INCOMMENSURABILITY AND COST-BENEFIT ANALYSIS

MATTHEW ADLER

INTRODUCTION

Cost-benefit analysis is a flourishing practice, desperately in need of a justification. By "cost-benefit analysis," or "CBA," I mean the monetized version: the version where the various benefits and costs of a governmental project are reduced to monetary sums and then aggregated, with total money costs subtracted from total money benefits, so that the project ultimately is assigned a single net money amount, positive or negative, the sign of which is in turn taken by the analyst as a significant (if not conclusive) indicator that the project should or should not be approved. This type of analysis has become widely used. In 1981, President Reagan issued an executive order enjoining federal agencies that "[r]egulatory action . . . not be undertaken unless the potential benefits to society for the regulation outweigh the potential costs to society," and requiring the submission of reports detailing the costs and benefits of large projects to a presidential oversight agency, the Office of Management and Budget (OMB). In 1993, President Clinton replaced the Reagan order with a new one,

† Assistant Professor, University of Pennsylvania Law School. Many thanks to Kathy Baker, Ruth Chang, Richard Craswell, Frank Goodman, Peter Huang, Stephen Perry, Eric Posner, Julia Rudolph, and Kim Scheppele; to the participants in the Law and Incommensurability Symposium; and to the participants in an ad hoc workshop at Penn, for their helpful comments.


4 See id. § 3, 3 C.F.R. at 128-30.
but retained the central requirement that a project's benefits outweigh its costs—"[e]ach agency shall . . . propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs"—and the central mechanism of OMB review. It bears noting that neither the Reagan nor the Clinton orders expressly requires the monetization of costs and benefits. But the orders certainly can be read to license and encourage monetization, and, over the last several decades, federal agencies have indeed, to a significant extent, relied upon monetized CBA as a test by which to approve or reject projects. And yet—this is the desperate part—CBA has been roundly criticized by most scholars who have looked seriously at its normative grounding. The prevailing view—not just among the moral philosophers and legal scholars who have written about the moral justification for CBA and its cousin, the Kaldor-Hicks test, but also among the welfare economists who have done so—seems to be that these tests are morally indefensible. There is now a

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6 See id. § 6, 3 C.F.R. at 644-48.
7 See OFFICE OF MANAGEMENT & BUDGET, ECONOMIC ANALYSIS OF FEDERAL REGULATIONS UNDER EXECUTIVE ORDER 12,866, at pt. III.A.2 (1996) (stating that "to the fullest extent possible, benefits and costs should be expressed in discounted constant dollars").
9 Prominent works by legal scholars on the normative foundations of Kaldor-Hicks or CBA include: JULES L. COLEMAN, EFFICIENCY, UTILITY AND WEALTH MAXIMIZATION, IN MARKETS, MORALS AND THE LAW 95 (1988); MARK KELMAN, A GUIDE TO CRITICAL LEGAL STUDIES 126-50 (1987); Richard A. Posner, UTILITARIANISM, ECONOMICS, AND LEGAL THEORY, 8 J. LEGAL STUD. 191 (1980); Ronald M. Dworkin, Is Wealth a Value?, 9 J. LEGAL STUD. 191 (1980); Symposium on Efficiency as a Legal Concern, 8 HOFSTRA L. REV. 485 (1980).
10 I say "cousin" because, given the so-called Boadway paradox, Kaldor-Hicks and CBA are not equivalent. See Charles Blackorby & David Donaldson, A Review Article: The Case Against the Use of the Sum of Compensating Variations in Cost-Benefit Analysis, 23 CAN. J. ECON. 471, 476-82 (1990) (discussing nonequivalence of Kaldor-Hicks and CBA).
truly startling disjunction between, on the one hand, the practices of government agencies and (more broadly) the applied economists and public-policy analysts who have generated a vast body of work detailing the monetized costs and benefits of regulatory measures, and, on the other hand, the skepticism about the moral status of CBA that prevails in the scholarly literature.

Is the skepticism warranted? Let me distinguish between CBA as a criterion of moral rightness or goodness and CBA as a morally justified decision procedure. The thrust of the scholarly criticism has been that CBA is not the former. It is not the case that, just because a project's monetized benefits are larger than its monetized costs, there is moral reason to favor the project. And this criticism is plausible. It is difficult to see how CBA marks out something morally important, even prima facie, about government projects or, more broadly, about options for choice. Consider two possible defenses of CBA as a moral criterion, which might be called welfare-dependent and welfare-independent. A welfare-dependent defense (which, as far as I know, no one has seriously pursued) tries to show how CBA is equivalent to a moral criterion of overall well-being. On this defense, a project increases overall well-being—which, after all, surely is a morally significant if not conclusive feature of projects—just in case it satisfies CBA. But why would that be the case? Standardly, a project's monetized benefits are defined, within CBA, as the cumulative amount of money that the "winners" from the project, those whose welfare it improves, would be willing to pay in return for securing it; conversely, a project's monetized costs typically are defined as the cumulative amount of money that the "losers" would require as compensation for accepting it. The welfare-dependent defense of CBA as a moral criterion says, thus, that a project improves overall well-being if and only if the cumulative amount that the winners would

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13 See David O. Brink, Moral Realism and the Foundations of Ethics 216-17, 256-62 (1989) (drawing and discussing this distinction).


15 See infra text accompanying notes 28-33 (defining CBA).
pay exceeds the cumulative amount that the losers would require. If this is true, then the following can never obtain.

Trivial Interpersonal Benefits for Rich Winners

The winners from the project are very rich. They own large stocks of money and other resources and would be willing to pay, in dollars, large sums to secure a project that, truly, has only a trifling effect on their own well-being. The losers, by contrast, are quite poor. The project has a significant negative effect on their well-being, but they would require only a moderate sum in compensation. Because of their poverty, the project losers can use moderate amounts of money to purchase improvements in the conditions of their own lives (and in overall well-being) that are even greater than the negative effects on them wrought by the project. So the project passes the CBA test but, if implemented (without any payment to the losers), decreases overall well-being.

A welfare-dependent defense of CBA entails, implausibly, that this scenario is impossible. If, for example, the construction of a particular-emitting device produces a delightful reddish tinge to sunsets that the rich view from afar, at the cost of considerable pulmonary discomfort to the poor neighbors who live nearby, it is surely true or at least possible that the project decreases overall well-being even though the project's monetary benefits are greater than its monetary costs.  

The alternative defense of CBA, as a criterion of moral rightness or goodness, is a welfare-independent defense. On this defense, CBA marks out a moral feature which is not equivalent to a project's contribution to overall well-being, but is morally important nonetheless. Historically, at least within welfare economics, this has been the standard way to think about CBA. The view has been that CBA is normatively defensible just insofar as it tracks a Kaldor-Hicks test. Kaldor-Hicks, in turn, originated in an intellectual milieu in which it was thought that interpersonal welfare comparisons were impossible. The effect on "overall well-being" of a project that improved the well-being of some, while making others worse off, was thought indeterminate. Rather, and alternately, it would count as a reason in favor of the project that the winners could afford to compensate the losers, making at least one person better off and no one worse off. This is what the Kaldor-Hicks test asks: Is there a costless redistribution from

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16 See Copp, supra note 8, at 74-77 (arguing that a project with net monetary benefits can decrease overall well-being); Railton, supra note 8, at 67-69 (same).
17 See HAUSMAN & MCPHERSON, supra note 8, at 84-100 (summarizing history of Kaldor-Hicks criterion and CBA).
winners to losers such that, if performed together with the project, the project-plus-redistribution would constitute a true Pareto improvement? Yet the Kaldor-Hicks test is vulnerable to the same kind of objection routinely leveled against proposed moral criteria that incorporate the merely hypothetical rather than actual consent of affected persons. A person has the power to change her moral position by promising, consenting, and undertaking other such performative utterances; but a necessary condition for this kind of change is that the utterance actually be performed. The fact that, hypothetically, the rich winners from a project that decreases overall well-being could afford to compensate the poor losers counts as no moral reason whatsoever in favor of the project.

In short, CBA is indefensible as a criterion of moral rightness or goodness—or so I will assume here. This is not to say, however, that CBA is indefensible tout court. We are considering, after all, a government practice: a decision procedure by which (an increasing number of) federal agencies and other government institutions assess projects. At bottom, the question whether government institutions should employ this decision procedure is a moral one. But that question, in turn, is not answered by saying that the relevant criteria of moral rightness or goodness are not incorporated directly into the practice. It could be the case that—by virtue of the epistemic limitations of agencies in determining what morality requires, plus their tendency, more or less strong, to pursue nonmoral aims—morality warrants a legal requirement that agencies employ a decision procedure more algorithmic, or verifiable, than the direct application of moral criteria.

This is what Professor Eric Posner and I have argued in an unpublished work on CBA. In particular, we have suggested that CBA is most plausibly defended as a decision procedure by which to implement the moral criterion of overall well-being. We claim that whether a project increases or decreases overall well-being is a morally relevant, if not conclusive, feature of that project. And CBA will, in

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19 See Brink, supra note 13, at 216-17, 256-62 (discussing moral grounds for decision procedures other than the direct application of moral criteria).
some (not all) contexts, be both reasonably congruent with the welfare criterion and significantly easier to implement than that criterion itself. In particular, CBA is reasonably congruent with overall well-being where money is equally productive of well-being as between winners and losers. Sometimes it is not, as in the case of the reddish sunset, but sometimes it is, and—before scholars conclude that the widespread and increasing practice of monetized CBA is simply misconceived—CBA should be evaluated in this light, as a welfarist decision procedure. "Welfarist" here just means "relative to a criterion of overall well-being." Why is monetized CBA a more plausible welfarist decision procedure than one that scales costs and benefits in terms of some other item, such as roses, or corned beef, or liberty? Money, unlike roses or corned beef, is a primary good, that is, it is broadly (instrumentally) advantageous for well-being; and, unlike liberty, has an existing public scale in the sense that many constituents of welfare, namely, marketed goods and services, already are scaled publicly in terms of dollars.

This is where incommensurability comes into play. A small but growing body of work by philosophers and legal scholars is critical, or at least skeptical, about monetized CBA, and links this criticism more or less directly to the fact of "incommensurability." I have in mind, particularly, Cass Sunstein's important article, Incommensurability and Valuation in Law, in which he defines incommensurability as follows: "Incommensurability occurs when the relevant goods cannot be aligned along a single metric without doing violence to our considered judgments about how these goods are best characterized." Sunstein argues that incommensurability, thus defined, underwrites a serious objection to monetized CBA:

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Of Morality 47-72 (1989) (describing "ordinary morality" such that persons have a general reason to promote the good but are not required invariably to do so, given their options and constraints).

22 "Welfarist" is used in this specific sense, and not more loosely as denoting moral criteria that incorporate welfare in some way, such as criteria that require equalizing well-being, or equalizing or maximizing resources for well-being. For a discussion of the difference between these criteria and the criterion of overall well-being, see Richard J. Arneson, Liberalism, Distributive Subjectivism, and Equal Opportunity for Welfare, 19 Phil. & Pub. Aff. 158 (1990).

23 See generally John Rawls, A Theory of Justice 90-95 (1971) (discussing primary goods, including "rights and liberties, opportunities and powers, income and wealth").


25 Id. at 796 (emphasis omitted).
A simple or flat judgment that a mountain is "really worth" $10 million is inconsistent with the way that we (or most of us) value the mountain. This is because the mountain is valued through a different kind of valuation from the $10 million; the former produces awe and wonder, whereas the latter is for human use—though admittedly $10 million may produce a (different) sort of awe and wonder as well. These points hold even if many people might be indifferent between $10 million and the mountain in the sense that they do not know which they would choose if both were offered . . . .

A broadly similar objection has been raised by Elizabeth Anderson, Richard Pildes, and Margaret Radin.27

Does "incommensurability" indeed undermine monetized CBA understood as a welfarist decision procedure? This Article tries to answer, or at least to clarify that question. Part I of the Article explains a bit more what CBA involves. Part II defines "incommensurability" and distinguishes among three different (arguable) grounds of incommensurability, which I term: (1) conventional ordering failures; (2) esoteric ordering failures; and (3) second-order considerations. In the remaining parts of the Article, I consider, in turn, the import of each for CBA. I conclude that options can indeed be "incommensurable," by CBA, with respect to overall well-being, but the true grounds of incommensurability are quite different than the existing legal and philosophical literature suggests.

