
THE MORAL JUSTIFICATION OF BENEFIT/COST ANALYSIS

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Benefit/cost analysis is a technique for evaluating programs, procedures, and actions; it is not a moral theory. There is significant controversy over the moral justification of benefit/cost analysis. When a procedure for evaluating social policy is challenged on moral grounds, defenders frequently seek a justification by construing the procedure as the practical embodiment of a correct moral theory. This has the apparent advantage of avoiding difficult empirical questions concerning such matters as the consequences of using the procedure. So, for example, defenders of benefit/cost analysis (BCA) are frequently tempted to argue that this procedure *just is* the calculation of moral rightness – perhaps that what it *means* for an action to be morally right is just for it to have the best benefit-to-cost ratio given the accounts of “benefit” and “cost” that BCA employs.¹ They suggest, in defense of BCA, that they have found the moral calculus – Bentham’s “unabashed arithmetic of morals.” To defend BCA in this manner is to commit oneself to one member of a family of moral theories (let us call them *benefit/cost moral theories* or *B/C moral theories*) and, also, to the view that if a procedure is (so to speak) the direct implementation of a correct moral theory, then it is a justified procedure. Neither of these commitments is desirable, and so the temp-

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1. If they reject descriptive analyses of moral terms, the claim might be that the judgment that one ought to maximize the ratio of benefits to costs (given the account of “benefits” and “costs” employed by BCA) is a fundamental moral judgment – what R. M. Hare calls a “decision of principle” (1969, pp. 56–78).

tation to justify BCA by direct appeal to a B/C moral theory should be resisted; it constitutes an unwarranted short cut to moral foundations – in this case, an unsound foundation. Critics of BCA are quick to point out the flaws of B/C moral theories, and to conclude that these undermine the justification of BCA. But the failure to justify BCA by a direct appeal to B/C moral theory does not show that the technique is unjustified. There is hope for BCA, even if it does not lie with B/C moral theory.

In defense of these claims, I begin (in section 1) with a slightly fuller account of the strategy of moral justification to be criticized and a brief sketch of what B/C moral theory would look like. There are several different versions it might take, but certain features will be common to all variants. In virtue of these common features, I dismiss all variants of B/C moral theory without detailed consideration. I argue in section 2 that even if some version of B/C moral theory were correct, it is unlikely that unrestricted use of BCA would be morally justified – that is, it is unlikely that B/C moral theory would endorse unrestricted employment of BCA. BCA appears to be doubly damned. However, in section 3 I sketch two arguments for the justification of a restricted use of BCA. Both arguments depend on the assertion that BCA yields information that it is reasonable to suppose is of moral importance. Different moral theories will interpret the information in different ways and accord it different roles, but most moral theories current in our society, and indeed most plausible moral theories, will take a higher benefit-to-cost ratio to be correlated, *ceteris paribus*, with moral preferability.

1. BENEFIT/COST MORAL THEORIES

The short-cut defense of BCA holds that BCA is the direct implementation of the correct moral theory. But the notion of “directly implementing” requires some clarification. It is difficult to define this term in a way that is neutral between axiological and deontological theories. Perhaps a pair of examples will illustrate the concept of *direct implementation*. Imagine, first, a moral theory according to which actions are right if and only if they maximize some value, v . The procedure that directly implements this theory is that of determining the set of alternative actions that maximize v and then performing one member of that set. In contrast, such a theory might be *indirectly* implemented by attempting to produce a merely satisfactory, rather than a maximum, quantity of v , by attempting to maximize some other value, or by attempting to conform to certain constraints. It is possible for v to be more effectively produced by indirect than by direct means.² Second, consider a theory

2. This fact has been noticed by many at least since John Stuart Mill’s discussion of it in chapter 2 of *Utilitarianism* (1968, pp. 264–66). For several recent discussions of this and related matters, see Parfit (1984, chap. 1), Elster (1983, chap. 2), and Hubin and Perkins (1986).

that holds that actions are right just in case they don't violate any member of a set of rules. Such a theory would be directly implemented by the procedure of determining the set of actions that satisfy the rules in question and performing one of those actions. An *indirect* implementation might have us attempt to conform to some other set of rules or to maximize some value. It is possible that an indirect implementation of a set of rules would be more effective in producing conformance with the rules than would a direct implementation. (I shall use "directly grounds" as the converse of "directly implements," so that a moral theory directly grounds a procedure that directly implements it.)

A theory that does not endorse its direct implementation will be called *self-effacing*,³ while one that does recommend its direct implementation will be called *self-promoting*. Defenders of the short-cut strategy, then, assume that some variant of B/C moral theory is both correct and self-promoting. Before attacking each of these assumptions, we will briefly consider two forms of B/C moral theory.

At the heart of any moral theory that could directly ground BCA, will be the concept of a Potential Pareto Improvement (PPI) as measured by individuals' willingness to pay (or accept compensation) for proposed changes. We should begin our examination of the moral theories that can be said to directly ground BCA with a discussion of the concept and moral significance of a Potential Pareto Improvement.

One state, s_1 , represents a PPI over another, s_2 , just in case, (roughly) there exists *in principle* some way to redistribute the benefits in s_1 so as to achieve a third state, s_3 , which is Pareto superior to s_2 . (The in-principle method of redistributing need not take account of transfer costs.) For present purposes, *Pareto superiority* is defined as follows: A state, s_1 , is Pareto superior to another, s_2 , if and only if no one is worse off in s_2 than in s_1 and at least one person is better off in s_2 than in s_1 . There is nothing in the concept of a Potential Pareto Improvement itself that implies anything about the specific interpretation of "better off" and "worse off," but B/C moral theories interpret these in terms of the individual's willingness to pay for a proposed change (WTP) and willingness to accept compensation for a proposed change (WTA).

Perhaps the most obvious candidate for a moral theory that directly grounds BCA would be one that prescribes those actions that produce the best consequences where the goodness of the consequences is proportional to the ratio of benefits to costs, with these being measured by the willingness to pay for a proposed change and the willingness to

3. I use this term rather than "self-defeating" or "self-subverting." The former is used in Derek Parfit's (1984) discussion of these matters, the latter by myself in earlier work (Hubin and Perkins, 1986). The reason for my preference is that I am specifically speaking of a property of the moral theory in question (not, for example, a property of our attempts to realize the goals set by the moral theory), and the two alternatives might suggest to some that theories that do not endorse their own direct implementation are somehow *self-refuting*. As will become clear, I mean to suggest nothing of the sort.

accept compensation for a proposed change of contemporary individual agents. Let us call this the *consequentialist version of B/C moral theory*.

We could view BCA as being the implementation of a nonconsequentialist moral theory, too. For example, consider the following rights-based theory that is not wholly consequentialistic (indeed, is not wholly axiological). Let us call it *deontological B/C moral theory*. This theory holds that people have *ab initio* a presumptive right to their current endowments. The theory does not offer a basis for these rights; rather, it employs these rights to impose restrictions on actions. Unlike most popular rights-based theories, this theory is quite permissive with respect to rights violations. These presumptive rights are to be violated, according to the theory, when and only when doing so brings about a potential pareto improvement (with this measured according to the WTP/WTA standard).⁴ Projects, of course, change endowments, and the new endowments define the rights that must be employed in evaluating future changes.

