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Everybody to Count for One?

Inclusion and Exclusion in Welfare-Consequentialist Public Policy

Noel Semple¹

This article asks which individuals should count in welfare-consequentialist analysis of public policy. Possible answers to this question fall along a spectrum between parochial and inclusive. One relatively parochial answer is that only welfare effects experienced by the living human subjects of a government should be considered in analysis of its policy options. At the other end of the spectrum, the most inclusive answer would be that welfare impacts on all individuals who are capable of having welfare should be weighed equally.

A two-level response to the “who counts” question is proposed. A specification of welfare-consequentialism serving as an ethical ideal might give equal weight to non-human individuals, to foreigners, and to the unborn. However, a welfare-consequentialist decision procedure must take into account the error-proneness of human analysts’ welfare predictions. Predictions of a policy’s welfare impacts on individuals who are more dissimilar from the predicting government are more likely to be wrong, compared to predictions regarding living human subjects. The paper concludes by considering alternative answers to the “who counts” questions that might minimize the combined rate of exclusion and misprediction errors.

1. Introduction

“We’re taking care of ourselves for a change,” said U.S. President Donald Trump at a rally in October of 2018. “A globalist,” Trump declared, is a person that wants the globe to do well, frankly, not caring about our country so much.” Trump described himself as the opposite of a globalist: “You know what I am? I’m a nationalist, okay? I’m a nationalist.”²

This claim responded, however bluntly, to a genuine question. Whom should government take care of? It is clear that policy choices can affect those who are not subjects of the government that makes them. The Trump administration’s withdrawal from the Paris Climate Agreement is one example. This will have consequences for living Americans, but also for all individuals, born and unborn, who will live in a climate that will change more dramatically because of the policy decision.

This article takes up this “who counts” question, from a welfare-consequentialist standpoint. It proposes a two-level answer. The ethically ideal public policy may be the one that maximizes aggregate welfare for all individuals capable of having welfare. However, for epistemically-limited humans, the best ethical decision procedure to use for analyzing public policy choices is one that counts a smaller circle of individuals.

Section 1.1 defines welfare-consequentialism. Part 2 considers first the position that each government has a special obligation to care for its human subjects, and then the opposing view that every welfare-bearing being is equally worthy of a government’s care. Exclusion error

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² Brett Samuels, "Trump: 'You know what I am? I'm a nationalist' (The Hill, October 22, 2018)," <<https://thehill.com/homenews/administration/412649-trump-you-know-what-i-am-im-a-nationalist>>.

is defined as deviation from ideal policy caused by the failure of analysis to include welfare-bearing individuals who ought to be included.

Part 3 argues that an ethical decision procedure must take into account the limited capacity of human analysts to predict the welfare consequences of public policies. Including individuals who are dissimilar from the government and the analyst increases expected *misprediction error*. This is because epistemic resources that analysts use to predict welfare are, in general, more helpful regarding individuals who are similar to the analysts.

Two levels are necessary, Part 4 argues, because a specification of welfare-consequentialism that is inclusive enough to succeed as an ethical ideal is likely to be self-defeating as a decision procedure for epistemic reasons. The paper's argument is illustrated using a hypothetical decision being taken by a municipal government about what recreational facility to build. Part 5 considers ways to minimize combined exclusion and misprediction error. These include systems of parochial governments, and various decision procedures that let welfare-consequentialist analysts avoid major exclusion errors without having to always predict everyone's welfare. Part 6 concludes.

1.1. Welfare-Consequentialism

Welfare-consequentialism holds that the goodness of an act is a function of the quantity of welfare that individuals will have if that act occurs. This paper focuses on welfare-consequentialism as a normative theory of public policy. Policies, according to welfare-consequentialism, are good to the extent that they lead to individuals' lives going well, for them.³ This theory can be elaborated in many different ways. Each possible *specification* of welfare-consequentialism includes multiple components, including:⁴

1. **Welfare Definition Component.** Welfare is "what we have when our lives are going well for us." Theories of welfare are often categorized as (i) accounts based on the fulfilment of desire or preference, (ii) accounts based on mental states (including hedonic theories of pain and pleasure), and (iii) accounts based on the extent to which "objective" goods are present or absent in a life.⁵
2. **Aggregation Component.** There are different ways to aggregate individual welfare values in order to describe the goodness of an outcome. Utilitarianism is the best known of these. It holds that the goodness of an outcome depends on the sum of the welfare of individuals in that outcome.⁶ Alternative aggregation methods are designed to endorse outcomes in which, although the sum of welfare is smaller than it might otherwise be, the distribution of welfare is more equal (egalitarianism), or badly-off individuals have more welfare (prioritarianism).⁷

³ Under "strong" welfare-consequentialism, this is the *only* goal of all public policy. Under "weak" welfare-consequentialism, it is one among several goals. (John Bronsteen, Christopher Buccafusco and Jonathan S. Masur, "Welfare as Happiness" (2010) 98 Geo. L.J. 1583). Both versions confront the "who counts" question.