I should emphasize that I am interested here in an internal critique of CBA: a critique relative to the moral criterion of overall well-being. CBA may, of course, be vulnerable to an external critique—for example, if the effect of agency projects on overall well-being is morally insignificant. However, I do not believe that, and in any event do not have the space here to consider an external critique of CBA. The welfarist defense of CBA is not necessarily a utilitarian defense. Its premise is that the effect of projects on overall well-being is morally significant, not that this effect is morally conclusive. For purposes of this Article, I assume the welfarist premise to be true. Part of the excitement and novelty of the "incommensurability" objection to CBA,
raised by Sunstein and others, is that even if the welfarist premise is true—indeed, even if utilitarianism is true—the defender of CBA needs to think hard about that objection.

I. WHAT IS CBA?

Before turning to incommensurability, we should be clear about what CBA involves. CBA is a special kind of decision procedure. It is a scaling procedure, one which works as follows: For each of the agency’s options, assign to that option (one or more) numbers equaling its net monetized benefits or costs relative to (one or more) baseline options; and then choose the option with the highest number (if the same project has the highest number from every baseline).

Cost-benefit analysts typically refer to the baseline option as the “status quo,” and to options other than the status quo as “projects”; I will follow that locution here. Note that there are various ways that a project’s monetized benefits or costs might be defined, depending, for example, on what set of reference prices are employed, or on whether monetary amounts are weighted. Typically, “benefits” and “costs” are defined in terms of so-called “compensating variations.” In turn, the concept of “compensating variation” typically is defined in terms of the “willingness to pay” or “accept” of, respectively, the winners and losers from the project—that is, in terms of their preferences. If the project improves PI’s welfare, then her “compensating variation” (or CV) is the amount of money that PI would be “willing to pay” such that, if the project were chosen and that amount were deducted from PI’s resources (with project-world prices held constant), she would be indifferent between the project world and the

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58 For an explanation of different types of scales, see JAMES GRIFFIN, WELL-BEING 93 (1986); HENRY E. KYBURG JR., THEORY AND MEASUREMENT 1-22 (1984). By a “scaling procedure,” I mean a scale (a rule for assigning numbers to options) that, further, satisfies a nonsuperfluity condition, and that therefore can serve as a decision procedure. See infra notes 47-48 and accompanying text (discussing scaling procedures and nonsuperfluity condition).


50 See BOADWAY & BRUCE, supra note 11, at 196-210 (distinguishing between “compensating” and “equivalent” variations); Copp, supra note 8, at 77-79 (discussing weighting).

51 See BOADWAY & BRUCE, supra note 11, at 6-7, 20-21 (employing compensating variation as the monetary measure of an individual’s welfare change).
status quo world. It is the amount such that, as between a world in which the project is chosen and that sum is extracted from her, and the status quo world, she prefers neither. Similarly, if the project degrades P2's welfare, then P2's compensating variation is the amount of money such that, if P2 were paid that amount and the project were chosen, P2 would prefer neither the project world nor the status quo world.32

The total "benefits" of the project are, in turn, defined as the aggregate of CVs from the project winners, while the total "costs" are defined as the aggregate of CVs from the project losers. In this Article, I will focus upon this particular, standard conception of CBA—as the sum of compensating variations.33

An initial problem, for anyone who wants to defend CBA as a welfarist decision procedure, is to reconcile its preference-based approach to monetization with the nature of well-being. Unless P's compensating variation matches, more or less, the effect of the project on her own welfare, it is hard to see how the welfarist defense of CBA can even get started. Compensating variations are defined, as I have just said, in terms of preferences, not welfare. On this definition, a person's CV is the amount that she would be willing to pay or be paid in return for the project, not the amount that would make her just as well off. The two definitions are not equivalent. Of course, what motivates the preference-based definition of CV is the view, prevalent within economics, that P's preferences are constitutive of her welfare.34 If P prefers some state of affairs to another (at least with sufficient information),35 and the first state of affairs obtains rather than the second, then P is comparatively better off; if P is indif-

32 See id. at 40-43, 201-05 (defining compensating variation).
33 Technically, the procedure described here (determining and then aggregating individual CVs for the project), is employed where the agent/analyst knows with certainty the project's outcome. In the case of choice under risk or ignorance, where the agent/analyst cannot predict the outcomes of options with certainty, monetized cost-benefit analysis is more complicated. See id. at 226-34, 322-28 (discussing cost-benefit analysis under uncertainty). For simplicity, this Article focuses on the case of choice under certainty. But the argument I develop here applies quite generally and regardless of how the cost-benefit procedure for choice under risk or ignorance is defined. The agent will have reason not to use a cost-benefit procedure in choosing between options only if conventional ordering failures occur or if certain second-order considerations obtain.
34 For illuminating discussions and criticisms of the link between preference and welfare within welfare economics, see HAUSMAN & MCPHERSON, supra note 8, at 71-83; L.W. SUMNER, WELFARE, HAPPINESS, AND ETHICS 113-22 (1996).
ferent between the two (at least with sufficient information), then her well-being is unaffected. But the preference-based view of well-being is wrong. To say that P "prefers" S1 to S2 is just to say that P ranks S1 over S2. We might, in turn, want to draw a connection between this ranking, by P, and P's choices—we might say that P, in preferring S1 to S2, is necessarily disposed to choose S1 over S2—or we might omit this connection. The problem, in either event, is that the reasons underlying this ranking are unrestricted. P might, for example, rank S1 over S2 for moral reasons. But if so, and if S1 rather than S2 occurs, then, although P's preference for S1 has been satisfied, P is certainly not necessarily comparatively better off. Notoriously, moral and egoistic considerations can conflict for a given actor; but to define well-being as constituted by unrestricted preferences implies the opposite.

This point has real, practical consequences for CBA. Much of the data for CBA, nowadays, comes from so-called "contingent valuation" studies. These studies use survey rather than market data to determine CVs, across the population, for various goods, typically nonmarketed goods. Citizens are asked how much they would be willing to pay or accept to, say, prevent the destruction of a wilderness area, tolerate the elimination of a species, purchase an improvement in visibility, or incur an increase in the rate of workplace accidents. Sometimes, citizens refuse to respond to such questions, or respond with very large (or very small) dollar amounts. A respondent might state, for example, that no dollar amount would be sufficient to compensate her for the species' elimination, or that she would pay her entire stock of wealth (or nothing at all) to prevent the wilderness area's destruction. The fact that preferences can be motivated by

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36 On the nature of preference, see Arneson, supra note 22, at 161-64. A full philosophical analysis of the closely related notion of a "want" is provided by Robert Audi, Action, Intention, and Reason 35-55 (1993).


39 See Mitchell & Carson, supra note 38, at 30-38 (describing this phenomenon).
moral rather than egoistic considerations is a partial explanation for these types of responses. If the respondent believes that it is morally wrong for the species to be eliminated (independent of how much money is paid to her), and this belief drives her unrestricted preference or ranking for the project worlds (the worlds in which the species is eliminated, plus some dollar amount is paid to her) relative to the status quo, then her “willingness to accept,” defined on unrestricted preferences, is indeed infinite. But this fact about her unrestricted preferences does not, in turn, mean that the species’ elimination will make her life irremediably worse. She might be a materialist, who gains great enjoyment from the things money can buy and has no personal interest in endangered species; she might not watch them, work to preserve them, or have personal projects tied up with them. Their existence makes no difference to her own well-being, and a very small amount of money paid to her, in the project world, would make that world better for her. But she ranks the status quo world over the project world, all things considered, because she is convinced that eliminating the species is morally wrong—say, because the existence of a species is highly valuable independent of human well-being, or because the gains to overall well-being from eliminating this one are not worth the costs.

How should the welfarist defender of CBA respond to this difficulty—that well-being is not equivalent to the satisfaction of unrestricted preferences, and that, more generally, the significance of even restricted preference for well-being remains highly controversial? The best response, I suggest, is to sever the conceptual connection between CVs and preferences. A person’s CV should instead be defined as her welfare equivalent. For the remainder of this Article, I will use the term “CV” or “compensating variation” to mean a person’s welfare equivalent, not her willingness to pay or accept.

**CVs Defined as Welfare Equivalents**

If a person \( P \) gains from a project, her CV is the unique amount of money such that, deducted from her resources in the project world,

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40 It is not a complete explanation, for, as I discuss at greater length below, respondents may take themselves to be obliged not even to think about the relevant goods in dollar terms. See infra text accompanying notes 108-11.


42 Welfare economists sometimes equate CVs with the smallest amount that a loser would be willing to accept, or the largest amount that a winner would be willing to pay. See MISHAN, supra note 29, at 180-82 (defining CVs this way). But given standard as-
and holding constant project-world prices and the connection there between well-being and commodity bundles, \( P \) is precisely as well off in the project world as in the status quo world.\(^4\) If a person \( P \) loses from a project, her CV is the unique amount of money such that, added to her resources in the project world, etc., she is again precisely as well off in one world as in the other.

Theories of well-being standardly are divided into three types: an objective-list theory, which says that \( P \) is on balance benefited by \( S_1 \) relative to \( S_2 \) just in case she more fully realizes in \( S_1 \) the balance of welfare-constituting values (such as the value of musical or scientific accomplishment), independent of any desire, approval, endorsement, or other pro-attitude by \( P \) for \( S_1 \) over \( S_2 \);\(^4^4\) a mental-state theory, which says that \( P \) is on balance benefited by \( S_1 \) relative to \( S_2 \) just in case she more fully realizes in \( S_1 \) the balance of welfare-constituting mental states (such as the sensation of gustatory pleasure); and a desire-based or preference-based theory, which says that \( P \) is benefited by \( S_1 \) relative to \( S_2 \) just in case she has the right kind of desire or preference for \( S_1 \).\(^4^5\) CBA, redefined as the aggregate of welfare equivalents,\(^4^6\) is meant to be agnostic among these types of theories of well-being. This redefined CBA is no longer committed to an unrestricted preference-based theory, or indeed to any preference-based theory. Rather, it is committed only to the two following premises: (1) on the

\( CBA, \) redefined as the aggregate of welfare equivalents,\(^4^6\) is meant to be agnostic among these types of theories of well-being. This redefined CBA is no longer committed to an unrestricted preference-based theory, or indeed to any preference-based theory. Rather, it is committed only to the two following premises: (1) on the

46 The “aggregate of welfare equivalents” is the sum of welfare equivalents (CVs) for the project winners minus the sum of welfare equivalents (CVs) for the project losers.
correct theory of well-being, CVs will be well-defined (that is, for each project and each person affected by the project, there will exist a unique sum of money that precisely compensates her welfare gain or loss), as will the sum of CVs, and (2) the sum of CVs will track, with sufficient accuracy, the effect of projects on overall well-being.

This is clearly more robust than the traditional defense of CBA that links it specifically to a preference-based theory. If the correct theory of well-being turns out to be a different kind of theory, but the premises I have just articulated still hold true, then we still have a viable, welfarist defense of CBA. Conversely, if the correct theory of well-being turns out to be a preference-based theory, and the premises do not hold true, then the welfarist defense of CBA will fail regardless of the truth of the traditional, economic view of well-being.

But do the premises hold true? That, in essence, is the problem of incommensurability for CBA. More specifically, the failure of the premises comprises a particular, and significant, ground of incommensurability—what I will call a "conventional ordering failure." Let me now distinguish between that ground of incommensurability, and two other arguable grounds that, I will claim, are less significant.

II. WHAT IS INCOMMENSURABILITY?

"Incommensurability," in one sense, means the absence of a scale or metric. More precisely, given that we are interested here in the practical implications of "incommensurability" (its implications for choices by agents), we might say that "incommensurability" in one sense means the absence of a scaling procedure: a procedure for choice

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47 See Ruth Chang, Introduction, in INCOMMENSURABILITY, INCOMPARABILITY, AND PRACTICAL REASON 1, 1 (Ruth Chang ed., 1997) ("[I]ncommensurable items cannot be precisely measured by a single ‘scale’ of units of value."). For other entries in the philosophical literature on incommensurability, see ANDERSON, supra note 27, at 44-64; GRIFFIN, supra note 28, at 75-92; SUSAN HURLEY, NATURAL REASONS 254-70 (1989); JOHN KEKES, THE MORALITY OF PLURALISM 53-75 (1993); ISAAC LEVI, HARD CHOICES (1986); NUSBAUM, supra note 27, at 107; JOSEPH RAZ, THE MORALITY OF FREEDOM 321-22 (1986); HENRY S. RICHARDSON, PRACTICAL REASONING ABOUT FINAL ENDS 89-118 (1997); MICHAEL STOCKER, PLURAL AND CONFLICTING VALUES 211-40 (1990); DAVID WIGGINS, NEEDS, VALUES, TRUTH 239-62 (1987); John Finnis, Natural Law and Legal Reasoning, 38 CLEV. ST. L. REV. 1 (1990); and T.K. Seung & Daniel Bonevac, Plural Values and Indeterminate Rankings, 102 ETHICS 799 (1992). As Professor Chang observes, "incommensurability" can also be used to denote "the idea, spawned by the writings of Thomas Kuhn, that evaluation across different conceptual schemata, ways of life, or cultures is impossible." Chang, supra, at 1. The philosophical literature here cited is not concerned with "incommensurability" in the Kuhnian sense, and neither am I in this Article.
between options that (1) assigns numbers to options in some fashion, and (2) directs the agent to choose the option with the highest (or lowest) number. This might be fleshed out further, as follows.