Though these two moral theories are structured quite differently, they both have as a cornerstone the notion of a PPI and they both determine PPIs by reference to WTP/WTA information. Therein lies their undoing. Any moral theory committed to the PPI criterion (measured by WTP/WTA) is unacceptable for a variety of independent reasons. While I argue later that BCA is not undermined by the refutation of B/C moral theory, many of the criticisms of BCA are, in fact, criticisms of B/C moral theory. And, construed as such, they are effective.⁵ I make no attempt here to justify this claim nor even to be exhaustive in listing the criticisms I believe *are* effective against B/C moral theory. But here are a few:

- (1). Because of its commitment to the PPI criterion and the WTP/WTA test, B/C moral theory accords a morally unjustified status
4. The full deontological B/C moral theory would have to incorporate the comparative aspect of BCA. This could be done by inclusion of a consequentialistic element (requiring that, when the presumptive rights are violable, they are to be violated in the way that maximizes the ratio of benefits to costs). Alternatively, and less plausibly, it could be held that individuals have a right to the most cost effective violation of their presumptive rights.
5. There are notably bad criticisms of the PPI criterion and the WTP/WTA test, as well. This philosophical "piling on" has produced arguments designed to show that any theory that directly grounds BCA must treat things that are intrinsically valuable as merely instrumentally valuable. (Daniel Schwartzman discusses and endorses such an argument (1982, p. 73). He attributes the argument to Steven Kelman's "Economic Incentives and Environmental Policy: Politics, Ideology, and Philosophy," a then unpublished paper, pp. 103, 106-7.) In fact, though, B/C moral theories are, in themselves, absolutely agnostic on the question of what things are of intrinsic value – or perhaps it would be better to say that, on this issue, B/C moral theories are completely deferential to individuals' preferences. If we value something intrinsically, then B/C moral theory will take it to be of intrinsic value. B/C moral theory doesn't offer a substantive theory of intrinsic value; it offers a procedure for determining what has intrinsic value.

to the current state of affairs. The desirability of a state of affairs is always measured against the *status quo* and the magnitude of improvements is measured by WTP/WTA, which is, notoriously, sensitive to current endowments.

- (2). Because of its commitment to the PPI criterion, B/C moral theory fails to accord the appropriate role to considerations of distributive justice.
- (3). Because of its commitment to the WTP/WTA test, B/C moral theory fails to accord the proper moral status to future generations and to those individuals (both human and nonhuman) lacking in the cognitive capacities necessary to display a WTP/WTA.
- (4). Because of its commitment to the WTP/WTA test, B/C moral theory exhibits a naïve form of subjectivism, endorsing whatever errors and ignorance are incorporated in an individual's WTP/WTA.

These are not flaws in the finish of B/C moral theory; they are cracks – perhaps chasms – in the core. If the justification of BCA depends on the acceptability of B/C moral theory, it is doomed.

2. THEORY AND PRACTICE: FROM B/C MORAL THEORIES TO BENEFIT/COST ANALYSIS

The attempt to justify BCA on the grounds that it is the direct implementation of the correct moral theory – that it *is* the moral calculus – depends on two claims: first, that some variant of B/C moral theory is the correct moral theory; and, second, that if a practice is the direct implementation of a moral theory, then that moral theory endorses the practice. The first is false. But suppose it weren't; suppose that some form of B/C moral theory were an adequate moral theory. Would this alone serve to justify the practice of BCA?

No. That is to say, the correctness of some version of B/C moral theory does not guarantee that the practice of BCA is morally justified; B/C moral theories may be self-effacing – they may not recommend engaging in a practice of BCA (indeed, they may recommend *against* doing so).

This is not a peculiarity of B/C moral theories – nor is it even unique to *moral* theories. Any consequentialistic normative theory (be it one of morality, rationality, prudence, or whatever) that does not define the goodness of an outcome (at least in part) by whether the theory is directly implemented, is open to this possibility.⁶ (Self-effacement can occur with

6. For a further discussion of this specific claim, see Hubin and Perkins (1986). See also Gibbard (1986b, especially pp. 102ff. and 108–9).

nonconsequentialist theories as well. A moral theory that tells us, as much as possible, to conform our behavior to some set of rules might, depending on empirical considerations, recommend that we not *try* to conform to those rules.)

Jeremy Bentham seemed unaware of the possibility that utilitarianism is self-effacing when he wrote, “[t]he principle of utility is capable of being consistently pursued; and *it is but tautology* to say, that the more consistently it is pursued, the better it must ever be for humankind” (1948, p. 13; emphasis added).⁷ But John Stuart Mill’s discussion of the importance of secondary moral rules as a solution to the problem of calculating utility shows a subtle awareness of the possibility that utilitarianism is self-effacing (Mill, 1968, p. 265).

Some have taken self-effacement to be an indictment of a moral theory. The thinking appears to go as follows: the *raison d’être* of a normative theory is to guide action. If a normative theory fails *by its own lights* to be an adequate action guide – that is, if it is self-effacing – it cannot be an acceptable normative theory. It is analogous to a descriptive theory entailing its own falsity; such a theory cannot be true and hence cannot be acceptable.

If this is correct, then there is yet another serious problem with the short-cut defense of BCA, for there is reason to suspect that B/C moral theory *is* self-effacing. Indeed, it is surely *partly* self-effacing, since there are undoubtedly situations in which the attempt to determine which action maximizes the B/C ratio is more costly than the difference between the best and the worst alternative. In such a situation, B/C moral theory is wisely self-effacing. But B/C moral theory may be self-effacing for more profound reasons – reasons having nothing to do with the costs of calculation. As a result, B/C moral theory may be self-effacing even when the results of BCA are obtained cost-free. Consider social decisions that concern issues about which people have strong moral convictions. These may well be cases in which there are likely to be costs attached to the reliance on BCA information in public decision-making. The costs in question might involve the perception instilled in citizens that the government is without principle and views its citizens as consumers to be satisfied rather than as rational agents with political and moral arguments to be given and weighed. People may well be willing to pay to live in a society in which certain issues (the punishment of criminals,

7. What is “but tautology” is that, if the utilitarian standard is correct, then the more it is *complied with* the better it is morally. What Bentham fails to appreciate is that *pursuit* of a standard may not be in compliance with it. (Surprisingly, he also fails to appreciate here that even *compliance* with the utilitarian standard may not be best for *humankind*, since, for Bentham, the utilitarian standard counts the welfare of all sentient creatures equally.) For an interesting recent discussion of related issues, see Elster (1983, Part II). See also, Hubin (1986).

the legal status of abortion, the laws securing freedom of religion and association, for example) are not decided by doing benefit/cost analysis.⁸ If so, then B/C moral theories may be self-effacing as a result of these sorts of costs.

While B/C moral theories are certainly self-effacing in some actual cases, the fact is that no one really knows when B/C moral theories would recommend their direct implementation – that is, the use of benefit/cost analysis on individual occasions to determine social policy. B/C moral theories tell us that an action, program, project, policy, or practice is morally permissible if, and only if, the ratio of WTP to WTA is higher for that action, etc., than for any available alternative. The justification of the practice of using BCA to evaluate, rank, and choose between various social projects, then, would require demonstration that the ratio of WTP to WTA is higher for this practice than for any available alternative. A BCA establishing this has yet to be done.⁹

One attempting to defend the use of BCA by appeal to some form of B/C moral theory is confronted, then, not only with the problem of defending that form of B/C moral theory – an impossible task in itself – but of showing that the doing of BCA passes the BCA test. This latter thesis is empirical and undefended.¹⁰ There are reasons to suspect that B/C moral theory would *not* endorse unqualified use of BCA; we should not begin with the assumption that it would.