⁴ Matthew D. Adler, *Measuring Social Welfare: an Introduction* (New York: Oxford University Press, 2019) at 9.

⁵ Derek Parfit, *Reasons and Persons* (Oxford, UK: Oxford University Press, 1986) at 4; Paul Dolan and Mathew P. White, "How Can Measures of Subjective Well-Being Be Used to Inform Public Policy?" (2007) 2 *Perspectives on Psychological Science* 71 at 71.

⁶ Amartya Sen and Bernard Williams, *Utilitarianism and Beyond* ([S.I.]: Cambridge University Press, 1982) at 3.

⁷ Nils Holtug, "Theories of Value Aggregation: Utilitarianism, Egalitarianism, Prioritarianism" in Jonas Olson & Iwao Hirose eds., *The Oxford Handbook of Value Theory* (New York: Oxford University Press, 2015).

3. **Uncertainty Component.** Specifications of welfare-consequentialism must account for the fact that outcomes can never be predicted with full certainty.⁸ One basic approach to uncertainty is expected value. Probability estimates are assigned to the different outcomes that could result if a certain policy is adopted. The expected value of that policy is equal to the sum of the welfare values of each possible outcome multiplied by their respective probabilities of occurring.
4. **Inclusiveness Component.** This is an answer to the “who counts” question. If an individual is included, then the welfare effects of a policy upon them factor in to the ethical desirability of the policy. The inclusiveness component is the subject of this article.

2. Inclusiveness and Exclusion Error

The most *inclusive* specifications of welfare-consequentialism are those in which a policy’s welfare effects on all individuals who are capable of having welfare are equally relevant to the policy’s ethical attractiveness. All welfare-bearing individuals “count” equally in these maximally-inclusive specifications.

A second set of specifications would exclude welfare-bearing individuals from the analysis, or discount them, based on factors such as race or personal friendship with leaders of the government. These can quickly be dismissed. They violate the expectation that ethical principles be impartial, because they distinguish between individuals on indefensible grounds.

More or less *parochial* specifications of welfare-consequentialism make up the third set. These include and exclude individuals on the basis of their *similarity* to the policy-making government. The most parochial specifications count only welfare effects on the living human subjects of a government as relevant to the ethical desirability of a policy option open to that government. Although these individuals are natural beings and in that sense dissimilar to a government (which is an institution), they are more biologically, politically, and temporally similar to that government than any other individuals are.

Policy-oriented specifications of welfare-consequentialism can be placed along an inclusiveness spectrum, based on how similar an individual must be to the policy-making government in order to be counted in that specification. Inclusiveness, it should be noted, is not a matter of the absolute number of individuals whose welfare a specification takes into account. Suppose one policy analysis counts welfare effects on 10 million individuals, all of whom are living human subjects of the policy-making government. A second analysis counts 5 million individuals, including the smaller current human population of the policy-making government along with certain unborn, non-human, and non-subject individuals. The second analysis is based on a specification of welfare-consequentialism that is more inclusive, as that term is defined here.

⁸ Adler, above note 4 at 19, 108.

2.1. Special Obligations

Special Obligations To Humans

Parochialism has been defended on the basis that governments should honour *special obligations* to their human subjects.⁹ It follows that individuals to whom a government does *not* owe special obligations either should not count at all, or should count for less. Humans are said, by some, to possess traits that justify special attentiveness to their welfare on the part of governments, relative to non-human individuals. John Rawls, for example, argued that “moral personality” is shared by individuals with capacities for (i) a conception of the good, and (ii) a sense of justice.¹⁰ Non-human animals lack moral personality, and therefore they should not count equally with humans. One objection to this position is that there is no obvious reason why the mere possession of a capacity entitles one to preferential treatment by a government.¹¹

Alternatively, it can be maintained that the institutions of *every* species should prioritize the interests of its “co-speciesists.”¹² Human governments should prioritize human welfare, but it would also be right for dog governments (if there were any) to focus on dog welfare. This seems to be a more impartial and less arbitrary way to justify special obligations to humans. However, if policies that create more welfare are better than policies that create less welfare (the premise of welfare-consequentialism), and if non-humans can have welfare, it is unclear why the species of the welfare-bearers is relevant to the ethical evaluation of a particular government’s policy options.

Special Obligations to Subjects

A special obligation to humans would be consistent with “cosmopolitan” specifications of welfare-consequentialism, which count all humans equally. However many philosophers would agree with the popular view that governments have special obligations to their own subjects, relative to other humans. David Miller argues that the relationship between individual compatriots is intrinsically valuable, and not inherently unjust. Giving effect to special obligations between compatriots is integral to the maintenance of this valuable relationship, and prioritization by a national government of its subjects’ interests is how we discharge these obligations collectively.¹³ Miller’s argument might readily be extended to support special obligations to subjects of a subnational political jurisdiction.