**Incommensurability: A Practical Definition**

1. Options are incommensurable, by a particular scaling procedure, for an agent, with respect to a particular normative criterion, if in light of that criterion the agent has (normative) reason not to use that scaling procedure in choosing between those options.

2. Options are incommensurable, simpliciter, for an agent, with respect to a particular normative criterion, if in light of that criterion the agent has reason not to use any scaling procedure in choosing between those options.

3. Options are incommensurable, simpliciter, for an agent, if in light of the totality of normative considerations the agent has reason not to use any scaling procedure in choosing between those options.

I should emphasize one feature of this definition, which will prove important in my discussion of esoteric ordering failures. Options are “incommensurable” for an agent by a scaling procedure or simpliciter, if that agent has reason not to use that scaling procedure or any one. This feature of the definition captures the practical and critical import of the claim that options are “incommensurable.” To say that

48 Further, a scaling procedure must satisfy a nonsuperfluity condition. The rule that assigns number one to the “best option for choice,” number two to the “next best option for choice,” and so on, is a scale, but not a scaling procedure, because once we know what the best option, next best option, and so forth are, we can make the choice among them without assigning numbers. Because CBA clearly satisfies the nonsuperfluity condition, and is therefore not just a scale but a scaling procedure, I will not try to be more precise here about how that condition should be formulated.

49 By “options,” I mean simply those actions that the agent is considering. See Michael D. Resnik, Choices: An Introduction to Decision Theory 6 (1987) (“A decision ... involves a choice between two or more options or acts ...”). The clever critic of CBA will note that CBA cannot be used to evaluate an action that is deliberationally complex in the following way: the action, say, of “building a bridge after using a decision procedure other than CBA.” This is true; but the arguments advanced in Part V show that, if CBA is the right decision procedure for choosing between simple actions without this deliberative caveat (“building a bridge,” “not building a bridge”), then the corresponding deliberationally complex actions are not better qua welfare, than the simple actions.

50 Here and throughout the Article, “reason” denotes a normative, rather than a motivating, reason. My concern, and that of the “incommensurability” literature, is what agencies ought to do—specifically, whether they ought to use CBA. My argument does not depend upon a particular analysis of “normative reason,” but I am happy to use Michael Smith’s: “[T]o say that we have a normative reason to [do something] in certain circumstances is to say that, if we were fully rational, we would want that we [do that] in C.” Michael Smith, The Moral Problem 181 (1994).
options are "incommensurable" is to say something about the reasons that an agent does or does not have. Further, it is to say, not merely that the use of a scaling procedure by the agent is a matter of normative indifference, but more robustly that the options are incommensurable, that is, that there is reason against using a particular scaling procedure or any one at all. So it is both fair and illuminating to define "incommensurability" as entailing the existence of reason for the agent against using a scale.

To be sure, the term "incommensurable" is ambiguous. It has been used in the literature in connection with such (seemingly) diverse phenomena as the plurality of values, the incomparability of options, the existence of goods constituted by certain constraints on our attitudes, as well as the absence of a scale for measuring options. Why do I pick out "the absence of a scale" as the relevant sense of "incommensurability" for purposes of the welfarist critique of CBA? To begin, what unifies the seemingly diverse phenomena hitherto discussed under the rubric of "incommensurability" just is their connection to the absence of scales. The plurality of values implies, among other things, that the monist's natural scaling procedure, in which options are measured in terms of the one value that the monist takes to be exclusive, will not capture reliably the true relative value of options. To say that options are "incomparable," that is, neither better, nor worse, nor precisely equal, is again to say that no real-valued scale can represent how the options truly relate, because one real number must be either greater than, less than, or precisely equal to another. And the kind of attitudinal constraint discussed in the literature is, precisely, a constraint on thinking about options in numerical terms.

But beyond all this, defining "incommensurability" as the absence of a scale is appropriate here because it is the definition most generous to the welfarist critique of CBA. For CBA is simply one kind of scaling procedure. As I have already explained, CBA assigns to each option (one or more) numbers equaling its net monetized benefits or

51 See, e.g., KEKES, supra note 47, at 53-75 (linking incommensurability and pluralism).
52 See RAZ, supra note 47, at 322-28 (defining incommensurability as incomparability).
53 See id. at 345-53 (discussing "constitutive incommensurabilities").
54 See Chang, supra note 47, at 2 (“[L]et us henceforth reserve the term 'incommensurable' for items that cannot be precisely measured by some common scale of units of value . . . .”).
55 See infra text accompanying notes 108-11.
costs relative to (one or more) baseline options, and then directs the agent to choose the option with the highest number (if the same project has the highest number from every baseline).\textsuperscript{56} Thus, any claim that there is welfarist reason for agencies not to use CBA in choosing between options is a claim that those options are "incommensurable"—for it is a claim that there is welfarist reason for agencies not to choose between the options using the scaling procedure that CBA constitutes. If we were to use a different, narrower definition of "incommensurability," the incommensurability critic of CBA properly might object that we have ruled out, by definitional fiat, some sound objection of hers to this scaling procedure. My definition of "incommensurability" is not open to this objection.

In short: (Two or more) options are "incommensurable" for an agent, by CBA, with respect to overall well-being, if the agent has welfarist reason not to use CBA in choosing between those options. Given the breadth of this definition, it becomes important to distinguish among the various (arguable) grounds of incommensurability. I will distinguish three arguable grounds: conventional ordering failures, esoteric ordering failures, and second-order considerations. By a "conventional ordering failure" I mean this: The numbers assigned by CBA to options do not represent how the options truly relate with respect to overall well-being, insofar as options are related by the trichotomy of conventional value relations. By an "esoteric ordering failure" I mean this: The numbers assigned by CBA to options do not represent how the options truly relate with respect to overall well-being, insofar as options are related by value relations other than the trichotomy. Finally, by "second-order considerations," I mean considerations other than

\textsuperscript{56} As this definition suggests, and as I explain at much greater length below, CBA may fail to assign a number to some or even all of the options in a given choice situation. \textit{See infra} Part III.A (discussing how the sum-of-CVs might be undefined). Such a failure, when it occurs, might be taken to render CBA a deviant scaling procedure, or it might instead be taken to mean that CBA fails as a scaling procedure at that point. If the latter, then a claim that an agent ought not use CBA in a choice situation where CBA fails to assign numbers to all the options is not, technically, a claim that those options are "incommensurable" by CBA, for "incommensurability" as I have defined it here concerns reason not to use a scaling procedure. Nonetheless, because such failures may be an important ground against the use of CBA as a decision procedure, I have included Part III.A in my discussion. And certainly, if a failure to assign numbers makes a decision procedure a deviant scaling procedure, rather than no scaling procedure at all, such a failure technically can be a grounds of incommensurability.

\textsuperscript{57} \textit{See Kyburg, supra} note 28, at 2 (discussing the function of scales in representing a measured attribute).
conventional or esoteric ordering failures by virtue of which the agent has welfarist reason not to use CBA.

The trichotomy of conventional value relations is: better than, worse than, and precisely equal. Imagine, for example, that a project is truly better than the status quo with respect to overall well-being. Then, if the number assigned by CBA to the project—its sum of compensating variations—is zero or negative, we have a conventional ordering failure. Imagine, instead, that the project is incomparable with the status quo with respect to overall well-being. The project and status quo are not ordered by the conventional trichotomy; instead, the project is neither better, nor worse, nor precisely equal to the status quo with respect to overall well-being. And yet, CBA assigns the project a number which is either higher than, lower than, or precisely equal to zero. We then have an esoteric ordering failure. Finally, imagine for example that the project is truly better than the status quo and CBA assigns the project a positive number, but these options are such that to choose between them using a monetary scale is itself welfare-degrading. We then have second-order considerations against CBA.

Why do I delineate the different grounds of incommensurability in this manner? The distinction between esoteric and conventional ordering failures is meant to reflect one important claim advanced within the philosophical literature on incommensurability: the claim that the trichotomy of conventional value relations does not exhaust the ways in which options might relate and, in particular, that options might be truly incomparable. The distinction between first-order and second-order considerations is meant to reflect a different, and very interesting, claim: the claim that considerations of value or well-being might constrain the permissible attitudes that we have towards options for choice. This is what Joseph Raz calls "constitutive incommensurability":

Certain judgments about the non-comparability of certain options and certain attitudes to the exchangeability of options are constitutive of relations with friends, spouses, parents, etc. Only those who hold the view

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58 See Chang, supra note 47, at 4 (discussing this conventional trichotomy). These are arguably conventional for only a subset of moral criteria, such as goodness-type, or agent-neutral, criteria. The conventional relations for a rightness-type, or agent-relative, criterion might be: obliged, forbidden, permitted. Because overall well-being is a goodness-type, agent-neutral criterion, I frame this discussion in terms of "better," "worse," and "equally good."

59 See id. at 13-27 (surveying and criticizing arguments for incomparability).
that friendship is neither better nor worse than money, but is simply not comparable to money or other commodities are capable of having friends.

The interesting and important possibility to consider here is that, even if the numbers assigned by CBA to options do truly reflect how the options fare with respect to overall well-being, the very beliefs, thoughts, or judgments entailed by this scaling procedure are inconsistent with welfare in some way. There might be second-order, welfarist reason for citizens and agencies not to believe that a project which saves a mountainside, or an endangered species, or the lives of ten children, is worth $X, for the welfare value of these goods just might entail not believing that they have dollar equivalents.

These three grounds for incommensurability are exhaustive of the welfarist objections to CBA. Any claim that options are incommensurable by CBA with respect to overall well-being must point to a conventional ordering failure, an esoteric ordering failure, second-order considerations, or some combination thereof. In the remaining parts of this Article, I will argue for the following view. Conventional ordering failures are possible and, to some extent, actual, and where they occur, they do indeed undermine CBA. Esoteric ordering failures also seem possible, but do not in fact undermine CBA. In short, they are not a true ground of incommensurability, as surprising as that may seem. Finally, second-order considerations also are possible, but it is implausible that the second-order considerations weighing

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60 RAZ, supra note 47, at 352. For similar claims within the incommensurability literature, see ANDERSON, supra note 27, at 17-43; NUSSBAUM, supra note 27; RADIN, supra note 27, at 83-94; Sunstein, supra note 24, at 782-95. For analogous claims within the literature both criticizing and defending utilitarianism, see BRINK, supra note 13, at 273-83; Peter Railton, Alienation, Consequentialism, and the Demands of Morality, 13 PHIL. & PUB. AFF. 134, 148-64 (1984); Michael Stocker, The Schizophrenia of Modern Ethical Theories, 73 J. PHIL. 453, 458-66 (1976); Bernard Williams, A Critique of Utilitarianism, in UTILITARIANISM: FOR AND AGAINST 75, 108-18 (J.J.C. Smart & Bernard Williams eds., 1973). A more skeptical view is defended by KAGAN, supra note 21, at 357-69.

61 I should stress that I focus here on the simple scenario of a choice by an agent among given options. But even if a scaling procedure is best used by the agent, conditional on it being best that the agent choose among those particular options, it might still be the case that (a) it is even better for the agent not to be choosing at all; or (b) it is even better for the agent to be choosing from a different set of options. And to the extent that CBA or another scaling procedure is used by agencies—not just in choosing between fixed options, but in deciding whether to decide, or in generating choice sets—then we have a different kind of incommensurability. But that is not the kind I have space to discuss here. Cf. GRIFFIN, supra note 28, at 85-86 (distinguishing between incommensurability of value-types and incommensurability of value-tokens, that is, options).
against (justified) CBA include the intrinsic second-order considerations described by Raz et al., and termed "constitutive incommensurability."