Suppose it did not; indeed, suppose that B/C moral theory entails

8. See, for example, Rawls (1955) for the now classic statement of the argument that a direct implementation of utilitarian principles is not likely to pass the utilitarian test of moral permissibility. Rawls is wrong to think that this constitutes an objection to act utilitarianism. If his thesis about the disutility of a direct implementation of act utilitarianism is correct, it shows only that act utilitarianism is self-effacing in the sense used here. A similar point could be made with even greater plausibility about B/C moral theories.
9. The specter of regress lurks here. To know whether the practice of BCA is justified on a B/C moral theory, we would have to have done a benefit/cost analysis. And how could we know whether *this* project was justified? Apparently, only by having done another benefit/cost analysis. And so on. We are not here concerned with *how we could know* whether the practice of BCA is justified, however, but with whether it *is* justified. And, if some form of B/C moral theory is correct, then it is justified if, and only if, the ratio of WTP to WTA is greater than any alternative. And this fact is, I assume, independent of its discovery.
10. While not offering an opinion on this matter precisely, Herman Leonard and Richard Zeckhauser (1986), in their defense of BCA, suggest that the prospects for the use of BCA techniques to pass the BCA test are dim: “Cost-benefit analysis, particularly applied to public decisions involving risks to life and health, has not been notably popular” (p. 31). They suggest that the unpopularity of BCA is based on ignorance and misinformation. Alas, even if this suggestion were correct, the WTP/WTA standard fails to distinguish preferences based on ignorance and misinformation from those based on knowledge. So, whatever the source of the unpopularity of BCA, it may well be true that the use of BCA would not pass a BCA test.

that we ought never to do a benefit/cost analysis, nor even to base any of our policies on such an analysis if the results were given to us cost-free. Would this provide yet another reason to reject B/C moral theory? Is the fact that a theory is completely self-effacing a reason to reject it?

No. Suppose a normative theory, *T*, tells us that we ought to maximize some value, *V*. Suppose, further, that circumstances were such that, *I*, the direct implementation of *T* (that is, the direct pursuit of *V* by trying to measure the degree to which alternatives promote *V* and performing those actions that are believed to maximize *V*) did not maximize *V*. If *T* were an otherwise adequate theory, it would hardly be an objection to it that it didn't recommend *I*. After all, *I* does not maximize the value that *T* tells us to maximize; it would be inconsistent for *T* to tell us to make an exception here. *T* tells us to maximize *V*; it tells us to follow *I* only contingently, if at all (Hubin and Perkins, 1986; see also Parfit, 1984, chap. 1).

As Mill notes (1968, p. 265), people are not inclined to reject self-effacing principles in areas of practical concern outside of ethics (and, one should now add, rationality and public policy). It is no flaw in the principle of maximizing profit that this is sometimes best achieved by forgetting about profit altogether and focusing on such other considerations as customer service, product quality, and corporate integrity. Telling a novice bowler to forget about the pins and try to throw the ball through the lane markers at a certain point hardly commits one to the view that the ultimate standard of bowling is not the number of pins knocked down.

It is sometimes alleged that the moral principles of a just society must be public. That is to say, a principle cannot be a principle of justice if it would be wrong for that principle to be publicly known.¹¹ While I am not sympathetic to this requirement, its validity need not detain us here. It is irrelevant. In the sense in which I have been using the term, a self-effacing theory need not advocate deception or concealment. A theory is self-effacing if it does not recommend its direct implementation. This is fully consistent with a publicity requirement. A self-effacing utilitarian theory could endorse its public recognition consistent with recommending that public policy be limited by certain side-constraints "entitled to govern absolutely [such things as] the dealings of society with the individual in the way of compulsion and control" (Mill, 1968, p. 129).

There is no reason for taking the potential (or even actual) self-effacement of B/C moral theories to be a further criticism of those theories. The correctness of B/C moral theories is logically independent of the correctness of actually *using* B/C moral theory by directly imple-

11. One of the best-known exponents of this position is Rawls (1971, p. 133).

menting it. This fact, and the difficult empirical questions involved in bridging the logical gap, render bleak the prospects for the direct approach to the justification of BCA by appeal to a B/C moral theory. Such an approach has two hurdles to clear. Clearing the first seems completely impossible; clearing the second only slightly less so. Some may take this to result in dim prospects for any justification of BCA. But such a conclusion would be hasty and unwarranted. In fact, the recognition that the correctness of a moral theory doesn't ensure the correctness of its direct implementation opens up an entirely new approach for the justification of a practice, for it suggests that even if B/C moral theories are inadequate, the practice of BCA may still be justified.¹²

An analogy may illuminate. Many accept the moral justification of allowing certain sorts of social decisions to be decided by a majority vote. How could this be defended? Surely the most naïve way would be to argue for what we might call *democratic moral theory* – the theory that the right action just *is* that action approved of by the majority – and that the democratic procedure is, therefore, the moral calculus. Democratic moral theory is clearly unacceptable. But this is a matter of no concern for the democrat; he has never felt that his commitment to democratic institutions committed him to democratic moral theory. Rather, the democrat sets about justifying democracy by appeal to other, more plausible moral theories. The proponent of BCA should do likewise.

3. THE JUSTIFICATION OF BCA

The attempt to justify the funding of and reliance on BCA by claiming it to be the direct implementation of the correct moral theory is not promising. But, were this the only way to justify a decision-making procedure, democracy itself would be in trouble. Democratic decision-making may be morally justified for a range of issues confronting the public, despite the failure of its corresponding moral theory. Similarly, there is a range of public issues for which it is plausible to suggest that the funding of benefit/cost analyses and the reliance on the results of those analyses to guide (or possibly even to determine) public policy are warranted. The failure of B/C moral theories no more undermines the

12. Diana Raffman pointed out to me that the reasoning here is rather complex. Roughly, it goes as follows: A correct moral theory need not endorse its direct implementation; but plausible moral theories will endorse *some* practical decision procedure. Every decision procedure is the direct practical implementation of *some* moral theory; therefore, the correct moral theory may endorse a decision procedure that is the direct practical implementation of some other (incorrect) moral theory. It is possible, then, that BCA, the direct implementation of an inadequate moral theory, is nevertheless endorsed by an adequate moral theory.

use of BCA than does the failure of democratic moral theory undermine the use of democratic mechanisms.¹³

Various approaches to the justification of BCA are available. Justifications will differ both with respect to the range of application and the role in deliberation they assign to BCA. Some will hold that it is appropriate for all social decisions (or, conceivably, for all decisions of *any* sort). More modest versions will restrict the range of applicability, holding that the technique has, for example, no place in the individual acts of sentencing criminals or the establishment of the basic freedoms that make liberal democracy possible. Justifications will also vary in the role given to BCAs. The most ambitious view would hold that, where BCA is applicable, it determines the correct decision. That is, society should implement those projects with the highest benefit-to-cost ratio until its budget is expended or the costs exceed the benefits regardless of other considerations. Less ambitious approaches would hold that BCA plays some "less than definitive" role in decision-making, even where its use is appropriate. (And, of course, one might wish to assign a differential role to BCA depending on the issue to which it is being applied.)

There are two distinct but compatible kinds of reasons one might have for assigning a less than determining role to BCA (or to any decision process, for that matter). First, one might hold that the unaugmented procedure is less likely to come to the correct decision than is the procedure when supplemented in specified ways. Call this an *outcome-oriented reason*. One might believe, for instance, that when social decisions involve infringement on important rights or risks to life, BCA must be augmented in order to arrive at (or maximize the likelihood of arriving at) the correct answer.¹⁴ In addition to reasons of this sort, there are also *process-oriented reasons* for limiting the role of benefit/cost analysis. These reasons can, perhaps, best be understood negatively, as non-outcome-oriented reasons. An example will illustrate a common variety of process-oriented reason. Parents typically allow children some say so in matters that affect them and, if the consequences of error are not too great, sometimes even a determining role. This is frequently *not* because the decision made is likely to be better given the child's role in making it.