These special obligation arguments were not originally developed within the intellectual framework of policy-oriented welfare-consequentialism, and problems arise when they are transposed into this context in order to justify parochialism. First, Miller’s case differentiates between different types of duty, whereas welfare-consequentialism identifies only one duty of government (increasing welfare). Second, Miller’s argument that treating compatriots in a certain way will preserve an inherently valuable relationship does not necessarily require parochialism. The welfare benefits created by the preservation of valuable relationships would be counted even in a completely parochial specification. For example, if the Government of Canada spends \$100 million providing health care for Canadians, that might generate a welfare

⁹ E.g. Michael Hardimon, "Role Obligations" (1994) 91 *The Journal of Philosophy* 333; Richard J. Arneson, "What, If Anything, Renders All Humans Morally Equal?" in Dale Jamieson ed., *Singer and his critics* (Oxford, UK ; Malden, Mass.: Blackwell Publishers, 1999).

¹⁰ John Rawls, *A Theory of Justice* (Cambridge, MA: Harvard University Press, 1971 [2009]) at 561.

¹¹ Mark H. Bernstein, *The Moral Equality of Humans and Animals* (2015) at 31.

¹² *Ibid.* at 39.

¹³ David Miller, "Reasonable Partiality Towards Compatriots" (2005) 8 *Ethical Theory and Moral Practice* 63 at 71.

increase of x units through improved health, plus a welfare increase of y units through a welfare-enhancing relationship of national solidarity among Canadians. If the Government of Canada spends that \$100 million on health care for Ugandans, only the former type of welfare increase will occur. A welfare-consequentialist analysis will take account of this difference, regardless of how inclusive the specification is.

2.2. Everybody to Count for One?

At the other end of the spectrum, the most inclusive specifications of welfare-consequentialism give equal weight to every individual who is (i) affected by a policy choice, and (ii) capable of having welfare. “Everybody to count for one” was the phrase used for this approach by J.S. Mill, paraphrasing Jeremy Bentham.¹⁴ Nineteenth century utilitarians held that all welfare-bearing beings should receive equal consideration, denying that “the number of the legs, the villosity of the skin, or the termination of the *os sacrum*” of an individual justify disregarding or discounting that individual’s welfare.¹⁵ Mill therefore argued that any act that would cause more pain to animals than pleasure to humans was immoral.¹⁶

Unborn individuals also deserve equal consideration according to this reasoning. Henry Sidgwick held that “the time at which a man exists cannot affect the value of his happiness from a universal point of view,” and therefore “the interests of posterity must concern a Utilitarian as much as those of his contemporaries.”¹⁷ There are good reasons to discount future income streams, and to factor in the greater risk confronting expected welfare increases that are further in the future, but there do not seem to be serious arguments that governments have special obligations to their living human subjects relative to their unborn human subjects.¹⁸

The “expanding circle” may be the apotheosis of this line of thought.¹⁹ Peter Singer suggests that the process of reasoning tends to expand the number of people to whom we recognize ethical duties. He calls our attention to the step – elementary but crucial to ethical reasoning – of recognizing that one is *only one* among many, with no right to have one’s welfare fostered more assiduously than the welfare of others. Once this step is taken, and

I have seen that from an ethical point of view I am just one person among the many in my society, and my interests are no more important, from the point of view of the whole, than the similar interests of others within my society, I am ready to see that, from a still larger point of view, my society is just one among other societies, and the interests of

¹⁴ John Stuart Mill, *Utilitarianism* (London: Longmans, Green and Company, 1861 [1895]) at 93.

¹⁵ Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation* (London, UK: T. Payne and Son, 1789) at Chapter 17, Section 1.

¹⁶ John Stuart Mill, “Whewell on moral philosophy.” In: Robson, J.M. (Ed.), *Essays on Ethics, Religion and Society, Vol. X of the Collected Works of John Stuart Mill*, (Toronto, 1969), at 170.

¹⁷ Henry Sidgwick, *Methods of Ethics, 4th Ed* by MacMillan and Co. (New York: 1890), Book 4, Chapter 1, p. 414.

¹⁸ See e.g. Parfit, above note 5; Erik Angner, “The politics of happiness: Subjective vs. economic measures as measures of social well-being.” in L. Bortolotti ed., *Philosophy and happiness* (Basingstoke: Palgrave Macmillan., 2009). Weighing the welfare of those who will live or not live at all depending on which policy choice is made is a more complex question, and beyond the scope of this paper.

¹⁹ Fonna Forman-Barzilai, *Adam Smith and the circles of sympathy cosmopolitanism and moral theory* (Cambridge, UK ; New York: Cambridge University Press, 2010) at 9.

members of my society are no more important, from that larger perspective, than the similar interests of members of other societies.²⁰

The “circle” of ethical concern cannot be rationally limited based on individuals’ similarity to government, nor can the welfare of some within that circle be discounted. Therefore, Singer argues, it is ethically wrong for a wealthy country to spend a large sum on an expensive medical therapy to prolong an elderly citizen’s life for a few months, if that sum could save the lives of many children in developing countries through the purchase of anti-malarial bed nets.²¹