III. CONVENTIONAL ORDERING FAILURES

- In this Part, I will show why conventional ordering failures are a possible feature of CBA. Given two or more options, it is possible that CBA will assign numbers to the options that do not reflect how they conventionally relate with respect to overall well-being. For simplicity, I will focus on the case where the agency only has two options: the project and the status quo. By hypothesis, the project is, truly, either better than, worse than, or precisely equal to the status quo with respect to overall well-being. Yet on any reasonable theory of well-being, it is possible that the number assigned by CBA to the project—the sum-of-CVs—does not reflect its true welfarist relation to the status quo. This can happen in two ways, which I will discuss in turn. First, the sum-of-CVs might just be undefined. A person’s CV or welfare equivalent is the unique amount of money such that, if the person were to pay or be paid that sum of money along with the agency’s choice of the project, her well-being would be precisely the same as her well-being under the status quo. It might be the case, however, that no such unique amount exists; if so, that person’s CV will be un-
defined, and the sum-of-CVs will in turn be undefined. Second, even if the sum-of-CVs is well-defined, that number may fail to track the effect of the project on overall well-being. For instance, the number might be positive or zero where the project truly decreases overall well-being, or it might be negative or zero where the project truly improves overall well-being.

If and when conventional ordering failures occur, why does that strengthen the welfarist case against CBA? Why, in short, are conventional ordering failures a true ground of incommensurability? The answer is straightforward. If, in some choice situation before an agency, the project is truly better or worse than the status quo, and yet CBA orders the two options the wrong way (or as equal), or simply fails to order them at all (because of undefined CVs), then that fact counts against CBA and in favor of any decision procedure that orders the options correctly. Assume, first, that the other decision procedure is equal or better than CBA with respect to second-order considerations, such as costs. Then it will be better, in light of overall well-being, if the agency uses the other decision procedure instead of CBA in this choice situation. Assume, next, that the other decision procedure is worse than CBA with respect to second-order considerations. Then it still may be better for the agency to use that decision procedure instead of CBA, if the welfare difference between the two options that CBA ranks incorrectly is sufficiently large.64

I say that conventional ordering failures are "possible," for CBA, but do they actually arise in a significant way? Of the actual choice situations that agencies face, to what extent do conventional ordering failures actually occur? That depends on a lot: on what the right theory of well-being is, on the types of options that reach agency agendas, and on the ways in which these options would affect the well-being of the persons who gain or lose from them. Absent information about all this, it is hard to be definitive about the significance of conventional ordering failures. But, as we shall see, it is at least plausible that conventional ordering failures actually occur in a significant way.

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64 A further premise upon which I am relying here is that so-called "agent internalism," concerning the connection between morality and normative reason, holds true. That is, the fact that some action is better for an agent, in light of a moral criterion (which I am taking "overall well-being" to be), entails that (ceteris paribus) the agent has normative reason to perform that action. See Brink, supra note 13, at 37-43 (discussing internalism, including agent internalism).
A. Undefined Sum-of-CVs

1. Undefined CV

There are various reasons why the CV or welfare equivalent for person $P$ might be undefined—why, for a particular project, there might not exist a unique monetary amount that precisely counterbalances the welfare effect of the project on $P$. Economists like to assume that $P$ has a continuous, increasing function mapping dollar payments to or from her in the project world onto a scale of her welfare (a "utility" scale), but on any reasonable theory of well-being this might not occur. For example, the connection between money and well-being might be partly nonincreasing—money might have a marginal utility of zero for $P$, within some range of dollar payments. If so, there might be a range of dollar payments such that any payment within this range precisely counterbalances the welfare effect of the project on $P$. Or, the connection between money and well-being might be discontinuous—there might be no dollar amount that precisely counterbalances the project's welfare effect on $P$. Instead, for dollar amounts less than a given amount, such payments plus the project leave $P$ worse off than the status quo and, for dollar payments of that amount or greater, such payments plus the project leave $P$ better off than the status quo. Both of these are surely possible, on any reasonable theory of well-being: an objective-list theory, a desire-based theory, or a mental-state theory. On any reasonable theory, money is not (or need not be) intrinsically valuable to $P$; rather, it is (or may be) merely instrumentally valuable to $P$, insofar as it enables $P$ to purchase goods and services traded on markets. But nothing guarantees that, if we give $P$ one marginal dollar, the goods and services that $P$ is thereby enabled to buy will improve her realization of objective welfarist values (plausibly, values such as accomplishment, deep personal relations, enjoyment, understanding, and autonomy); or will contribute to states of affairs that $P$ desires (since $P$ might be indifferent between having those marginal goods and services, or

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65 See BOADWAY & BRUCE, supra note 11, at 33-43 (discussing utility and money); DAVID M. KREPS, A COURSE IN MICROECONOMIC THEORY 45-50, 81-83 (1990) (same).


67 For plausible objective lists, see JOHN FINNIS, NATURAL LAW AND NATURAL RIGHTS 85-90 (1980); GRIFFIN, supra note 28, at 67-68; GEORGE SHER, BEYOND NEUTRALITY: PERFECTIONISM AND POLITICS 199-201 (1997).
not); or will produce better mental states for \( P \). And when increasing dollar payments do become large enough to make a welfare difference for \( P \), this change might be a discrete rather than a continuous change.

Yet another way in which, arguably, CVs might turn out to be undefined involves incomparability.\(^{69}\) I say "arguably" because it remains controversial, among philosophers, whether incomparability is truly possible.\(^{69}\) But it surely \textit{seems} possible. Raz argues for the possibility of incomparability by pointing to the possibility of small improvements with respect to the value of options that bear plural values:

Imagine that I am indifferent as between a walk in the park and a book with a glass of Scotch at home. It is possible that though I will definitely prefer (\( a \)) the book with a glass of port to (\( b \)) the book with Scotch, I am indifferent as between either and (\( c \)) a walk in the park. This establishes that I regard (\( a \)) and (\( c \)) as incommensurate. It seems plausible that normally people's valuation of options allows for... incommensurability of this sort.\(^{70}\)

We can use a similar strategy to construct possible scenarios in which, it seems, dollar payments to persons harmed or benefited by projects will make them neither better, nor worse, nor precisely as well off as without the project. \( P \) is a nature-lover, who benefits from the wilderness area near her home; \( P \) also enjoys opera. Paying \( P \$500 \), in return for a project that destroys the wilderness area, will enable her to purchase a season's subscription at the opera in the cheapest seats—and this is neither better nor worse for \( P \) than the status quo. Paying \( P \) larger amounts (up to, say, \$1000) will enable her to purchase better and better opera seats, which will enhance her enjoyment of the opera relative to the cheaper seats; yet, it seems that a season at the opera in the best seats still might be neither better nor worse for \( P \) than the status quo. Thus, it seems, dollar payments to \( P \) between \$500 and \$1000, along with the project, might make her incomparably well off as compared to the status quo, and not precisely as well off.

\(^{69}\) For that matter, any kind of esoteric relation might give rise to undefined CVs. If well-being is vague—if it can be neither true nor false that options are better, worse, or equally good with respect to well-being—then a person's CV might be undefined by virtue of vagueness. In this Article, I focus on incomparability. \textit{See infra} notes 93-95 and accompanying text (defining incomparability).

\(^{69}\) \textit{See} Chang, supra note 47, at 13-27 (surveying and criticizing arguments for incomparability).

\(^{70}\) Raz, supra note 47, at 328.
Finally, a person's CV might be undefined because of *lexical priority*. By this I mean the following: If \( P \) loses from a project, any dollar payment to \( P \) along with the project still leaves her worse off than the status quo, and if \( P \) gains from a project, any dollar payment from \( P \) (out of the resources available to her) still leaves her better off than the status quo. Lexical priorities are obviously possible on any reasonable theory of well-being. Consider projects that cause *death to \( P \)* where \( P \) is a loser from the project (i.e., \( P \) 's life in the status quo is not so bad that death is a good thing for her). On any reasonable theory of well-being, it is possible and, I think, highly plausible that, for this kind of project, no dollar payment to \( P \) (specifically, to \( P \) 's estate) along with the project would suffice to make \( P \) as well off as with the status quo. For it is highly plausible and surely possible that nothing \( P \) 's heirs or anyone else can do with the money in \( P \) 's estate, after \( P \) 's death, can improve \( P \) 's well-being.\(^7\)

Now, the welfarist defender of CBA will likely respond to these various scenarios, in which no precise welfare equivalent for \( P \) exists, by developing a new construct (call it the \( CV^* \)) that is more or less closely related to the construct of a welfare equivalent, and that will be well-defined. For example, to deal with the possibility of a non-increasing connection between money and welfare, the welfarist might define \( P \) 's \( CV^* \) as, say, the smallest amount sufficient to compensate precisely \( P \) 's loss (if \( P \) is a loser) or the largest amount required to balance precisely her gain (if \( P \) is a winner).\(^7\) To deal with the added possibility of a discontinuous connection between money and welfare, the welfarist might define \( P \) 's \( CV^* \) as, say, the smallest amount sufficient either to compensate precisely or to overcompensate \( P \) 's loss (if \( P \) is a loser) or, failing that, the lower limit of the amounts that precisely compensate or overcompensate \( P \) 's loss—and symmetrically if \( P \) is a winner. To deal with the added possibility of dollar payments that leave \( P \) incomparably well off, the welfarist might define \( P \) 's \( CV^* \) as, say, the smallest amount sufficient either to compensate precisely \( P \), or to overcompensate \( P \), or to leave her incomparably well off (if \( P \) is a loser) or, failing that, the lower limit of the amounts that precisely compensate, overcompensate, or leave \( P \) incomparably well off—and

\(^7\) For discussions of the welfare of the dead, see GRIFFIN, supra note 28, at 22-23; SUMNER, supra note 34, at 125-27.

\(^72\) See MISHAN, supra note 29, at 183 ("With respect to the opportunity of acquiring a particular good, there are then, in general, two alternative sums to be considered: a maximum sum he will pay to have the good and a minimum sum he will accept to forgo it.").
symmetrically if $P$ is a winner. Finally, in order to deal with projects that involve lexical priorities, among some portion of the affected population, the welfarist might redefine a person's CV* for this kind of project as her CV for the risk that the project will go through.

A person's CV*, unlike her CV, will (or may be) well-defined. But the upshot may be that CBA*, defined as the sum-of-CV*s, fails to track overall well-being. CBA* may end up assigning positive numbers to welfare-degrading projects, or negative numbers to welfare-improving ones—and this may, in part, be a result of the very facts about money and well-being by virtue of which CVs are undefined. To see the problem in a simple way, imagine that the connection between money and well-being, for the winners and losers from a project, is as follows. A payment of any amount from $0 up to but not including $5 makes no difference to a loser's welfare, and a payment of any amount from $5 to $15 improves her welfare by one unit of overall well-being. Symmetrically, a deduction of any amount from $0 up to but not including $5 makes no difference to a winner's welfare, and a deduction of any amount from $5 to $15 decreases her welfare by one interpersonal unit. There are three persons affected by the project: two losers, who each incur a one unit loss in interpersonal welfare units, and one winner, who gains by one unit. Therefore, the project degrades overall well-being. But the winner's CV* is $15, while each of the loser's CV*s is $5. Thus, the sum of CV*s is positive, which (incorrectly) signals that the project is welfare-improving.

Does the possible phenomenon I have just described—in which undefined CVs force a redefinition of the compensating variation, such that cost-benefit balancing thus redefined fails to track overall well-being—actually arise in a significant fraction of choice situations before agencies? At least in the case of lexical priority, it plausibly does. Agencies often must evaluate “projects” that involve incremental deaths relative to the status quo. This is routinely the case for agencies such as the Food and Drug Administration, the Occupational Safety and Health Administration, the Environmental Protection Agency, and the National Highway Traffic Safety Administration that regulate, respectively, the constituents of foods and drugs, the safety of workplaces, the level of environmental pollutants, and the

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73 In this case, the problem might be solved by defining a CV** as the midpoint of the range of amounts that compensate someone, but accurately determining that number might be expensive and difficult. In short, the trade-off between CV* and CV** here is a trade-off between conventional ordering failures and second-order considerations.
design of automobiles.\textsuperscript{74} The now-standard approach to cost-benefit balancing, for these kinds of projects, is to determine the incremental risk of death that the projects create among the affected population, and then to aggregate the CVs for that risk.\textsuperscript{75} An initial objection to this procedure might be that a person's "risk" from the project is itself undefined: If the world is deterministic, the person will either die, or not. This initial difficulty is probably surmountable through some epistemic construct. For example, we might say that \(P\)'s incremental "risk" from the project is the incremental risk she would estimate given the epistemic effort that is optimal or reasonable for her, in light of her well-being.\textsuperscript{76} But even if \(P\)'s welfare equivalent for the incremental "risk" from the project to her is well-defined, there is a plausible—indeed powerful—argument that the sum-of-CV\(^*\)s (CVs for risk) is a woefully inadequate tool for measuring the effect on overall well-being of death-causing projects. As John Broome writes:

Consider any project in which an unknown person will die. Because whoever it is does not know it will be him, because of his ignorance, he is prepared to accept a ridiculously low compensation for letting the project go forward. The government does not know who will be killed either, but it knows it will be someone, and it knows that, whoever it is, no finite amount of compensation would be adequate for him.\textsuperscript{77}

To put Broome's point most starkly: \(P\)'s welfare equivalent for the incremental risk of her death is not merely "ridiculously low," it should be zero. Plausibly, risk as such does not constitute a welfare setback for persons; only death (or the fear of death) does.\textsuperscript{78} But clearly if the CV for the risk of death is zero or "ridiculously low," then the sum-of-CV\(^*\)s will not track the welfare effect of death-causing projects.\textsuperscript{79}

\textsuperscript{74} See Stephen Breyer, Breaking the Vicious Circle: Toward Effective Risk Regulation 3-29 (1993) (undertaking a critical survey of risk regulatory programs).