13. Closer to home, many who would reject what might be called a "market morality" – that is, that what is morally right is whatever the free market produces – would still endorse the use of a free market. (Witness the rise in popularity of the theory of market socialism.) The attempt to justify a practice or institution on the grounds that it is the direct implementation of the correct theory is simplistic. The idea that this is the only way to justify a practice or institution is nonsense. BCA should no more be held to this standard than should market or democratic mechanisms.
14. This is an oversimplification. One may reasonably accept a procedure that is less likely than an alternative to arrive at the correct answer if it guarantees avoidance of disaster. This can provide yet a different basis for an outcome-oriented objection to a procedure: One might hold that the procedure in question should not be definitive, even if it is the most reliable procedure available, on the grounds that, when it fails, it fails spectacularly.

It is because of other benefits of the child's playing that role in the process. Similarly, one might hold that while certain decisions are likely to be better if made strictly in accordance with B/C criteria, allowing democratic procedures to determine the outcome, while almost certain to cause deviations from the best decisions, is justified because of the value (intrinsic or instrumental) of participatory democracy.¹⁵

Whatever range and role one seeks to justify for BCA, the best way to give a full moral justification of a procedure would be to begin with the correct moral theory and show that the procedure in question is endorsed by it. But, since there is significant disagreement about what is the correct moral theory, no noncontroversial starting place presents itself. One could, of course, simply assume some moral theory to be correct and then show that it endorses the procedure. This might be of broad intellectual interest but would be of practical interest only to those who accepted the moral theory assumed to be correct. Absent antecedent agreement on moral theory, the ideal approach would be to *demonstrate* the unique adequacy of a particular moral theory thereby forcing rational assent to it; then, one could set about showing that this theory endorsed the procedure. Such an ambitious approach is beyond my present scope (not to mention ability). Another alternative, more closely related to the one pursued here, is this: Show that BCA is endorsed by *every* viable moral theory – an ambitious project in its own way, to be sure – too ambitious to undertake here. The strategy pursued here is a poor second-cousin of this bold strategy.

I want to sketch two different approaches to the justification of a practical decision procedure. These approaches promise less than those just outlined and, so, are more likely to fulfill their promise. One might be labeled a probabilistic moral argument for the funding of and reliance upon benefit/cost analyses. It is founded on the observation that the information contained in a competently conducted benefit/cost analysis will be deemed morally significant and useful by most plausible moral theories. That is to say, it is likely that, whatever the correct moral theory turns out to be, it will take a higher BCA ranking to be *prima facie* evidence

15. The consequentialist will see the problem here as being one of an unsuitably narrow understanding of "outcome." If the procedure has intrinsic value, then the proper description of the outcome must be an inclusive one – including the fact that what might ordinarily be considered the outcome in a narrower sense is *produced by this procedure*. If the procedure has instrumental value apart from the correctness of the decision, then the correct account of the outcome must include not only the decision but the fact that it was produced by a procedure that has this additional benefit. An entertaining and instructive parable about excessively narrow understandings of outcomes is given by Ernest J. Weinrib:

Assume that Jones loves playing golf and plays eighteen holes every Sunday morning. One particular Sunday Jones realizes that he cannot spare the time to play his usual game. Instead he goes out into his back yard, digs a hole, and drops the ball into it eighteen times. (1980, p. 321); quoted in Byrne (1983, p. 574)

turns out to be, it will take a higher BCA ranking to be *prima facie* evidence that there is a *pro tanto* reason to prefer a project. Moreover, it is likely to recommend use of the information contained in the benefit/cost analysis in making a social decision. This fact provides some moral reason for conducting and employing benefit/cost analyses, and perhaps for supporting institutions that employ a strict B/C rule for certain types of decisions.

Another line of argumentation, which runs parallel to the above in certain respects, is suggested by a long-standing strategy implicit in the liberal justification of the state.¹⁶ This strategy does not seek agreement on ultimate values; it explicitly eschews, for example, appeal to the nature of the good life as a basis for justifying the institutions it aims to justify. Rather, it attempts to justify an institution (the state, for example) as a necessary means to the attainment of whatever the individual citizens aim at. In this respect, the justification is not philosophical but political; it is quite frankly an *ad hominem* argument, appealing to the ends and values of the audience to which it is addressed.¹⁷

On the liberal view, people with radically different moral ideals and conceptions of the good life can, nevertheless, agree on common political institutions because these institutions are necessary to the achievement of whatever ideals these people might have.¹⁸ This is the founding faith of pluralistic society. The relative stability of many liberal pluralistic societies is some evidence that it is not misplaced faith. Following this insight, I suggest that the use of BCA is warranted by the moral views that enjoy currency in our society. That is to say, according to the (often partly inchoate) moral views held in our society, the information incorporated in a competent benefit/cost analysis is morally relevant. To the extent that citizens want to make choices about public policy that are, by their own lights, morally responsible, there is a reason for them to attend to the results of benefit/cost analyses.

In making this argument, I do not assume that B/C moral theory is a widely held moral theory. Few, presumably, would hold that the information contained in a benefit/cost analysis is all that is morally relevant or that the procedure attaches all the appropriate weights to

16. "Liberal" here refers to the tradition of liberal individualism as exemplified by such thinkers as Thomas Hobbes (1669), John Locke (1690), John Rawls (1971), Robert Nozick (1974) and David Gauthier (1986).

17. It does not, of course, seek to show that a proposition is true because of its relation to beliefs held by the audience (as certain forms of a circumstantial *ad hominem* fallacy would). Rather, it aims at showing that a procedure or an institution is *desirable* for individuals with certain specified aims. It seeks consensus, not truth.

18. The power of this argument can be exaggerated. It is unlikely, for example, that we can find *any* institutions that are necessary means to *whatever* coherent set of ends an agent might have.

the individual costs and benefits measured. The conclusions of a benefit/cost analysis will be judged by most to be readily defeasible; *what* may serve as a defeater will vary from one moral view to another, but the fact of defeasibility remains. Still, a recommendation founded appropriately on morally relevant information is useful even if defeasible.¹⁹ Some may hold that, by itself, a favorable B/C ratio provides *no* reason (not even a defeasible – that is, *pro tanto* – one) to pursue a project (Copp, 1987, p. 80). Even if this were true, to the extent that BCA provides us with a measure (even an imperfect one) of the degree to which people expect that their intrinsic preferences will be satisfied by various programs or projects, it provides us with *information* that is morally relevant.²⁰ This is what I mean by the claim that the fact that a project has a high B/C ratio is *prima facie* evidence of a *pro tanto* moral reason to undertake it. In a particular case, the evidence itself may be defeated, undermining the claim that there is any reason, even a *pro tanto* one, to undertake the project. Even if the reason does exist, though, it may be overridden by other moral considerations.

The Role and Range of Benefit/Cost Analysis

I shall limit discussion of the justification of BCA to those positions holding that such a procedure has restricted applicability and, even within this range of issues, is not to play the role of determining decision. This is a modest, but still contested, position. The objections levelled against B/C moral theory suggest that enforcing such a doubly limited role for BCA is prudent. While the possibility that the correct moral theory is self-effacing entails that the correct moral theory *could* endorse the unrestricted and determinative use of BCA, this seems unlikely in light of the nature and severity of problems with B/C moral theory, which suggest limitations of the procedure of BCA.

It is relatively easy to generate a list of plausible reasons for rejecting a strict and unrestricted adherence to BCA in deciding matters of public policy. I make no attempt to be encyclopedic; rather, I present several considerations that seem salient.

1. *Benefit/cost analysis itself does not allow any role for side-constraints on government action.* Those who accept a deontological moral theory will obviously have reason to be concerned with this omis-

19. By “appropriate” here, I mean only that it counts benefits positively and costs negatively. I have already suggested that on plausible moral views, BCA will not employ the appropriate *weights* in making its final recommendation.