Singer is also well-known for his defence of animal rights. His definition of welfare is hedonic. Animals, like foreigners, can suffer pain and “if a being suffers, there can be no moral justification for refusing to take that suffering into consideration.”²² He argues that species is like race – an irrational basis to prefer the interests of one individual over another.²³ The circle of concern must include all welfare-bearing beings because, from the impartial stance which is necessary for moral reasoning, no good reason appears to draw its boundary anywhere else.²⁴

2.3. What Counts when Everybody Counts for One

“Everybody to count for one” is not quite as radical as it may seem. First, no matter how inclusive a specification of welfare-consequentialism is, it cannot count beings that cannot have “welfare” under the specification’s definition of that term. If, for example, an “idealized” preferentist theory of welfare is specified, then only the fulfilment of preferences that are sufficiently rational or well-informed increases an individual’s welfare.²⁵ Life-forms not capable of having such preferences cannot count. This is not a result of parochialism, but rather a result of the specification’s definition of welfare.

Second, even if all welfare-bearing individuals count equally, most theories of welfare provide that different things are good for different individuals. For this reason, policies that treat humans and non-humans differently are not necessarily inconsistent with everybody counting for one. Giving a sheep the right to education, for example, does not increase its welfare (or anyone else’s).²⁶ On a hedonic conception of welfare, even killing a sheep painlessly might not reduce welfare. It would, at least, be less bad than killing a human, insofar as the latter death creates more anticipatory dread in the victim, and more fear in other individuals.²⁷

Third, maximally inclusive specifications of welfare-consequentialism would factor in “worse actor” risk.²⁸ This is the chance that policy-makers will be replaced or overruled by

²⁰ Peter Singer, *The Expanding Circle: Ethics, Evolution, and Moral Progress* (Princeton, NJ: Princeton University Press, 2011) at 71.

²¹ Peter Singer, “The Many Crises of Health Care” in Peter Singer, *Ethics in the Real World: 82 Brief Essays on Things that Matter* (Princeton, NJ: Princeton University Press, 2016).

²² Peter Singer, *Animal liberation*, 2nd ed. (New York, N.Y.: New York Review of Books : Distributed by Random House, 1990), p.8.

²³ Peter Singer, “Introduction” in Peter Singer ed., *In defense of animals: the second wave* (Malden, MA: Blackwell Pub., 2006).

²⁴ Singer, *The Expanding Circle*, above note 20 at 120.

²⁵ Anna Alexandrova, *A Philosophy for the Science of Well-Being* (New York, NY: Oxford University Press, 2017) at 160.

²⁶ Singer, “Introduction,” above note 23 at 5.

²⁷ *Ibid.*

²⁸ Scott Wisor, “The Moral Problem of Worse Actors” (2014) 7 *Ethics & Global Politics* 47.

different policy-makers, with policies that would reduce aggregate welfare. Policies that increase aggregate welfare in the short run, but which are unpopular with those who have the power to overturn them, may decrease welfare in the long run by increasing worse actor risk.

Consider a wealthy country government applying policies recommended by maximally-inclusive Bentham/Singer welfare-consequentialist analysis, and disregarding worse actor risk. These policies might include a ban on meat consumption, rapid total decarbonization, and very large increases to foreign aid spending. This government would probably be removed from office quickly -- either at the ballot box or by force -- by voters not prepared to support such sacrifices of their own welfare, and that of those similar to them, for the sake of non-human, unborn, and foreign individuals.²⁹ The “demandingness” of an option does not, in of itself, make it less ethically attractive. However if an option’s demandingness reduces its political sustainability and increases worse actor risk, this changes its consequences and therefore changes its ethical attractiveness under any specification of welfare-consequentialism.

So far, it seems that “who counts” hinges on the debate between (i) the case for parochialism based on special obligations, and (ii) the case for inclusiveness based on Bentham and Singer’s expanding circle. Assume, for the purposes of this paper’s argument, that the latter argument is correct: everybody capable of having welfare should, ideally, count for one.

2.4. Analysis and Analysts

A welfare-consequentialist analysis produces a policy recommendation designed to maximize aggregate welfare. Analysis is conducted by human beings. They may be within government (e.g. elected officials or civil servants), or outside of it (e.g. citizens or academics). Welfare-consequentialist analysts are usually living human subjects of the government whose policy decision they are analyzing. The classes of welfare-bearing individual which are similar and dissimilar to a government will have equivalent relationships of proximity to most analysts of that government’s policies.

Welfare-consequentialist analysis is subjective in the sense that it can only recommend policies that, from the point of view of the analyst(s), can rationally be expected to maximize aggregate welfare. Only *rational* expectations have a role in welfare-consequentialist analysis. If analysts have an irrational reason to expect that poisoning a town’s water supply would maximize aggregate welfare (e.g., they had a dream in which God indicated that this is so), that would not make the recommendation to do so a sound one, under welfare-consequentialism. The analysis is evidence-based.