\textsuperscript{75} See Viscusi, supra note 12, at 17-33 (describing this methodology).


\textsuperscript{77} John Broome, Trying to Value a Life, 9 J. Pub. Econ. 91, 95 (1978).

\textsuperscript{78} See Perry, supra note 76, at 330-39 (arguing that risk is not harm).

\textsuperscript{79} Much more needs to be said here. Although \(P\)'s welfare equivalent for risk is plausibly zero, her ex ante egoistic willingness to pay to avoid the risk is not. It is rational for \(P\), in her own interest, to pay to avoid a risk that (unbeknownst to her) will not eventuate. Assuming that \(P\)'s willingness to pay conforms to expected-utility theory, see Resnik, supra note 49, at 88-100 (describing the expected-utility theory), then it can be argued that aggregating ex ante egoistic willingness to pay to avoid risk, across the population at risk, is, in turn, a rough measure of the welfare loss that will result
The plausible claim here is not that death-causing projects necessarily degrade welfare. Rather, the plausible claim is that cost-benefit balancing, whether defined as the sum-of-compensating-variations-for-death or the sum-of-compensating-variations-for-the-risk-of-death, fails to track the effect of death-causing projects on overall welfare. To quote Broome once more:

[I] magine trying to perform a compensation test with roses as medium instead of money. People cannot be compensated with roses for any major loss. Therefore, according to this method, rather a lot of projects would have an infinite cost. Nevertheless many of them could still be improvements (as we might be able to find out by recalculating their values in terms of money). The point is that roses are an inadequate measuring instrument, but even the measuring rod of money is not long enough to encompass life and death.80

A person’s CV for death is undefined, and although her CV* for death is well-defined, the sum-of-CV*s is, plausibly, uncorrelated with whether the death-causing project improves or degrades overall well-being.

2. Baseline Dependence

I have been discussing one straightforward way in which the scaling procedure called CBA may fail to assign a definite number to an agency’s project: The CV for some individual person, her welfare equivalent for the project relative to the status quo, may turn out to be undefined. If so, the sum-of-CVs for that project in turn will be undefined. Yet there is another quite interesting way in which the number assigned by CBA to a project can be undefined even if every individual has a well-defined CV for that project.

That possibility arises because a person’s CV is baseline dependent. Someone’s CV-for-the-project, relative to the status quo (the amount that, paid to or from her in the project world, makes her just as well off as in the status quo world) need not be the same as her CV-for-the-

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80 Broome, supra note 77, at 96. For a defense of the claim that welfarist gains in other dimensions (for example, leisure, recreation, education) can outweigh the welfare loss of lost lives, see Alastair Norcross, Comparing Harms: Headaches and Human Lives, 26 PHIL. & PUB. AFF. 135 (1997).
status-quo, relative to the project (the amount that, paid to or from her in the status quo world, makes her just as well off as in the project world). As a result, it may turn out that (a) the sum-of-CVs-for-the-project is negative, and the sum-of-CVs-for-the-status-quo is also negative, that is, from each world it looks as if the other is worse; or (b) the sum-of-CVs-for-the-project is positive and the sum-of-CVs-for-the-status-quo is positive, that is, from each world it looks as if the other is better.\footnote{See Blackorby & Donaldson, supra note 10, at 487-88 (noting that CBA produces reversals). For an overview of empirical work on the baseline dependence of individual CVs, see Elizabeth Hoffman & Matthew L. Spitzer, Willingness to Pay vs. Willingness to Accept: Legal and Economic Implications, 71 WASH. U. L.Q. 59 (1993).}

The problem of baseline dependence has been long discussed in the economics literature. The deviation between a given person’s CV-for-the-project and her CV-for-the-status-quo, and in turn the conflict between aggregate CVs from each baseline, may arise because (1) as economists have emphasized, prices simply may be different in the project and status quo worlds, or (2) although prices are the same, a person may convert purchased goods and services into well-being at different rates in the two worlds.\footnote{For a discussion of the point that Scitovsky reversals and the like can result from preference shifts, as well as from wealth effects given constant preferences, see generally Cowen, supra note 35.} Neither (1) nor (2) presupposes a commitment to a particular theory of well-being, and so picking a particular theory will not solve the problem.

Why not simply stipulate that the status quo is the unique baseline for purposes of CBA? The answer is this: There is nothing in CBA itself that distinguishes the “status quo” option from “project” options. The sum-of-compensating-variations methodology says only, “from a given baseline, evaluate costs and benefits for other options”\footnote{See OFFICE OF MANAGEMENT & BUDGET, supra note 7, pt. III.A.1 (“The benefits and costs of each alternative must be measured against a baseline [which] should be the best assessment of the way the world would look absent the proposed regulation.”).}; it does not further specify which baseline to pick. Perhaps there are some nonwelfarist criteria, such as deontological criteria, that pick out the “status quo” world as the true status quo for purposes of these criteria (say, because the agency is much less active there, relative to the “project” world). Yet CBA is not meant to track how the “project” fares with respect to these nonwelfarist criteria; it is meant to track whether it improves overall well-being. Perhaps, too, there is some welfarist sense in which the “status quo” world is truly the status
quo. This point, however, is not helpful in specifying how to perform CBA, because CBA is meant to serve as a decision procedure that agencies can employ instead of the direct application of welfarist criteria.

The CBA analyst might simply flip a coin to define the status quo, but if the ranking of options from this baseline differs from the ranking from other baselines, why should we conclude that the analysis has captured the true effect of the options on overall well-being? The better approach, for CBA, is this: Take each option, in turn, as a baseline and then pick the option with the highest number if the ranking of all the options from each baseline is the same, and, if not, use a different decision procedure entirely (for example, the direct application of the welfare criterion). But as I have just explained, in the simple case of two options, and a fortiori when agencies are offered more than two options, the ranking of all the options from each baseline need not be the same. In this important sense, CBA can turn out to be undefined even if individual CVs are well-defined for every option from every baseline.

B. Poor Tracking

One way in which CBA can fail to represent how options truly relate, with respect to overall well-being—where, by hypothesis, the options are truly ordered by the trichotomy of conventional ordering relations—is where CBA fails to assign definite numbers to the options. The other way in which CBA can fail to represent how options truly relate, with respect to overall well-being—on the same hypothesis—is where the definite numbers assigned to options do not correspond to their true, conventional relations. Call this "poor tracking." I already have discussed poor tracking in connection with CBA, but let me say a bit more here. Because it is straightforward to see why poor tracking is both possible and plausibly actual, my discussion will be relatively brief. This brevity is meant to signal the intuitiveness of the problem, not its insignificance.

Imagine that the connection between money and well-being is as welfare economists like to imagine: There is an increasing, continuous function that goes through the origin, and that maps dollar payments to or from $P$ along with the project onto changes in a cardinal scale (the "utility" scale) of $P$'s well-being. Thus, assuming no lexical

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84 Or a bit more weakly: if the top-ranked option from all the baselines is the same.
priority, each \( P \) affected by the project has a unique welfare equivalent. Further, assume that the project is given a well-defined ranking, relative to the status quo, by CBA.\footnote{That is, the sum-of-CVs-for-the-project has a different sign, positive or negative, than the sum-of-CVs-for-the-status-quo; or both the sum-of-CVs-for-the-project and the sum-of-CVs-for-the-status-quo are zero.} Finally, to make the illustration simple, assume that utility differences are interpersonally comparable. Each person's utility scale is not just a scale of her well-being but a scale of overall well-being; such that the project increases or decreases overall well-being relative to the status quo just in case the sum of individual utility differences for that change is, respectively, positive or negative.\footnote{See John A. Weymark, A Reconsideration of the Harsanyi-Sen Debate on Utilitarianism, in INTERPERSONAL COMPARISONS OF WELL-BEING, supra note 14, at 255, 299-305 (1991) (distinguishing between interpersonally comparable and noncomparable utility functions).}

In this scenario, how can poor tracking arise? Very simply. Unless every person has the same function connecting money and utility for a given project and status quo, and that function is a straight line, the sum-of-CVs for the project can deviate from the sum of utility differences. It can deviate if winners and losers from the project have different functions. Or, it can deviate if every person has the same function and yet—because the function is not a straight line—dollars are translated into interpersonal welfare at different rates, along different parts of the function.

On any reasonable theory of well-being, it is possible that winners and losers have different functions connecting money and utility, for a given project and status quo. Take first an objective-list theory. On this theory, it is possible, indeed probable, that the contribution of money to personal and interpersonal well-being decreases as a person's stock of wealth increases. As Thomas Hurka explains, within the context of an Aristotelian theory:

For modest perfection . . . one needs enough resources for material security and a basic education. On its own . . . this fact does not amount to diminishing marginal utility. However important it is to move from zero resources to the minimum, it could be equally important to move from there to twice the minimum. But this is unlikely given the nature of Aristotelian perfection. . . . Of the many routes to excellence, many are quite undemanding of resources. Consider the artistic and scholarly lives. . . . [T]hey hardly require great personal fortunes, nor do lives devoted to chess, athletics, or personal relations. . . . Past a point [wealth]
can increase the number of a person’s options but will not add greatly to their quality.87

It is also possible that the contribution of money to well-being differs between equally wealthy persons, insofar as money is differentially productive of the value that each is best poised to realize. I am a scholar, while you are a traveller; money can do very little beyond a certain point to help my scholarly pursuits, while it can do quite a lot to facilitate your travel.

Similar points apply, mutatis mutandis, to desire-based theories. People typically, or at least possibly, develop desires for states of affairs in virtue of the objective values they take those states to realize.88 If indeed each person’s desire for a state roughly tracks the degree to which she realizes an objective value in that state, and if persons are differentially poised to convert money into objective values, then money will be differentially productive of desire-satisfaction across persons.89 Finally, and clearly, differing functions are possible on a mental-state theory: either a Sidgwickian theory which makes welfare depend on desirable mental states (the objective-list story I have just told can be retold here, insofar as, say, P desires the experience of friendship, accomplishment, autonomy, and other objective values) or a Benthamite theory which makes welfare depend on pleasurable sensations (if, for example, “resource monsters” efficiently convert purchased goods and services into pleasure, while “resource misers” are less efficient).90

What if, remarkably, winners and losers from the project do have the same function connecting money and utility? In that event, it is quite possible that the function will not be a straight line. Just as rich and poor persons may benefit differentially from equal dollar payments, so large dollar payments to the same person need not produce a benefit proportional to that of small payments.

88 See GRIFFIN, supra note 28, at 26-31 (noting that people typically desire what they take to be valuable); Thomas M. Scanlon, The Moral Basis of Interpersonal Comparisons, in INTERPERSONAL COMPARISONS OF WELL-BEING, supra note 14, at 17, 24-25 (same).
89 This statement assumes that there is some concept of desire-satisfaction that is interpersonally comparable. For a survey of possibilities, see Daniel M. Hausman, The Impossibility of Interpersonal Utility Comparisons, 104 MIND 473 (1995). I am not suggesting here that differential realization of desired values is the only way that poor tracking can arise within a desire-based theory, simply that it is one way.
90 See SUMNER, supra note 34, at 83-92 (distinguishing between two types of mental-state theories).
Here, as with undefined CVs and sum-of-CVs, I have focused mainly on the possibility of poor tracking without making stronger claims about its actual significance. That significance depends on the actual nature of agency projects, the actual shape of functions connecting money and utility, and so forth. But there is at least one actual and significant case, other than the risk/death example already discussed, in which CBA plausibly fails to track the welfare effect of agency and legislative projects. That is the case of projects that involve transfer payments from rich to poor. Such transfers plausibly will increase overall well-being, without more, because, as I have just explained, it is plausible (and usually assumed) that the poor reap greater well-being from dollars than the rich, ceteris paribus. Yet a transfer payment, without more, is notoriously counted by CBA as no improvement whatsoever over the status quo.