20. This argument depends on the assumption that the information contained in a benefit/cost analysis does not “count as noise rather than information” and does not “hinder rather than help rational social decision making.” David Copp speculates that this assumption may be false (1987, p. 81).

sion. (It is, of course, *possible* that one has the best chance of complying with the side-constraints morality imposes, if there are any, by following decision procedures that do not incorporate side-constraints. But this seems a *bare possibility* – not worth taking seriously for practical purposes unless some evidence of its truth is forthcoming.) It is important to see that the absence of side-constraints on government action – indeed the absence of any provisions for handling such constraints – will be of concern not only to deontologists but to many consequentialists as well. The most brilliant defense of individual liberty in the English language, John Stuart Mill's *On Liberty*, grounds moral side-constraints on government action solely on considerations of utility. Mill offers a variety of utilitarian arguments in favor of liberty. The most interesting from our point of view is also the one on which Mill rests the most weight:

[T]he strongest of all the arguments against the interference of the public with purely personal conduct is that when it does interfere, the odds are that it interferes wrongly and in the wrong place. (1968, p. 198)

Mill gives here, and in the subsequent passages, an argument that the *direct* implementation of a utilitarian theory is dangerous – that it is better to accept rigid side-constraints on government action as a *strategy* for maximizing utility. He would not endorse a procedure lacking such side-constraints as one that should determine government policy.²¹

An argument of similar structure may well show the desirability from a consequentialist point of view of imposing side-constraints on government action. Presumably, constitutional limitations like the Bill of Rights (which are intended to serve this purpose) are attractive to consequentialists as well as to deontologists.

2. *The subjective expectation of preference satisfaction is the only value directly measured by BCA.* While it is plausible to assume that this is an indicator of states of affairs that are morally important, it is quite implausible to assume that it is a perfect indicator of all that is morally relevant. People's estimates of intrinsic preference satisfaction may be distorted by ignorance or error, and individual good (and *a fortiori* overall moral good) plausibly consists in more than intrinsic preference satisfaction. Furthermore, to the extent that BCA equates people's estimates of their intrinsic preference satisfaction with WTP/WTA and measures this behaviorally, behavioral irrationalities will sometimes deprive the numbers of even their usual significance.

21. This insight offers the core of a plausible response to the issue of the possibility of a Paretian liberal – that is, a person who believes both that all Pareto-efficient changes should be made and that there are some issues over which the individual should exercise veto power. See Sen (1970).

3. *The reliance of BCA on the WTP/WTA criterion skews its analysis in favor of those with greater initial endowments (see Copp, 1987).* Equal WTP does not entail equal expected intrinsic preference satisfaction, equal happiness, or equality of any other quantity reasonably held to be of intrinsic moral value.

4. *BCA shows its utilitarian roots by being indifferent to matters of distribution.* Individual costs and benefits are summed; the recommendation is based on the aggregate net benefit. This is a damning objection – even if it is not seen as such by all.²²

These considerations, and more that could be stated, suggest that there are quite likely to be result-oriented objections to BCA. Were it possible to define a sphere of social issues with regard to which BCA incorporated all that was morally relevant and weighed it in the proper way in coming to a recommendation, there would be no result-oriented objections to allowing BCA to be determinative within that sphere. I am not optimistic about the possibility of doing this in any helpful way.²³ And, in any event, this would not defuse process-oriented objections, which I take seriously. There is an important moral difference between democratic institutions and bureaucratic or dictatorial ones even if they reach the same decisions.²⁴

For both result- and process-oriented reasons, it is appropriate to limit the role of BCA to that of informational input into a broader decision-making framework. The exact nature of this broader practice is a problem in applied political philosophy that is far beyond the present scope. Presumably, though, it will involve administrative, democratic, and judicial elements.

Taking the role of BCA to be the weak, but important, one of informational input into a broader decision mechanism, may seem to make the procedure so noncontroversial that there is no need to restrict its application. But this is not so. Information is not cost-free; there are costs involved in gathering information and, sometimes, in using it. With respect to some judgments, BCA may be so unlikely to give us new, morally relevant information that it is not worth the expenditure required to do it. More interestingly, there may be areas in which the information contained in a BCA even if attained cost-free should not be

22. J. J. C. Smart (1978), for example, is completely unmoved by such criticisms.

23. If there were *any* case in which BCA considered all morally relevant factors and weighed them properly, then it is trivial that there is a class of cases for which there are no outcome-oriented objections to having BCA be determinative. (Indeed, if BCA ever got the right answer in any way – even by “dumb luck” – this would be true.) But the interesting issue is whether that class can be identified in advance in such a way as to be helpful.

24. This point receives sustained emphasis by Mark Sagoff (1988).

considered. These might be cases in which the use of benefit/cost information tends to lead people to the wrong conclusion.²⁵

The question of what areas of social decision-making should not be informed by BCA (because of either sort of costs discussed above) will not be answered precisely or conclusively here. It seems plausible, though, to suppose that BCA will have little to tell us about the determination of fundamental moral principles upon which governmental policy is based: the rights of individuals, the goals of government, and so on. It would be inappropriate, also, to decide issues of individual criminal guilt and sentencing by BCA (though issues of what actions to criminalize and what sorts of sentences to impose generally may benefit by being informed by BCA). In contrast, the allocation of scarce resources seems to be a problem about which BCA is likely to provide useful morally relevant information.²⁶

If BCA is to be used to provide informational input into a broader social decision mechanism, it is important to consider what information is included in such an analysis and how this information is aggregated and analyzed. What BCA purports to offer us is a measure of collective intrinsic preference satisfaction. It begins with individual WTP/WTA information. This is, I believe, an indication of intrinsic preference satisfaction. It is not a perfect indication by any means. People can be wrong about their intrinsic preferences; they can, because of ignorance or error, have a willingness-to-pay for a change that does not reflect their intrinsic preferences; and they can behave in ways that do not reflect their true willingness to pay. These problems do not undermine the claim that individual WTP/WTA is an indication of intrinsic preference satisfaction. This is important because, as I shall argue soon, plausible moral theories will take such information to be, *prima facie*, of moral relevance.

It is, of course, one thing to believe that individual WTP/WTA is an indicator of individual intrinsic preference satisfaction and quite another

25. It is sometimes charged that decision-makers are subject to "bewitchment by numbers," so that even if the results of benefit/cost analyses are only to be used as information for the decision-maker (rather than a rule to follow), they still skew the decision in an inappropriate way. The idea is that decision-makers have a tendency to accord the BCA recommendation undue weight because of its rigor (or apparent rigor). This is, in effect, a charge that there are (moral) costs involved in using BCA information apart from the cost of securing it. It is not clear if there is any truth to the charge, and, if so, what the appropriate solution is. It may be better to educate decision-makers about what is incorporated in a benefit/cost analysis and what is not, rather than to avoid the reliance on BCA information. If so, the above is not an argument against using BCA but against using it poorly.