2.5. Exclusion Error

“Exclusion error” is deviation of a recommendation generated by a welfare-consequentialist analysis from the recommendation that a maximally-inclusive analysis would generate, where the deviation is caused by exclusion welfare-bearing individuals from the analysis or discounting them within it. For example, suppose a welfare-consequentialist analyst seeks to recommend a carbon price for a jurisdiction. If unborn individuals are excluded from the analysis, the recommended carbon price will be much lower than the true welfare-maximizing price, and emissions in the jurisdiction will be much higher than the welfare-maximizing level.

²⁹ This reflects not only selfishness, but also *oikeiōsis*, the phenomenon whereby “human affection weakens as it radiates outward in degrees from the self.” (Forman-Barzilai, above note 19 at 8).

There is an inverse correlation between inclusiveness and exclusion error, as illustrated by Figure 1.

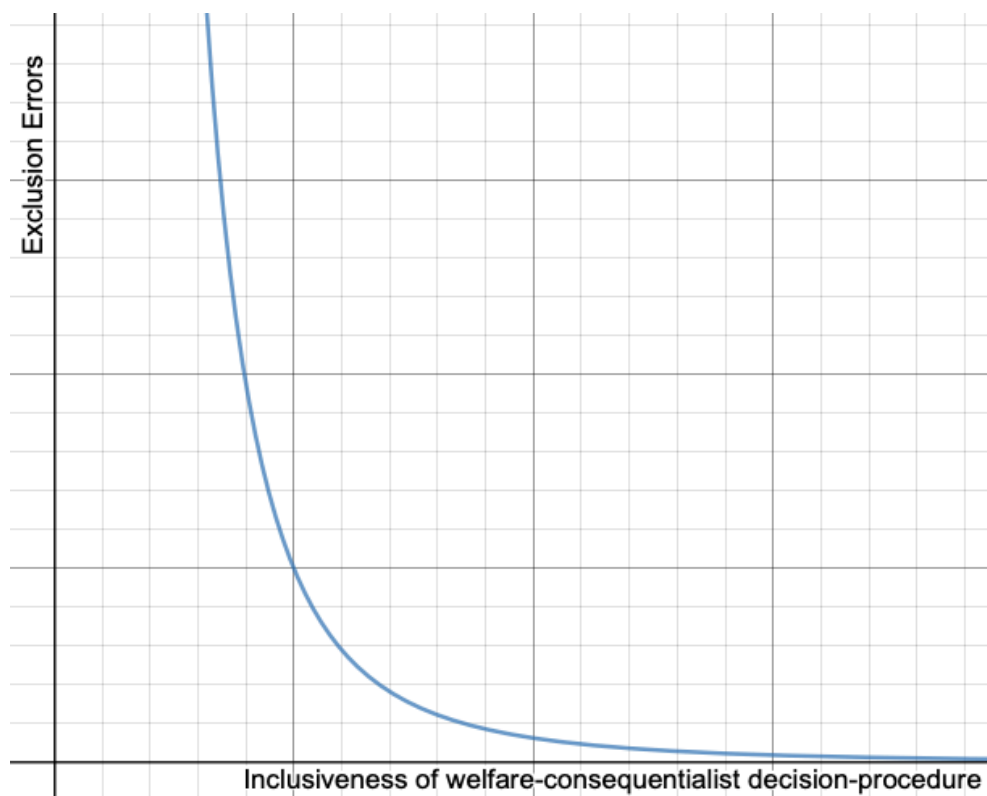


Figure 1 Relationship between Exclusion Error and Inclusiveness

The relationship between specification inclusiveness and expected exclusion error, and the slope of this line, depend on the policy decision being analyzed. Suppose it is about whether or not to place a stop sign on a certain intersection in a residential neighbourhood. The expected welfare consequences of the decision are almost entirely limited to local humans in the short term. There would be welfare gains to those who will avoid injury if the stop sign is installed; there would be welfare losses to drivers whose trip times will be slightly increased by the need to stop. The exclusion error rate line will have a steep slope. After the analysis achieves a modest degree of inclusiveness, little error will be prevented by looking further afield for welfare consequences. Conversely, launching a nuclear strike to end a conventional war is an example of a policy decision with expected consequences that reach far across time, species, and political boundary. For analysis of this decision, the exclusion error rate line would have a much more shallow slope.

3. Prediction, and Misprediction Error

Predictions about welfare are at the core of welfare-consequentialist analysis. Prioritarian and egalitarian specifications require even more prediction than utilitarian ones do. They require forecasts of the overall welfare levels of winners and losers in an outcome, in addition to predictions of how much welfare would be gained or lost overall.

Misprediction error is deviation of a recommendation generated by a welfare-consequentialist analysis from the ideal policy, caused by failure of the analysis to correctly predict welfare consequences for included individuals. The error-proneness of predictions is an Achilles heel for most consequentialist ethical theories. It leads to a common argument against act-consequentialism, which requires actors to predict the consequences of their alternative acts.³⁰ Rule-consequentialism, which instructs actors to follow rules that are themselves supported on consequentialist grounds, is a standard response to this problem, and one to which this article will return in section 5.4.