IV. ESOTERIC ORDERING FAILURES

Let us now consider a different (arguable) source of incommensurability: esoteric ordering failures. By this I mean, again, that the numbers assigned to options by CBA do not represent how the options truly relate with respect to overall well-being, insofar as options are related by esoteric value relations other than the conventional trichotomy (better than, worse than, precisely equal). In this Part, I will defend the following claim: It may be possible that esoteric ordering failures occur, but they are not, in truth, a ground of incommensurability, at least where the esoteric ordering relation at hand is incomparability. The fact that CBA fails to represent how incomparable options relate, for an agent, does not count against the agent's use of CBA in a choice situation involving those options, and in favor of some other decision procedure. In particular, given a choice situation in which all options are mutually incomparable, the question whether an agent has (normative) reason to use CBA in that situation is wholly dependent on second-order considerations. Further, as we shall see, the incomparability of options does not entail the existence of second-order

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91 See Hausman & McPherson, supra note 8, at 85, 201 (describing diminishing marginal interpersonal utility of wealth as plausible).

considerations (in particular, attitudinal constraints) that might weigh against CBA.\textsuperscript{93}

Two options are incomparable with respect to welfare, or more generally with respect to a normative criterion, if the following obtains: (1) for each option, it is false that this option is better than the other, with respect to the criterion, and it is false that this option is worse than the other, with respect to the criterion, such that (2) it is false that, in light of the criterion, there is reason to choose either option over the other, and yet (3) it is also false that the options are precisely equal, with respect to the criterion, for example because there exists a third option which is better than one of the two and still neither better nor worse than the other.\textsuperscript{94} Incomparability may not be the only kind of esoteric value relation. Perhaps there are others, such as vague value relations.\textsuperscript{95} However, because the philosophical literature on incommensurability, insofar as it has discussed esoteric value relations, has to date mainly focused on incomparability, that will be my focus here.

To begin, let me distinguish between global and local incomparability. By “global incomparability,” I mean that two agency options will be incomparable with respect to overall well-being as long as someone is better off with one option, and someone else is better off with the other. Global incomparability says that well-being cannot be compared across persons. To put the claim in the language of economics, it says that where two options are Pareto-incomparable, they

\textsuperscript{93} There might be a contingent connection, short of entailment, between esoteric ordering failures and the true grounds of incommensurability—I will not speculate on that issue—but, in any event, it is just those latter facts, and not esoteric failures, that must obtain for the agent to have reason not to use CBA.

\textsuperscript{94} See RAZ, supra note 47, at 322-35 (defining incomparability this way). Ruth Chang offers a different definition. See Chang, supra note 47, at 4-7, 6 ("[T]wo items are incomparable with respect to a covering value if, for every positive value relation relativized to that covering value, it is not true that it holds between them." (emphasis omitted)). My definition of incomparability, following Raz, excludes vagueness and includes what Chang calls “parity,” see id. at 25-27, at least if it is true that, with options on par with one another, no reason exists to choose one option over the other. Chang’s definition, on the other hand, excludes parity but includes vagueness.

\textsuperscript{95} Options are vaguely related with respect to the trichotomy if it is neither true nor false that the options are better, worse, or precisely equal. See GRIFFIN, supra note 28, at 95-98 (discussing vagueness); RAZ, supra note 47, at 324 (same); Chang, supra note 47, at 4-5 (same). The temptation to conflate vagueness and incomparability (as I have defined it here) should be avoided. If options are incomparable, then it is false that there is a reason to pick one or the other; if options are vaguely related, then it is neither true nor false that there is such a reason.
are welfare-incomparable. Global incomparability would be absolutely devastating for CBA. We do not need to monetize and aggregate a project's costs and benefits, relative to some baseline, if the project has no costs or no benefits relative to that baseline. CBA is a technique for evaluating projects that have both welfare costs and welfare benefits. The most plausible defense of CBA says that, for projects of this kind, which are left unranked by the standard of Pareto-superiority, CBA is a good decision procedure for identifying those that increase overall well-being. If, in fact, the criterion of overall well-being runs out just at the point where Pareto-superiority does, this welfarist defense of CBA collapses.

Fortunately, for the defender of CBA, global incomparability is false. If I can use a scarce medical instrument or procedure to relieve serious asthma, and you can use it to relieve a slight itch, then we are better off overall if I get the instrument or procedure, even if you neither care nor even know about me and therefore giving the procedure or instrument to me is truly a (slight) welfare setback for you. If I am an artist, who needs the amber hues of the sludge-colored river beneath my studio as inspiration for the abstract art I create, and you are my neighbors, whose lives are shortened or seriously discomforted by the chemicals that make the water amber, then overall welfare improves if we clean the water up, despite the harm to my artistic interests. Indeed, global incomparability is not merely false, but impossible on any reasonable theory of well-being. For a theory of well-being to be reasonable, it is a necessary condition that it warrant some interpersonal comparisons of well-being. As Daniel Hausman explains: "If a conception of well-being does not permit one to make interpersonal comparisons in an acceptable way, then that conception of well-being is itself unacceptable." It is a platitude about welfare that sometimes we can compare small losses or gains to one person with large gains or losses to another, and conclude that overall welfare has improved or decreased even though the welfare-changing move is not a true Pareto-improvement or the opposite. Any rea-

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96 By "Pareto-incomparable," I mean just that at least one person is better off with one option, and at least one other person is better off with the other option.

97 It bears emphasis, however, that global incomparability is devastating for CBA as a second-order matter (because CBA is presumably costly, and these costs are wasted if all options are incomparable) and not as a first-order matter.

98 Hausman, supra note 89, at 474.

99 See id. at 489 ("[I]nterpersonal comparisons are an ineliminable part of human life."); see also John C. Harsanyi, Morality and the Theory of Rational Behaviour, in
sonable theory of well-being will need to bear out this platitude, and rule out global incomparability.

This leaves local incomparability. By "local incomparability," I mean that some (not all) options will be incomparable, where they are Pareto-incomparable. Unlike global incomparability, local incomparability seems possible. It is not ruled out by our platitudes about welfare; it is a platitude that "large enough" welfare changes for one person will outweigh "trivial" changes in the opposite direction for that person or another, not that any welfare change for one person is comparable with any welfare change in the opposite direction for that person or another. Moreover, as I have already noted, Joseph Raz has constructed examples involving small improvements with respect to plural values—his port, scotch, and park example from *The Morality of Freedom*—that appear to be cases of true welfare incomparability. Of course, we do not use CBA to decide whether a single individual should spend the afternoon drinking port, drinking scotch, or walking in the park. But it is easy, following Raz's lead, to imagine a case in which options that CBA might be used to evaluate seem to be truly welfare-incomparable.

*Local Incomparability: Strolling or Sports*

A large tract of land at the edge of town can be put to one of two uses. It can be turned into a lovely park, with quiet, shaded paths for strolling, or it can be developed into an athletic facility, with areas for mountain-biking, skateboarding, in-line skating, and running. Half of the town's population are recreational walkers; half are recreational bikers, skateboarders, etc. Each group desires its respective recreation with the same distribution of intensity (whatever "intensity" of desire means for purposes of interpersonal comparison), and the feelings of satisfaction produced by each recreation are roughly the same for each group.

Adding an extra biking trail, or a better skateboard area, to the proposed athletic facility would make it even better than the originally proposed facility. Yet neither the proposed facility, nor the improved proposed facility, seems better or worse than the proposed park. (After all, both strolling and sports are valuable kinds of recreation. Nothing in the objective values at stake seems to warrant our counting either of the athletic facilities as a welfare improvement over the park, or vice

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UTILITY\textsc{itarianism and Beyond} 39, 49 (Amartya Sen & Bernard Williams eds., 1982) (noting pervasiveness of interpersonal utility comparisons in ordinary life).

\footnote{See \textsc{Hurka}, supra note 87, at 86-88 (stating in effect that local, but not global, incomparability will obtain with respect to human perfection); AM\textsc{ARTYA} \textsc{SEN}, IN\textsc{EQUALITY REEXAMINED} 46-48 (1992) (same, with respect to "functionings" and "capabilities").}
versa.) Thus, seemingly, the park and the athletic facilities are incomparable with respect to overall well-being.

It might be argued that the appearance of incomparability, in this case or in Raz's port, scotch, and park example, is misleading. Donald Regan, for instance, maintains that the trichotomy of conventional value relations normally exhausts the ways in which options relate. Normally, if not necessarily, for Regan, if two options are not better or worse, then they are precisely equal. The appearance of incomparability, he argues, does not reflect an esoteric relation beyond better, worse, and precisely equal, but more typically results from the ignorance of choosers about which of the three conventional relations the options bear. I need not take a position on the Regan-Raz dispute here, for the claim I wish to defend is that, even if local incomparability is possible, it does not undermine CBA.

Why not? Consider first the case in which CBA fails to provide a numerical ranking of two options. As I have already explained, this may occur for various reasons: because the CV for one or more persons is undefined, or because, even given well-defined CVs for all persons, each option looks better or worse from the baseline of the other. The case when CBA does not provide a numerical ranking, it should be stressed, is not an esoteric ordering failure. An esoteric ordering failure means that the numbers assigned by CBA to options (or, in this case, the absence of a numerical ranking) fail to reflect how the options truly relate. The numerical ranking (or absence thereof) produced by the scaling procedure is not an accurate representation of the true relations between the options, with respect to the governing criterion (here, overall well-being). That is what I mean by the term "ordering failure." But, if two options are truly incomparable, and CBA does not assign the options a numerical

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102 See id. Regan at one point "conced[es] that incommensurable values are logically possible" but also says that "all values are commensurable." Id. at 1056.

My discussion here is based exclusively on Regan's original work on comparability. His more recent defense of comparability is contained in Donald Regan, Value, Comparability, and Choice, in INCOMMENSURABILITY, INCOMPARABILITY, AND PRACTICAL REASON, supra note 47, at 129. This important treatment was published too late to be incorporated into my Article, but should certainly be consulted by any reader interested in incomparability, as should the other contributions to Professor Chang's volume, and the contributions to this Symposium. See Matthew Adler, Law and Incommensurability: Introduction, 146 U. Pa. L. Rev. 1169 (1998) (summarizing discussions of incomparability by Symposium participants).
ranking, then this absence of a numerical ranking accurately reflects how the options truly relate! In other words, if options are incomparable, then any numerical ranking of them would be a poor representation because numbers (or at least real numbers) are necessarily ordered as greater, lesser, or precisely equal. Conversely, the absence of a numerical ranking for incomparable options just reflects that they bear a fourth relation which no real-valued scale can mirror.

It might be objected that, in the case where options are incomparable and CBA fails to assign them a numerical ranking, there is welfarist reason against using CBA—for there is welfarist reason to use a decision procedure that, unlike CBA here, reaches a determinate choice: "Normally, it is a good thing from the point of view of overall welfare for agents or agencies to choose determinately between options, rather than to dither. CBA, to the extent it fails to assign a determinate ranking to options, leaves agents or agencies dithering." This objection is cogent. Dithering is often costly and, at a minimum, just silly; normally, we do indeed have welfarist reason not to dither. But that welfarist reason is a second-order, not a first-order reason. It is a reason which obtains even if, as in the case now considered, options are truly incomparable and CBA accurately reflects that fact. In any event, the problem of dithering is readily solved in the kind of case we are now considering. Simply stipulate that, where CBA fails to assign determinate numbers to options, the status quo is chosen (assuming some option is determinately picked out as the status quo by deontological criteria) or, failing that, a coin is flipped. This procedure may be objectionable, but only in cases of conventional ordering failure, or when second-order considerations obtain beyond the principle against dithering, such as second-order constraints on attitudes—and not merely in the case of incomparable options.

Now, let us move to the case in which CBA does assign a determinate, numerical ranking to the two options and yet they are truly incomparable. Here, we do have an esoteric ordering failure. The project, say, is assigned a positive sum-of-CVs from the baseline of the status quo, and the status quo is assigned a negative sum-of-CVs from the baseline of the project, and yet, in truth, the project is neither better, nor worse, nor precisely equal to the status quo. But so what?