26. Allocation of scarce resources can have moral implications that are of a sort not well handled by BCA, of course. This is why, even here, there are legitimate concerns about employing BCA as a determinative procedure.

to think that when this information has been aggregated as it is in BCA it gives us any morally relevant information. Perhaps the BCA procedure turns signal into noise; it would not be the first procedure to do so. There is no doubt that the aggregation of individual WTP/WTA information introduces additional problems because of the sensitivity of an individual's willingness-to-pay (and willingness-to-accept compensation) for changes to that individual's current endowment. Recognizing the respect in which BCA might be thought to skew that morally relevant information conveyed by individual WTP/WTA is not sufficient to show that the BCA process "turns signal into noise." Skewed indicators may still be useful indicators, provided we understand the ways in which they are skewed.²⁷

There are, though, grounds for worrying that the results of BCA are genuinely without informative content. Consider the following analogy:

Suppose everyone is given a ballot and a crayon. Each person is asked to indicate his preference among alternative projects by coloring the square next to the most preferred alternative the darkest, the square next to the least preferred the lightest, and so on. The relative darkness of the colors on the ballot give us an individual's ranking of the alternatives. Now suppose that a color wheel is made up for each alternative, with each person's colored square for the alternative being put on the wheel. We spin the wheels, and rank the alternatives in order of the darkness of the spinning wheels. Call this method, *color analysis*. Is there any reason to think that color analysis gives us *prima facie* evidence of a *pro tanto* reason to choose the project with the darkest looking color wheel? Remember, each person has a different-colored crayon and there is no standard for how dark one should color the square beside the thing one prefers most.²⁸

This challenge raises issues to which I certainly can't respond adequately here. For example, the problem of interpersonal comparisons of utility (hinted at in the analogy) is not likely to be resolved quickly. It is worth noting, though, that the analogy need not be accepted in its entirety. First, it does not appear that BCA involves anything analogous to aggregating the darkness of "different-colored crayons."²⁹ BCA mea-

27. Even prior to its repair, the Hubble telescope was apparently returning valuable information despite the distortions produced by the improper design of the telescope.

28. This intriguing analogy was presented to me by David Copp (correspondence).

29. One standard view of utility identifies utility with certain behavioral dispositions. On this view, it is difficult, to say the least, to see what it might mean to sum utilities over persons, since individual utility is measured only on an entirely idiosyncratic scale. If this is the point of the objection, then the problem is not that BCA gives everyone "a different colored crayon," but precisely that it gives everyone the same color crayon to represent information that is not commensurable.

asures individual intrinsic preference satisfaction in terms of an individual's WTP/WTA, which employs a common measure, typically money. It seems the analogy should be one in which all are given the same color crayon. Someone denying the possibility of interpersonal comparisons of utility might well object to BCA precisely because it gives to each the same color crayon to represent things that are incommensurable.

In addition, it is true that there is nothing in color analysis that indicates how darkly to color each of one's choices. (This seems a virtue of the theory since any attempt to do so would impose an – arbitrary, I think – interval scale on individuals. For some, the difference in the preferability of the first and last place alternative may be great, while for others it may be negligible.) But it is also true that each person's crayon is of finite length, and the more darkly one colors a square, the more of one's crayon is consumed. Individuals have to budget their crayons accordingly. Of course, individuals begin with crayons of different lengths, and this has to be taken into account after one has spun the wheels and completed one's color analysis. But, this does not seem to be the sort of problem that deprives color analysis of conveying morally relevant information. The issue may not divide along the "length-of-crayon" dimension. Even where it does, we may find that the options preferred by those with the longer crayons do not fare well in color analysis. Since such analysis, as a technique for determining intrinsic preference satisfaction, favors those with longer crayons, to the extent that we deem the satisfaction of intrinsic preferences morally valuable, we have reason *a fortiori* to oppose that alternative. Finally, unlike color analysis, BCA, if based on market behavior rather than interviews, looks at behavior that agents engage in for reasons independent of the analysis; that is, the behavior is not engaged in for the purpose of providing information for BCA. This tends to lessen the risk of "strategically" motivated behavior – behavior that intentionally misrepresents preferences in order to better satisfy them.

Clearly, much more needs to be said in defense of the aggregation procedure involved in BCA. I think, though, that it is quite plausible to assert that BCA gives us a view of overall intrinsic preference satisfaction. It must be remembered that few will think that overall intrinsic preference satisfaction is all that is morally relevant. Furthermore, the view of overall intrinsic preference satisfaction BCA affords is flawed and distorted, but still contains useful information.

A Multitude of Justifications

After discussing some of the more straightforward approaches to the justification of BCA, I will develop the previously outlined defense of the funding and use of benefit/cost analyses for certain types of social projects. It is inspired by the liberal insight alluded to earlier. This po-

litical justification will run parallel to a somewhat unconventional probabilistic moral argument that has the more conventional *aim* of giving a moral justification of a practice.

THE UTILITARIAN DEFENSE OF BENEFIT/COST ANALYSIS

In attempting to justify BCA, one might naturally look to a utilitarian theory. BCA is not the direct implementation of any standard version of utilitarianism;³⁰ rather, it directly implements some version of B/C moral theory. But, as I have argued, a theory may well justify employing some practical decision mechanism other than its direct implementation. It could be, then, that BCA would find a utilitarian defense, despite not being the direct practical implementation of utilitarianism.

The defense might go like this. Institutions are justified by their beneficial consequences. While utilitarian theories differ concerning their standard of value, plausible theories will hold that individual well-being is at least partly constituted by the degree to which individual intrinsic desires are satisfied. For a number of reasons, it is reasonable to suppose that, in general, individuals are likely to be the best judges of what will satisfy their intrinsic desires. (The fact that people sometimes fail spectacularly does not refute this.) It is also reasonable to suppose that, in general, people's willingness to pay for some change reflects their *ex ante* evaluation of the degree to which the change will satisfy their intrinsic desires. Thus, we may plausibly take individual willingness to pay to be a *defeasible* indicator of the relative *intra*-personal benefit of changes. That is, if an individual is willing to pay more for one change than another, it is reasonable to suppose (in the absence of contrary or undermining evidence) that the former satisfies her intrinsic desires more than the latter.

Summing the WTP (and WTA) across individuals involves, of course, a large additional step – especially because WTP is influenced by ability to pay. A poor man, willing to pay half his annual salary for an operation to save the life of his child, desires his end more, I would suppose, than a wealthy man who is willing to spend the same *amount* of money to jet overseas to watch the Wimbledon finals desires his. To use BCA as a final arbiter for all public decisions would be objectionable to a utilitarian for this reason if for no other.³¹ One could seek to rectify this in a number of ways. For example, one could introduce a weighting factor to adjust for differential incomes. Or, one could attempt to measure

30. Contrary to what is suggested by MacIntyre (1979).

31. The fact that the assumptions mentioned in the previous paragraph are defeasible is probably reason enough, though, for a utilitarian to refrain from conferring this status on BCA.

WTP hypothetically upon equal incomes, though this magnifies the practical problems of measurement. An alternative approach would be to restrict either the range of applicability or the role of BCA. While some public projects may divide people along lines of wealth, many do not. The use of BCA could be restricted to issues unlikely to show such division. Alternatively, if BCA is not taken to be the final arbiter, division along lines of wealth could be noted and taken into account in the broader procedure in which BCA plays a part. I have explicitly provided for this last approach by restricting our discussion to the justification of BCA within a limited range and with a limited role.

A society may choose *on utilitarian grounds* to do benefit/cost analyses and to take the recommendations very seriously – even to follow a B/C rule – for many kinds of projects. Surely, a BCA constitutes something much less than a full utilitarian appraisal of all of society's actions and expenditures. Its aims are more modest than that. It seeks to guide action piecemeal – making adjustments at the margin – in a way that can be expected, at least if conjoined with policies based on more traditional utilitarian evaluations of the basic structure of society, to lead to desirable outcomes in the long-run. As a utilitarian can defend the market, so she can defend BCA as a rectification for market imperfections. And, of course, as she can justify limiting the scope or effect of the unfettered marketplace, so she can justify diverging from the action recommended by BCA. But limiting the scope or effect of the market hardly constitutes a rejection of the market. And diverging from the recommendations of BCA hardly constitutes a rejection of BCA.