Although analysis of public policy can often draw on resources that are typically unavailable for analysis of an individual's decision, it still makes heavy demands on analysts' capacity to correctly predict welfare.³¹ The consequences of a policy choice often depend on the behaviour of systems whose workings are poorly understood by the analysts.³² History offers many examples of public policies with significant consequences unanticipated by those who sought to predict them.

Sometimes the welfare gains that a policy would produce are relatively clear, but its welfare costs are much less clear. For example, it might be relatively easy to quantify the welfare loss caused by a dangerous chemical, through illness and premature mortality. However, the *net* welfare consequences of banning the chemical depend also on how much worse life would be for those who currently use the chemical without adverse effect, and those who have jobs because of trade in the chemical.³³ Quantifying these welfare effects depends on difficult questions such as the extent to which efficacious and safe alternatives to the chemical would be developed if it were banned, and how quickly those employed in its manufacture would find alternative employment. In collective action situations, predicting welfare gains from a policy means predicting how others will behave. For example, the welfare benefits of a state's choice to restrict greenhouse gas emissions depend on whether or not other states also do so.

3.1. Similarity and Misprediction Error

This section argues that there is a direct correlation between inclusiveness and misprediction error rate. When analysis includes more people, the analyst(s) must predict the welfare of more individuals who are more dissimilar from the government whose decision is being analyzed. These individuals are also more dissimilar from the analyst(s) themselves, in the typical case where the analysts share species, political jurisdiction, and time of existence with the government.

³⁰ András Miklós and Attila Tanyi, "Institutional Consequentialism And Global Governance" (2017) 13 *Journal of Global Ethics* 279 at 284.

³¹ Charles E. Lindblom, "The Science of 'Muddling Through'" (1959) 19 *Public Administration Review* 79 at 80; Stuart Shapiro, *Analysis and Public Policy Successes, Failures and Directions for Reform* (Cheltenham, UK: Edward Elgar Publishing, 2016) at 153.

³² Ian Sanderson, "Making Sense of 'What Works': Evidence Based Policy Making as Instrumental Rationality?" (2002) 17 *Public Policy and Administration* 61 at 63.

³³ John Bronsteen, Christopher Buccafusco and Jonathan S. Masur, *Happiness and the Law* (Chicago: University of Chicago Press, 2015) at 39.

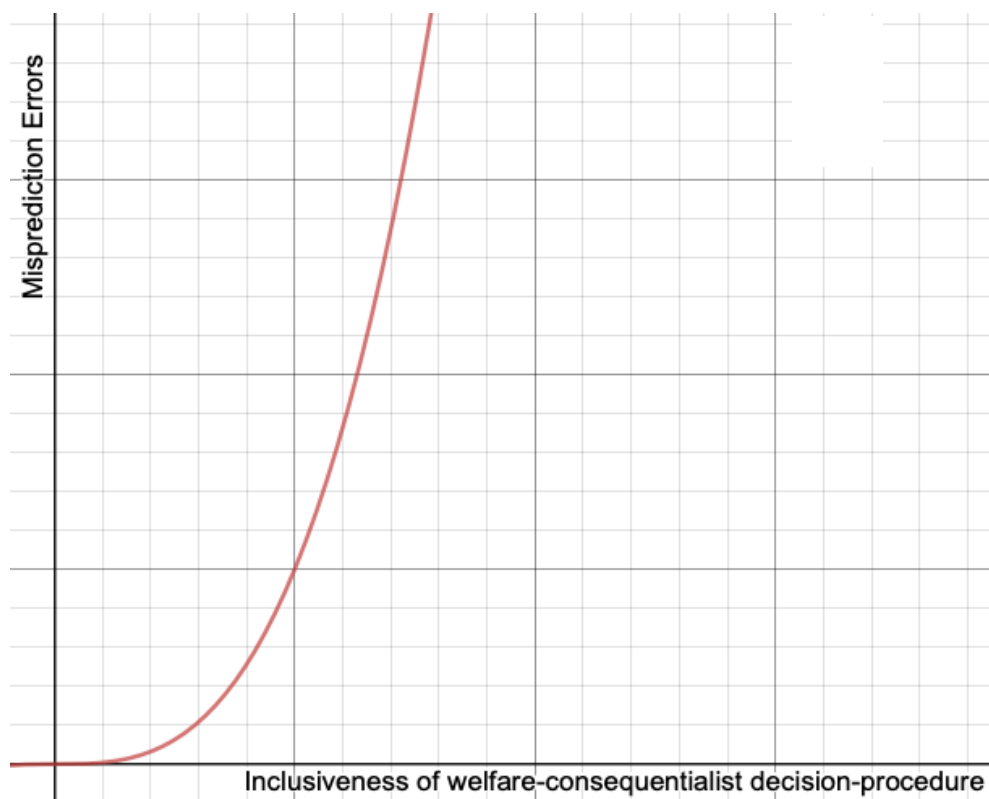


Figure 2 Relationship between Misprediction Error and Inclusiveness

For epistemological reasons, the less similar a welfare-bearing individual is to an analyst seeking to predict that individual's welfare in an outcome, the less accurate that prediction tends to be. More inclusive analysis must count more individuals for whom the analyst's welfare predictions have a relatively weak epistemic basis. Multiple sources of knowledge are available to inform welfare predictions, but at least three of these are more reliable for predictions about similar individuals and less reliable for predictions about dissimilar ones. These are tacit knowledge, tradition, and democracy.