103 Of course, we have reason to dither where something more might be learned about the options; but in the case of incomparable options, there is nothing left to learn. See Regan, supra note 101, at 1062-64, 1063 (stating that "deliberating [between two incomparable options] beyond the point where the relevance of practical reason has been exhausted . . . makes no sense").
The existence of an esoteric ordering failure does not wholly or partly constitute a normative reason for the agent to use some other decision procedure here instead of CBA. Consider a decision procedure that, in this case, determinately picks out the status quo rather than the project. That alternative decision procedure is not better, qua welfare, than CBA. Rather, it is incomparable, so far as we yet know. Where procedure $D_1$ picks out $O_1$, and procedure $D_2$ picks out $O_2$, and $O_1$ and $O_2$ are welfare-incomparable, then $D_1$ and $D_2$ are also incomparable, insofar as their welfare value depends on the welfare value of the options they pick out. To demonstrate that a welfarist reason exists in favor of procedure $D_2$, we would need to point to the fact that $D_2$, but not $D_1$, correctly ranks other options that are not incomparable; or to the fact that $D_1$ violates second-order constraints on the permissible attitudes that choosers adopt; or to further second-order considerations.\footnote{104 The same holds true for a decision procedure that, like CBA, picks out the project but does so in a way that accurately reflects the incomparability of the project and the status quo. Without more, the agent has no reason to choose this decision procedure over CBA.}

The point bears emphasis: CBA is, without more, neither better nor worse than any alternative decision procedure that determinately picks out an option that is incomparable from the option picked out by CBA. To be sure, CBA is not precisely equal to the alternative decision procedure. This absence of precise equality, however, does not entail the existence of a welfarist reason pro or con CBA. Again, incomparability just means that there is no reason in favor of one option or the other. The absence of precise equality may have other entailments (for example, that for some choice situation there will be a third decision procedure better than CBA, but incomparable to the alternative), but specifically not the entailment that a reason exists in favor of one incomparable procedure or the other.

What about the procedural option of dithering? Where CBA determinately picks out a project that is truly welfare-incomparable with the status quo, one alternative procedure (an incomparable one) is a procedure that determinately picks out the status quo; another alternative procedure is a procedure that picks out neither option, but leaves the agent or agency dithering. Note that the argument I have just adduced does not prove CBA to be incomparable with the dithering alternative. For dithering, by definition, picks out neither of the two options, and our premise is that the two options are incomparable to each other, not that they are incomparable with the third op-
tion of dithering. Yet as I already have argued, there is normally welfarist reason not to dither. CBA thus is not incomparable with the dithering option; rather, it is better, at least normally. To be sure—and this is why I say “normally”—there may be welfarist reason to dither rather than engage in CBA when CBA, but not dithering, violates constraints on permissible attitudes. If I am trying to decide whether to spend the holidays with my birth family or my adoptive family, then monetizing and comparing the well-being I would receive under each option may be an inappropriate way to think about the choice. As compared to that, or any decisive procedure, a little dithering might be better, even if the options are incomparable. But it is a large mistake to think that the incomparability of options always brings into play second-order constraints that would bar thinking about options in monetary terms. Incomparability is neither sufficient nor necessary for the existence of such constraints—assuming they exist, a point to be considered in Part V. Incomparability is not necessary, since if there is reason, for example, not to think about friends, or children, or mountains in monetary terms, then surely this reason does not evaporate if the option of losing the friend, child, or mountain is not merely incomparable with the option of keeping the friend, child, or mountain, but is truly worse! More importantly for our purposes, the incomparability of options is not plausibly sufficient for monetization to constitute an inappropriate attitude. Incomparability, if it exists, is logically distinct from, and can exist without, second-order constraints on monetization.

Consider again Raz’s port, scotch, and park example,105 or my example of strolling versus sports.106 What drives the (seeming) incomparability in these cases is the existence of plural values, and the possibility of small improvements in one without apparent change overall. But if the values are not constrained, such that thinking about them in welfare or monetary terms is destructive of their goodness—and why think recreational values are like that?—we have (apparent) incomparability without relevant attitudinal constraints. “Incommensurability” meaning incomparability—that is, the absence of reason for choice—is quite distinct from “incommensurability” meaning the existence of reason not to think about choices in a certain way. It is now time to consider whether “incommensurability,” in this last sense, really arises.

105 See supra text accompanying note 70.
106 See supra text accompanying notes 100-01.
V. SECOND-ORDER CONSIDERATIONS

"Second-order considerations" are a residual category. Any welfarist consideration against an agent's use of CBA for choosing between given options, other than an esoteric or conventional ordering failure, is a second-order consideration. For example, in a given choice situation, imagine that an agency's options are ordered by the conventional trichotomy of better than, worse than, or precisely equal. Further, suppose that CBA, if properly executed, both is well-defined and tracks perfectly the true welfare order of the options. Thus there are no first-order considerations against the use of CBA in this situation. Nonetheless, Congress or a presidential oversight agency might have a legitimate welfarist reason to countermand the agency's use of CBA here. CBA might be too expensive, or its application might be sufficiently opaque that it invites agency shirking and malfeasance, relative to another, more clear-cut decision procedure that, for these options, tracks overall well-being sufficiently well. These kinds of welfarist considerations against CBA, which tell in favor of yet more algorithmic procedures and which concern the epistemic imperfections of agencies, the relative time and effort involved by CBA, the risk of a deliberate or negligent misapplication of that procedure, and so forth, comprise—by my categorization—various kinds of "second-order" considerations. It is quite plausible that, to some extent, such considerations obtain, and in no way do I intend to deny that.

Rather, the position I wish to defend in this Part is that there is no intrinsic second-order welfarist consideration that does robust moral work against the use of CBA. The monetization of costs and benefits—even the costs and benefits of destroying mountains, killing children, ruining marriages or friendships, and harming other supposedly priceless goods—is not an intrinsic disvalue, sufficient to override CBA where CBA is otherwise justified. The plausible second-order considerations I have just described do not purport to identify some intrinsic disvalue in CBA. To say that CBA invites agency shirking or malfeasance, or that it consumes an agency's time and effort, is to identify some further welfare setback (the welfare-degrading projects that a shirking agency approves, the options that the consumed

107 What would that more algorithmic procedure be? It would not be a procedure of straight moral deliberation—which is even less algorithmic than CBA—but it might be a procedure of, say, imposing controls on firms up to the point of "technological feasibility," or banning all risks above a "de minimis" threshold, or permitting activities that satisfy existing trade or professional standards. See generally LAVE, supra note 1, at 9-25 (discussing these procedures).
resources could be used to promote) with which CBA is, contingently, connected. By contrast, what I take Raz to be claiming in his discussion of "constitutive incommensurability"\textsuperscript{108} is that monetization can be intrinsically disvaluable—specifically, that $P$'s very thought, belief, or judgment that certain goods have monetary equivalents is inconsistent with $P$'s partaking of the value of those goods. Raz is not alone in advancing this claim. Other prominent contributors to the "incommensurability" literature, such as Elizabeth Anderson, Martha Nussbaum, Margaret Radin, and Cass Sunstein, advance the same claim or closely related claims.\textsuperscript{109} As Sunstein crisply explains, attitudes (specifically, attitudes that preclude monetization) are partly constitutive of value:

If friendship and cash were commensurable, or if a park and $100,000 were valued in the same way, we could not have certain attitudes toward friendship and toward parks. Indeed, if parks and $100,000 could be aligned along the same metric, parks would not be parks as we now understand them. . . . [I]ncommensurability . . . is desirable as a means of maintaining attitudes and relationships that are parts of good lives.\textsuperscript{110}

Or again:

A parent who is asked to trade a child for some sum of money might well react with outrage and shock and regard the request as insulting. . . . The recipient of the offer objects not because the amount offered is unconscionably low, but because the kind of valuation is grotesquely unsuitable. The experience of parenthood is inconsistent with having an evaluative attitude that would permit consideration of dollar compensation for its sacrifice.\textsuperscript{111}

But is the claim true? I am interested, here, in an internal critique of CBA, relative to the criterion of overall well-being; and I am interested in whether the supposed disvalue constituted by monetization can override normative considerations in favor of CBA. So let me rephrase the question as follows: Can the very monetization of costs and benefits constitute an intrinsic setback to overall well-being, such that this setback furnishes sufficient welfarist reason against the performance of CBA, in some choice situation where CBA otherwise would be morally justified? The answer to this question, I will argue, is plausibly "No." I will defend this negative answer by considering

\textsuperscript{108} See Raz, supra note 47, at 345-53.

\textsuperscript{109} See sources cited supra note 27.

\textsuperscript{110} Sunstein, supra note 24, at 805.

\textsuperscript{111} Id. at 813.
what would seem to be the strongest case for Raz et al.—namely the case of projects that kill children. If any good is "priceless," in the sense that the good's very nature and value precludes thinking, believing, or judging it to have a dollar or welfare equivalent, it is surely the good of parenthood.

Consider three possible scenarios. Consider first a choice situation involving the death of a child where the agency already has reason not to use CBA, quite apart from any second-order constraint on thinking, believing, or judging children purely in dollar terms. Some governmental projects, as hard as it may be to admit this, will cause the death of children relative to other options: building infrastructure, approving dangerous drugs, foods, or consumer products, setting speed limits or vehicle safety specifications, and so on. It could well be the case that, for a choice situation involving such a project, the balance of first-order and nonintrinsic second-order considerations already weighs against CBA. For example, the problem of lexical priority may arise—that is, the parent of the child whom the project will kill has no well-defined CV since truly no dollar amount would suffice to compensate the parent for the loss. In this scenario, the advocate of CBA readily can concede the Razian claim that the very good of parenthood precludes monetization; but this is an easy concession for her to make because she can also point out that the Razian claim is superfluous to the moral case against CBA. Cost-benefit analysis is already unjustified here, quite apart from the truth of that claim.

Second, consider the scenario in which the agency has neither reason to use CBA nor reason against the use of CBA, on the balance of first-order and nonintrinsic second-order considerations. CBA is just as good as some other decision procedure: either the two are equally good, or incomparably good. Here, the Razian claim can do moral work against CBA. If the other decision procedure does not implicate the second-order constraint against the pricing of children—and I will not deny that, on the ordinary account of parenthood, such a constraint obtains—then the agency indeed will have

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112 By "CBA," here, I mean CBA as classically defined, that is, as the sum of unique welfare equivalents. The arguments I here develop are equally applicable to any definition of "CBA," for example, as the sum of lowest amounts, or rough substitutes, or CVs for risk. For simplicity and clarity, I focus on the classic version.

113 See, e.g., Regan, supra note 101, at 1068-69 (noting that "it is closer to the truth to say we regard the value of parenthood as incomparably greater than the value of money, than to say we regard these values as [incomparable]").
reason to employ that procedure instead of CBA.\textsuperscript{114} Note, however, that the Razian claim here performs only weak moral work against CBA; it tips the moral balance from precise equality or incomparability between the two procedures, to the existence of reason against using CBA. We have not yet shown that the Razian claim can do robust moral work, by which I mean the moral work of overriding the first-order and nonintrinsic second-order considerations that otherwise would make CBA the best-justified procedure for some choice.

So let us turn to the third scenario: a choice situation involving the death of a child where the agency, on the balance of first-order and nonintrinsic second-order considerations, has sufficient reason in favor of CBA as against all other decision procedures. Here, we must imagine, the parents affected by child-killing projects do have well-defined CVs for the death of their children; the sum-of-CVs is well-defined and adequately tracks overall well-being,\textsuperscript{115} and CBA is both cheaper than direct moral deliberation and much more accurate than yet-more-algorithmic decision procedures such as the invocation of a de minimis risk threshold. It is only in such a case that the Razian claim can do robust moral work against CBA. But note, crucially, what the claim here amounts to. It says that (1) it is constitutive of the good of parenthood for the affected parent and the agency not to think, judge, or believe something true (i.e., that there exists a unique sum of money which, paid to the parent, precisely compensates her for the loss of her child), and (2) this constraint on thinking, judging, or believing something true is constitutive of the good of parenthood even though such thoughts, judgments, or beliefs are required by a decision procedure (CBA) which is otherwise morally justified.

How can this be? How can it be bad for overall welfare for persons to think, judge, or believe a true proposition in the context of a

\textsuperscript{114} “Constraint” is my shorthand for intrinsic second-order considerations.