HYPOTHETICAL AGREEMENT

One of the most influential approaches to the justification of procedures and institutions is based on the notion of hypothetical agreement (which I will understand broadly to include both hypothetical contract and hypothetical consent). Sometimes combined with a utilitarian standard (for example, Harsanyi, 1977) but more frequently used to ground an explicitly nonutilitarian alternative, this approach seeks to show that institutions, procedures, or practices are justified because they would have been agreed to by certain relevant parties in some nonactual situation. The roots of this approach are traceable at least to the political philosophy of Thomas Hobbes. (See Hobbes, 1969.)

Although it is sometimes missed, it is absolutely crucial to note that the considerable force of this approach comes not from the notion of agreement (contract or consent) so much as from the hypothesis under which the agreement would take place. Hypothetical agreement is not a kind of agreement, it is a kind of hypothesis. Because it is only hypothetical, the agreement does not, in itself, have actual moral force. Its moral force rests entirely on the nature of the situation in which people

would make the agreement. Thus, employment of the PPI criterion cannot be justified on the grounds that actual pareto improvements are agreeable to all and, thus, *potential* pareto improvements are *hypothetically* agreeable because they are hypothetically pareto improvements. That is, the fact that the losers *would* agree to the project if the winners compensated them at their WTA (and that the winners *could* do so) does not, by itself, show anything of moral significance. Such a naïve approach is a caricature of hypothetical agreement.³²

But a more traditional and plausible defense of BCA along hypothetical consent lines can be offered. To a large extent, it mirrors that sketched for the utilitarian defense. Plausible hypothetical agreement theories make justification turn (at least partly) on the degree to which institutions function to satisfy individual intrinsic desires. They ask us to imagine people in an initial bargaining situation that is (claimed to be) ideal for making decisions about institutions and procedures and to determine what such people would agree to. There can be no general answer to the question of what people would agree to from the initial bargaining situation in a contractarian theory because there is no generally accepted characterization of that situation. However, the idealizing assumptions typically involve improved knowledge of the consequences of actions, idealized reasoning abilities, and (frequently) ignorance of one's own station in life.

It is eminently arguable that people thus situated would approve of the use of BCA as a part of a broader process of public decision-making because of the degree to which the results of BCA can indicate desirable changes. Such people would, many contractarians argue, be especially worried about how the worst-off will fare,³³ but even if this is a pressing concern it is certainly not the only concern such contractors would have. While I do not argue, indeed I deny, that they would accept a B/C moral theory as a conception of justice, this does not show that they would not accept the use of BCA as a means for generating relevant and important information for decisions about public policy for a variety of different issues, or even as a decisive rule for certain social institutions having a limited scope.

Concern for the distribution of individual goods is characteristic of hypothetical agreement theories. As we have seen, BCA does not share this concern. But the conception of the bargaining solution accepted by a hypothetical contractarian need not be indifferent to distributive con-

32. This sort of view is suggested by *some* of what Leonard and Zeckhauser (1986) say. Unfortunately, their discussion is not clear enough to be sure what theory the authors have in mind.

33. Many, but not all. While Rawls (1971) holds such a view, Harsanyi (1977) believes that contractors would not be risk averse and would, consequently, agree to utilitarian principles unaided by any distributive principle.

siderations for the theory to endorse institutions that rely on a B/C rule, much less to endorse ones that rely on B/C information. If such institutions are significantly more efficient in satisfying people's intrinsic preferences, and a theory takes such preference satisfaction to be part of the good of an individual, then there may be compelling reasons for agreeing to such institutions regardless of one's conception of the rational bargaining solution. Unless contractors are omniscient, they do not agree to the future course of the universe in all detail. They accept institutions that they expect will work to the long-run advantage of the worst-off, or that they expect will maximize their benefit given the similar demands of other rational agents. These institutions may well be guided by (indeed be controlled by) a rule that the contractors, themselves, do not employ in choosing institutions. But even if contractors would reject BCA as a final arbiter, they would almost certainly take the information contained in a BCA to be morally relevant information.

RIGHTS-BASED DEONTOLOGICAL THEORY

Some of the most persistent and principled objections to the use of BCA appear to be based on deontological moral theories – in particular, rights-based versions of these theories. It might seem, then, that there is little likelihood of BCA being justified on familiar versions of such theories. Such a conclusion would be hasty. Provided that the role played by BCA were one of informational input into a broader social decision process, there is good reason to suppose that plausible rights-based deontological theories would endorse the use of BCA. This is because plausible deontological theories must hold that the function of government is not merely to refrain from violating people's rights. Were this the only moral consideration relevant to government, it would be better if there were no government: What doesn't exist cannot violate rights. Presumably, at the very least, the rights-based deontologist will hold that government has a moral obligation to protect people against rights violations. If this is all that is admitted, the rights-based theorist is advocating a minimal, "night-watchman" state (Nozick, 1974, pp. 26–27).

Even the slim goal of protecting citizens against rights violations seems enough to establish the point that BCA may be endorsed by the rights-based deontologist. This is because, consistent with not violating rights, she will have reason for promoting the most efficient means of protecting rights. And, to the extent that BCA indicates efficient means, the rights-based deontologist should be interested in the information it offers. This, however, might be seen as reducing BCA to what Sagoff calls "cost-effectiveness analysis" (1988, p. 38 and pp. 195–224). While Sagoff is not particularly clear in drawing this distinction, it appears to be the following: Cost-effectiveness evaluation does not take individual preference to be relevant in determining the goals of public policy. Rather, these goals are to be set entirely by political procedures. The

role of the policy analyst is merely to compare the efficiencies of means to the politically determined goals. BCA, on the other hand, aspires to either set or inform the process of setting the social goals. Defenders of the night-watchman conception of the state might hold that the legitimate goals of the state are given, not by some political procedure, but by the correct moral theory. The role of BCA must be confined to determining cost-effective ways to attain these goals.

I will not attempt to clarify this distinction further,³⁴ nor to determine whether the night-watchman conception of the state necessarily demotes BCA to a less significant role than its proponents would like. The night-watchman conception of the state seems to me neither plausible enough, nor popular enough, to warrant such sustained discussion. More plausible rights-based theories hold that, *provided it is consistent with respect for rights*, governments have a moral reason to promote the ends of distributive justice, economic efficiency, and environmental protection. If these goals are admitted, the argument for the relevance of BCA information proceeds as it did in the consideration of the utilitarian and contractarian theories above. This may well warrant its having an official role in the determination of and administration of governmental policies.

Clearly, a rights-based deontologist will hold that there are constraints (possibly overrideable) on the projects that government may permissibly carry out. How a project affects people's rights will typically, if not always, trump B/C considerations. A person holding such a position will not be tempted by the view that BCA provides us with conclusive moral guidance. But it doesn't follow that the information in a benefit/cost analysis is morally irrelevant from this point of view. Frequently, proposed projects do not violate rights, or there are modifications to them that can avoid doing so. Furthermore, the potential benefits as measured by BCA may be sufficient to warrant overriding the rights in question (assuming the theorist allows that these rights are overrideable).

I have sketched the barest outlines of justifications for the use of BCA on a variety of fundamentally different moral theories. While the theories

34. I suspect that the distinction is not ultimately sustainable, unless Sagoff takes the notion of "costs" to be defined by some political (or other) process that doesn't take individual preferences to be relevant. Furthermore, and importantly, even if the "official" role of BCA is confined to "cost-effectiveness analysis," this doesn't undermine the claim that BCA provides morally relevant informational input into a broader decision-making procedure. BCA may still provide decision-makers – whoever they might be in this political decision-making procedure – with information that *they* deem morally relevant to their decision. So, while the government may operate entirely by direct majoritarian decision-making, the citizens may, in casting their votes, be moved by moral considerations that lead them to be interested in the information conveyed by a good benefit/cost analysis.

considered do not begin to exhaust the possibilities, they suggest the breadth of the appeal of B/C information. I think that this can reasonably be generalized. That is to say, I believe that one can reasonably conclude that B/C information will be deemed morally relevant and useful information from a wide variety of moral views. In particular, I conclude, first, that a wide variety of moral theories *currently accepted* will hold such information to be morally relevant and useful. Secondly, I believe that most *plausible* moral theories will come to this conclusion. On the first premise, I found a political argument for the use of benefit/cost analysis; on the second, a probabilistic moral argument.