3.2. Tacit Knowledge of Social Systems

The welfare effects of public policies are often mediated by complex social systems whose operations cannot be fully modelled or mapped. French-English relations in Canada and the class system in the UK are examples. This is an important source of misprediction error in welfare-consequentialist public policy analysis.

These systems are not unknowable, but knowledge of them is often *tacit*: it cannot be formally communicated. "We can know more than we can tell," in Michael Polanyi's phrase,³⁴ about the complex cause-and-effect chains likely to result from a certain policy within a certain society. Tacit knowledge is available to an analyst only regarding systems with which the analyst has personal lived experience. As analysis becomes more inclusive, the analyst must make more welfare predictions that cannot draw on tacit knowledge, and for this reason misprediction error is more likely. For example, Matthias Risse identifies the complexity of local systems as one of the reasons why development assistance programs designed by foreigners are

³⁴ Michael Polanyi, *The tacit dimension* (Chicago ; London: The University of Chicago Press, 1966 [2009]) at 4.

often surprisingly ineffectual in raising welfare. Likewise, analysts must resort to purely formal knowledge about welfare-relevant social systems among animals, or among the people of the 23rd century.

3.3. Tradition

The fact that a policy has been followed for many years might offer evidence that preserving it is more likely to maximize aggregate welfare than abandoning it would be. Edmund Burke argued that identifying good public policy “requires the aid of more minds than one age can furnish.” Therefore, “the best legislators have been often satisfied with the establishment of some sure, solid, and ruling principle in government.”³⁵ In a similar vein, F.A. Hayek encouraged respect for “ways of doing things evolved by the process of trial and error where only the superior manner, but not the reason for adopting it, has been handed down to us.”³⁶ Although neither Burke nor Hayek were necessarily welfare-consequentialists, these conservative arguments support tradition as a source of knowledge about the welfare effects of policy options.

However, the traditions of a jurisdiction generally offer information about what maximizes welfare *for the people of that jurisdiction*. That a certain policy has been continuously followed somewhere for 200 years may provide some evidence that the policy promotes the welfare of the humans who live there, because if not they would have taken steps to end it. This fact provides no evidence that the policy promotes the welfare of foreigners and non-human animals, who would, generally, have been unable to take steps to end the policy regardless of its effects upon them.

Although formal quantitative welfare-consequentialist analysis is a 20th century development, the broader effort to identify policies that will make life go best overall is certainly not new. The long survival of a policy might provide evidence that analysts, during the policy’s tenure, judged it to be welfare-maximizing. However, to the extent that welfare-consequentialist analysis has been conducted historically, parochial specifications have typically been used. “Everybody to count for one” has seldom been a popular basis for policy-making. The minds of the past may indeed furnish aid to the analyst’s predictive task, but this is generally aid in understanding the effects of policy on a parochially-defined circle. As the analyst’s circle grows, this aid becomes less helpful and so misprediction error becomes more likely.

3.4. Democracy

Democracy is said by some to have an epistemic function: it helps to identify correct (welfare-maximizing) policy answers.³⁷ The Condorcet Jury Theorem (CJT) holds that, under certain conditions, a large democratic “jury” is more likely than a smaller group would be to identify the correct decision. Robert Goodin and Kai Spiekermann argue that, in real-world democracies, the CJT offers good reason to take democratic verdicts as evidence of what is and is not correct.

³⁵ Edmund Burke, *Reflections on the Revolution in France* (London: James Dodsley, 1790). Online: <https://socialsciences.mcmaster.ca/econ/ugcm/3113/burke/revfrance.pdf> at 140.

³⁶ Friedrich A. von Hayek, *The constitution of liberty : the definitive edition* (Chicago: University of Chicago Press, 1960 [2011]) at 126.

³⁷ Robert E. Goodin and Kai Spiekermann, *An Epistemic Theory of Democracy* (London: Oxford University Press, 2018).

The CJT requires voters to be *sincere*; they must “vote for the alternative they believe to be the correct alternative.”³⁸ The typical real voter does in fact seem to back the option (s)he considers best for “society,”³⁹ as opposed to the one (s)he considers most likely to advance his or her self-interest.⁴⁰ According to the CJT, a democratic choice between parties, or between options in a referendum, is good evidence for an analyst about what would maximize aggregate expected welfare for “society.”

However this “society” is not the wide circle proposed by Bentham and Singer. Although they are willing to attend to the interests of their unborn human compatriots,⁴¹ most voters do not think of foreigners and non-human individuals as part of their society. However informative the democratic jury’s verdict may be (which is controversial⁴²), it is *most* informative regarding the welfare-maximizing policy choice for the same group that voters actually attend to when they vote. Welfare-consequentialist analysis based on a more inclusive group therefore gets less help from this epistemic resource, and is more prone to misprediction error.