\textsuperscript{115} I suppose that it may be possible for CBA to be best justified on the balance of first-order and nonintrinsic second-order considerations, even if individual CVs or the sum-of-CVs are not well-defined (that is, CBA followed by either dithering or some way to choose decisively, such as a coin-flip), although it is hard to imagine how that could happen. In any event, my argument in the text below focuses on the case in which CBA is best justified and individual CVs, as well as the sum-of-CVs, are well-defined. The argument would need to be modified somewhat to deal with the odd case I just speculated about, but it would rely on the same basic premise: If CBA is best justified on the balance of first-order and nonintrinsic second-order considerations, as compared to all other decision procedures, then the morally best account of goods like parenthood will permit their pricing in the context of CBA.
The welfarist critic of CBA might start by appealing to the desires or feelings of parents and other persons, for desires and feelings undergird welfare, on various theories. He might say that parents with true monetary equivalents for the loss of their children, and others, do not want to think about what that amount is; or that thinking about this true amount directly causes unpleasant feelings of discomfort, anger, frustration, or embarrassment to these parents and others. Perhaps so. Then again, it is possibly true of any agency decision procedure that the persons affected by that procedure might not want agencies to perform it, or might feel bad as a consequence of its performance. This is possibly true, for example, for the alternative procedure where agencies directly apply the criterion of overall well-being. To the extent parents truly desire not to price their children in dollars, or feel bad as a result of doing so, then plausibly to that extent they also desire not to evaluate the loss of their children in terms of intra- and interpersonal well-being, or feel bad as a result of doing that. Conversely, if agencies, by virtue of parents' feelings and desires, abandon CBA and direct moral deliberation, and instead rely on procedures that do not force parents to think true thoughts about the price or welfare value of their children, then other persons may suffer welfare setbacks because they desire CBA or deliberation or resent its absence. Further—and more to the point—a reasonable theory of well-being is unlikely to give much weight to these brute desires and feelings against the very procedures otherwise required by that theory, unless the desires and feelings themselves can be objectively justified by the welfarist goods at stake.

Can these desires and feelings be objectively justified? Raz and other proponents of "constitutive incommensurabilities" seem to think so. Their claim is not that persons merely disprefer or feel bad about the monetization of priceless goods, but rather that monetization is inconsistent with the (objective) nature of these goods, such

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116 For literature that, in one way or another, addresses this very important question for welfarists and utilitarians, see sources cited supra note 60; see also Dean Cocking & Justin Oakley, Indirect Consequentialism, Friendship, and the Problem of Alienation, 106 ETHICS 86 (1995); Barbara Herman, Agency, Attachment, and Difference, 101 ETHICS 775 (1991); Neera Badhwar Kapur, Why It Is Wrong to Be Always Guided by the Best: Consequentialism and Friendship, 101 ETHICS 483 (1991); William H. Wilcox, Egoists, Consequentialists, and Their Friends, 16 PHIL. & PUB. AFF. 73 (1987); Susan Wolf, Moral Saints, 79 J. PHIL. 419 (1982).

117 See supra text accompanying notes 44-45 (describing theories of well-being).

118 See infra note 123 and accompanying text.
that negative desires and feelings are understandable and appropriate. But the difficulty here is showing why the relevant welfarist good is best interpreted to preclude its pricing. Consider parenthood. The critic of CBA will say that we have an objective welfarist value or good, Parenthood, such that thinking, etc., about the true money price of that good objectively degrades its welfare value for those who participate in it. But why not say that the objective welfarist value or good is really Parenthood*, such that thinking, etc., about the true money price of that good does not objectively degrade its welfare value, at least in any context where money pricing otherwise is required by the exigencies of moral deliberation or its procedural stand-ins? Although Parenthood may be the common-sense and ordinary account of what parenthood entails, Parenthood* is the account that is truly best justified, for it is Parenthood*, but not Parenthood, that permits parenthood to cohere with the need of governments and citizens to apply moral criteria (either through direct application, or through substitute decision procedures resting upon those criteria, such as CBA). Or so the defender of CBA will respond. And the fact that Parenthood, but not Parenthood*, precludes participants from thinking, judging, or believing truths about their children is, I suggest, yet a further reason to count the latter as the best account of what parenthood objectively requires.

At this point, I see only one viable way to salvage the defense of intrinsic second-order considerations. That is to say something like the following.

Parenthood or Parenthood*

Although Parenthood* seems to be the best account of parenthood when we simply consider its coherence with the process of moral decisionmaking, Parenthood turns out to be the best account when we also consider human psychology. For it is simply impossible, or at least abnormal, as a matter of human psychology—be it natural psychology or the socially

119 See, e.g., RADIN, supra note 27, at 92 (stating that the best conception of human flourishing "will not be the life of universal commodification"); RAZ, supra note 47, at 348 ("I will argue that significant social forms, which delineate the basic shape of the projects and relationships which constitute human well-being, depend on a combination of incommensurability with a total refusal even to consider exchanging one incommensurate option for another."); Sunstein, supra note 24, at 804 ("[T]he recognition of an intrinsic good may entail an evaluative attitude that is incompatible with the use of certain reasons to compromise it.").

120 On the choice between common-sense and esoteric formulations of the relevant goods, see OWEN FLANAGAN, VARIETIES OF MORAL PERSONALITY: ETHICS AND PSYCHOLOGICAL REALISM 32-101 (1991); NUSSBAUM, supra note 27; Cocking & Oakley, supra note 116.
constructed psychology of persons in our society—to reap welfare from Parenthood*. After all, any welfarist good should have certain motivational and affective properties. It should be capable of motivating normal persons to seek it, and it should produce some kind of positive satisfaction for those who attain it. But Parenthood* cannot do that, given the psychology of normal persons in our society. Normal parents are psychologically incapable of believing that children have a money price and, at the same time, engaging in and reaping satisfaction from parenthood with the same engagement that they do under Parenthood.*

This response is valid. If indeed Parenthood* is incapable of motivating and satisfying humans like us, then we have sufficient reason to count Parenthood as the best account of the welfarist good, and, in turn, to give real weight to the desires and feelings against monetization that parents and other persons experience, or simply to count monetization as an intrinsic welfare setback quite apart from negative desires and feelings. But note that the defense of “constitutive incommensurability” ends up resting upon a claim of psychological fact, namely, that we are built so as to require constituting the relevant good in a morally suboptimal way. In order to demonstrate that there exists a second-order constraint against the use of otherwise-justified CBA, the critic must try to prove this psychological claim, rather than merely noting (which is true but insufficient) that certain goods may constrain attitudes, or showing (perhaps true, but again insufficient) that the ordinary account of certain goods precludes monetization. Thus far, Raz, Sunstein, and other second-order critics of monetization and CBA have not, to my knowledge, demonstrated the psychological claim.

It is hardly unusual to think that our ordinary, preanalytic understandings, beliefs, and practices may need to give way in light of a fuller moral analysis. My argument here is that, unless the psychological claim holds true, the preanalytic view of parenthood and other goods supposedly constituted by a constraint on thinking, etc., about them in monetary terms should give way to permit the pricing of those goods, where CBA is otherwise justified. Further (although it is well beyond the scope of this Article to disprove the psychological claim), I confess that I find the claim implausible. American juries have been pricing children in the context of wrongful death suits brought by

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1 For additional commentary on the psychological feasibility of novel goods or moral views, see generally FLANAGAN, supra note 120, at 32-101; NUSSBAUM, supra note 27, at 120-22.
parents for at least the last fifty years. Nonetheless, parents seemingly continue to feel strong affection for their children, and to be strongly motivated by the project of raising them. If there is no second-order constraint against jury pricing of children in the context of wrongful death suits, then *mutatis mutandis* there is no second-order constraint against agency pricing of children in the context of justified CBA, and *a fortiori* there is no second-order constraint against agency pricing of the environment, marriage, friendship, death, risk, sex, or anything else.

And finally, if CBA must go, then it is likely that so must the direct application of the welfare criterion. The common-sense view of parenthood, friendship, the environment, and other priceless goods is that the participant is precluded from thinking, believing, or judging that her participation in these goods is only valuable qua overall welfare. So if this common-sense account gives rise to desires and feelings against CBA, then similarly it should give rise to desires and feelings against direct welfarist deliberation—as I have already noted. And if the common-sense account justifies these negative desires and feelings in one case, then so should it in the other. The upshot here is that the intrinsic second-order critique of CBA is not a specific critique of that procedure, but rather a generic critique of any decision procedure that requires agencies and citizens to evaluate the importance for welfare of goods supposedly constituted by second-order constraints. If the psychological claim is correct, and the intrinsic second-order critique goes through, agencies will be constrained from using any procedure—not just CBA—which involves an honest assessment of the welfare benefits of such goods.

Let me stress how limited my argument is here. I am not denying that some constraints on attitudes, and related constraints on behavior, *are* constitutive of goods such as parenthood. Rather, my position is that, if for some person a finite dollar amount would serve to repair precisely the welfare setback caused by the loss of a child, friend, mountain, etc., then there is no further constraint on that person’s

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123 Or, for that matter, thinking, believing, or judging that her participation in those goods is only valuable qua any impartial moral criterion. See sources cited *supra* notes 60, 116. In particular, see Railton, *supra* note 60, at 135-40 (discussing alienation critique of impartial moral views, particularly utilitarianism).
identifying that amount in the context of justified CBA. This position is consistent with the following claims, which I do not mean to deny:

It is constitutive of parenthood, etc., that the parent give very significant weight to the child’s welfare, as opposed to the parent’s welfare, in determining the parent’s actions; or even that the parent think solely of the child’s welfare, in determining the parent’s actions.

Relatively, it is constitutive of parenthood, etc., that the parent not sell her child, or consider doing so.

It is constitutive of parenthood, etc., not to have persistent, idle thoughts about the welfare impact of parenthood.

Nor do I mean to deny this claim:

It is constitutive of parenthood, etc., that no dollar amount would repair precisely the parent’s loss of the child.

Again, if this last claim is true (and it may be), then CBA will collapse by virtue of a conventional ordering failure: the parent’s CV will be undefined. My point is simply that, if the last claim is not true, then there is no further second-order constraint on pricing children and other such goods in the context of justified CBA.

CONCLUSION

Options are “incommensurable” for an agent, by CBA, with respect to overall well-being, if the agent has welfarist reason not to use CBA in choosing between those options. Can incommensurability occur? Of course it can. But we should be clear about what the grounds for incommensurability are. It is possible, and to some extent plausible, that conventional ordering failures do occur—most problematically, that CBA gives a higher or equal ranking to an option that in fact degrades overall welfare, or fails to rank two options that differ qua overall welfare. And conventional ordering failures, in turn, clearly augment the welfarist case against CBA. (If, for example, CBA and direct welfarist appraisal are equal with respect to all second-order considerations, but a conventional ordering failure by CBA occurs in some choice situation, then the agency will have welfarist reason to engage there in direct appraisal.) By contrast, esoteric ordering failures may be possible but (at least where the esoteric ordering relation at hand is incomparability) do not augment the welfarist case against CBA. An esoteric ordering failure is not a true ground of incommensurability, as surprising as that may sound; the choice between CBA and other procedures ought wholly to depend upon con-
ventional failures and second-order considerations. In turn, mundane second-order considerations, such as the costliness of CBA, the likelihood of its misapplication, and so forth, are possible, plausible, and can augment the welfarist case against CBA. However, the more intriguing notion of a “constitutive incommensurability,” an intrinsic, second-order constraint that precludes the otherwise-justified use of that procedure, rests on the (to my mind) implausible and, in any event, unproven psychological claim that humans cannot be appropriately motivated and affected by friends, children, mountains, etc., unless they believe that there is no amount of money that precisely repairs the loss of such goods, even in scenarios where such an amount turns out to exist. The upshot is that CBA is indeed vulnerable to an “incommensurability” critique, but one quite different from that hitherto described by legal scholars and philosophers.

What about a nonwelfarist objection to CBA? I have focused here on an internal critique of CBA, relative to the moral criterion of overall well-being. Imagine that, in light of that criterion, CBA is best justified as against all other decision procedures for some choice situation. Does the critic of CBA have anything left to say? There are two possibilities. First, she might say that overall well-being is morally irrelevant, meaning this: The fact that one option increases overall welfare, relative to another option, does not provide an agent (or at least a governmental agent) normative reason to choose the first option. Second, and alternatively, she might say that nonwelfarist considerations are inseparable from considerations of overall well-being, meaning this: Even if the agent has reason to use CBA in light of overall well-being, CBA is not part of the complete decision procedure that the agent has reason to use, in light of the totality of moral considerations, including (but not limited to) overall well-being. The claim of irrelevance is, I think, wrong, and the claim of inseparability is at least counterintuitive. But these are not matters I have space to consider here. The critic of CBA who concedes the welfarist case can still succeed by showing irrelevance or inseparability, but if she is to succeed, it is one or the other that she will need to demonstrate.