The Political Argument

The determination of a procedure for the setting of social policy is a political matter. It is a mistake to think that political issues are always to be decided by appealing to basic principles. Often, perhaps usually, it is better to seek agreement on means, on procedures, and on middle- and low-level goals than to “begin at the beginning” – attempting to forge agreement on foundational principles and/or ultimate goals.

The fact that the information contained in a B/C report is morally relevant information from a broad variety of moral theories that represent the theoretical elaborations of the moral views actually current in our society means that most people should be interested in this information. That is to say, the vast majority of people in our society (I speculate) hold moral theories according to which this information is morally relevant. In the absence of a reason to suppose that gathering and employing the information in reaching a decision is too costly (either for outcome- or process-oriented reasons), most people should support the doing of BCAs and the use of information contained therein to arrive at a social decision.

This is compatible, of course, with most people believing that the recommendations of BCA are defeasible on any of a number of grounds. Those who believe this – most likely the vast majority – will view the possibility of BCA recommendations being accepted without further evaluation, or being given undue weight in the process of social deliberation, as a potential outcome-oriented reason for refraining from the doing of benefit/cost analyses. These concerns are alleviated significantly by the explicit recognition that BCA is *not* the moral calculus, that arguments based on B/C considerations are *not* the only impartial, morally relevant considerations that bear on an issue, and that there is a place for other considerations to have an appropriate role.

The Probabilistic Moral Argument

The fact that the information contained in a properly done benefit/cost analysis is deemed morally relevant by the moral theories current in a

society doesn't seem to provide any reason, in itself, to think that the information is morally relevant. These moral theories could be so seriously flawed that there would be no reason to think that the information they take to be morally relevant really is. But if we look to the argument made above rather than merely to its conclusion, we will see the basis for an argument that does address the moral significance of the BCA information – at least in a probabilistic way.

I have argued that according to several approaches to moral theory the information contained in a benefit/cost analysis is morally relevant. Without settling the issue of the precise nature of the correct moral theory, I claim not only that these theories are representative of those current in our society but that they are representative of the range of plausible moral theories.³⁵ This means that it is reasonable to expect that whatever moral theory turns out to be correct, it is likely to assign positive moral value to the satisfaction of intrinsic preferences. Therefore, it is likely to take information (even less than perfect information) about the degree to which such preferences are satisfied to be morally relevant information. And, so, it would take BCA reports to be valuable informational input into social decision procedure. This means that BCA information is likely, in general, to be morally relevant information. If it is reasonable to expect that the costs of doing such an analysis would be recouped by following a better policy as a result of the analysis, then there is reason to support the doing of and reliance upon a benefit/cost analysis.

CONCLUSION

To justify the use of BCA, it would be desirable first to establish the unique correctness of a specific moral theory and then to demonstrate that the use of BCA is endorsed by this theory – both daunting tasks. I set my sights much lower; I sketched two arguments, new in the literature, for a weaker result: There are good grounds for believing that institutions that employ B/C information, and perhaps follow a B/C rule, for public policy decisions on a variety of issues are endorsed by a wide range of moral theories that are both currently accepted and plausible. If so, this provides both a reason for believing that such institutions are, in fact, morally justified *and* a political argument for supporting such institutions.

REFERENCES

Bentham, Jeremy. 1948. *Principles of Morals and Legislation*. Darien, Connecticut: Hafner Publishing Co.

35. Indeed, I take the sensitivity of the theory to the degree of intrinsic preference satisfaction to be a plausibility condition itself. That is to say, a theory is *eo ipso* less plausible if it does not take intrinsic preference satisfaction to be morally relevant. The argument in the text does not require this assumption.

- Byrne, John. 1983. "What's Wrong with Being Reasonable? The Politics of Cost-Benefit Analysis." In *Ethical Theory and Business*, edited by Tom L. Beauchamp and Norman Bowie, pp. 568–76. Englewood Cliffs, NJ: Prentice Hall.
- Copp, David. 1987. "The Justice and Rationale of Cost-Benefit Analysis." *Theory and Decision* 23:65–87.
- Elster, Jon. 1983. *Sour Grapes*. Cambridge: Cambridge University Press.
- Gauthier, David. 1986. *Morals by Agreement*. Oxford: Clarendon Press.
- Gibbard, Allan. 1986. "Risk and Value." In *Values at Risk*, edited by Douglas MacLean, pp. 94–112. Totowa, NJ: Rowman & Allanheld.
- Hare, R. M. 1969. *The Language of Morals*. Oxford: Clarendon Press.
- Harsanyi, John C. 1977. "Morality and the Theory of Rational Behavior." *Social Research* 44:625–56.
- Hobbes, Thomas. [1651] 1969. *Leviathan: Or the Matter, Forme, and Power of a Commonwealth Ecclesiasticall and Civil*. London: Collier-Macmillan Ltd.
- Hubin, Donald C. 1986. "Of Bindings and By-Products: Elster on Rationality." *Philosophy and Public Affairs* 15:82–95.
- Hubin, Donald C., and Michael Perkins. 1986. "Self-Subverting Principles of Choice." *The Canadian Journal of Philosophy* 16:1–10.
- Leonard, Herman, and Richard Zeckhauser. 1986. "Cost-Benefit Analysis Applied to Risks: Its Philosophy and Legitimacy." In *Values at Risk*, edited by Douglas MacLean, pp. 31–48. Totowa, NJ: Rowman & Allanheld.
- Locke, John. 1960. *Two Treatises of Government*. New York: Mentor Books.
- MacIntyre, Alasdair. 1979. "Utilitarianism and Benefit/Cost Analysis: An Essay on the Relevance of Moral Theory to Bureaucratic Theory." In *Ethical Theory and Business*, edited by Tom L. Beauchamp and Norman E. Bowie, pp. 266–76. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Mill, John Stuart. 1968. *Selected Writings of John Stuart Mill*, edited by Maurice Cowling. New York: Mentor Books.
- Nozick, Robert. 1974. *Anarchy, State, and Utopia*. New York: Basic Books, Inc.
- Parfit, Derek. 1984. *Reasons and Persons*. Oxford: Clarendon Press.
- Rawls, John. 1955. "Two Concepts of Rules." *Philosophical Review* 64:3–32.
- . 1971. *A Theory of Justice*. Cambridge, MA: Harvard Press.
- Sagoff, Mark. 1988. *The Economy of the Earth*. New York: Cambridge University Press.
- Schwartzman, Daniel. 1982. "Cost-Benefit Analysis in Environmental Regulation: Sources of the Controversy." In *Cost-Benefit Analysis and Environmental Regulations: Politics, Ethics and Methods*, edited by Daniel Schwartzman, Richard Liroff, and Kevin Croke, pp. 53–86. Washington DC: The Conservation Foundation.
- Sen, A. K. 1970. "The Impossibility of a Paretian Liberal." *Journal of Political Economy* 78:152–57.
- Smart, J. J. C. 1978. "Distributive Justice and Utility." In *Justice and Economic Distribution*, edited by John Arthur and William Shaw, pp. 103–31. Edgewood Cliffs, NJ: Prentice-Hall.
- Weinrib, Ernest J. 1980. "Utilitarianism, Economics and Legal Theory." *University of Toronto Law Journal* 30:307–36.