3.5. Sources of Welfare Knowledge

Tacit knowledge, tradition, and democracy are epistemic resources that help analysts predict welfare effects. However these torches of knowledge best light the ground closest to the welfare-consequentialist analyst. If she seeks to survey a larger circle, she must do so without their light, and she is therefore likely to make more error.

These are not the only available sources of welfare-knowledge, and the argument here is not that the welfare of dissimilar individuals is unknowable. Some formal sources of welfare-knowledge can be applied to individuals highly dissimilar to the analyst. Scientific evidence can, for example, inform predictions of how the welfare of individuals born in the year 2100 will differ, depending on whether the climate is only 1 degree hotter, as opposed to 5 degrees hotter.⁴³ Observation of non-human animals can ground predictions about how their welfare will vary depending on their habitats and other life characteristics that are affected by policy choices.

Nor is similarity to the predictor the only thing that affects the accuracy of predictions about an individual’s welfare. Although non-human animals are less similar than humans are to human analysts, they may also have simpler welfare. This would reduce the misprediction error rate when an analyst tries to predict the effects of a policy option upon a population of non-human animals.

Nevertheless, as the circle widens the epistemic returns from tacit knowledge, tradition, and democracy diminish, and so inclusiveness and misprediction error rate are directly correlated. Indeed, an analyst shifting to a more inclusive form of welfare-consequentialism will encounter not only increased misprediction error risk regarding the dissimilar individuals who must now be counted, but also increased misprediction error risk about the similar individuals

³⁸ *Ibid*, at 19.

³⁹ Carolyn L. Funk, “The Dual Influence of Self-Interest and Societal Interest in Public Opinion” (2000) 53 *Political Research Quarterly* 37 at 40.

⁴⁰ Timothy Feddersen, Sean Gailmard and Alvaro Sandroni, “Moral Bias in Large Elections: Theory and Experimental Evidence” (2009) 103 *The American Political Science Review* 175.

⁴¹ Alan M. Jacobs, *Governing for the Long Term: Democracy and the Politics of Investment* (Cambridge, MA: Cambridge University Press, 2011) at 36.

⁴² See, for example, Jason Brennan, *Against Democracy* (Princeton, NJ: Princeton University Press, 2016).

⁴³ William D. Nordhaus, *The climate casino : risk, uncertainty, and economics for a warming world* (New Haven: Yale University Press, 2013).

who were being counted beforehand. Welfare predictions are epistemically taxing. Analysts have a limited supply of resources available for making them.⁴⁴ Predictions about dissimilar individuals impose relatively large demands on these resources, given that there are fewer sources of knowledge available to inform them. Undertaking these predictions may overtax these resources, to the extent that welfare predictions about similar individuals also become more error-prone.

4. Ethical Ideals and Ethical Decision Procedures

“Who counts” is a question that requires a two-level answer.⁴⁵ A specification of welfare-consequentialism can serve two distinct purposes. First, it can be an *ethical ideal*: a claim about the attributes that the ideal policy would have. Second, it can be an *ethical decision procedure*: a set of instructions for an analyst who wants to make a policy recommendation. As Cynthia Stark explains, an ethical decision procedure is a “method of deliberation.” It “offers an answer to the question, ‘How do I decide in a given case which action is ethically right?’”⁴⁶ A decision procedure must be designed in a way that takes into account the decision-maker (in this case, the analyst’s) characteristics.⁴⁷

An ethical ideal can exist without any accompanying decision procedure. However, in this bare form it would disappoint the widespread expectation that ethical theories should help people decide what to do.⁴⁸ On the other hand, an ethical decision procedure cannot exist without an ethical ideal informing it. This is because, from a consequentialist standpoint, the only reason to follow an ethical decision procedure is to reduce the expected gap between the current state of affairs and a certain ethically ideal state.

The decision procedure that superficially most resembles an ethical ideal will not necessarily be the one that can rationally be expected to produce an outcome as close as possible to that ideal, if actual human decision-makers attempt to follow it.⁴⁹ If “everybody to count for one” is the ethically-ideal degree of inclusiveness, then a welfare-omniscient analyst (who is capable of predicting all welfare effects of policies) should use an equally inclusive decision procedure. However for a real human analyst, with epistemic limitations, a more parochial ethical decision procedure will produce a recommendation with less expected divergence from the ethically-ideal policy.

4.1. A Municipal Example

The following example illustrates how these considerations would apply in a simplified but realistic scenario. Smallville is building a park, and must decide whether to build a tennis

⁴⁴ Miklós and Tanyi, above note 30 at 281.

⁴⁵ Fred Feldman, "True and Useful: On the Structure of a Two Level Normative Theory" (2012) 24 *Utilitas* 151.

⁴⁶ Cynthia A. Stark, "Decision Procedures, Standards of Rightness and Impartiality" (1997) 31 *Noûs* 478 at 478.

⁴⁷ Matthias Brinkmann, "Indirect Instrumentalism about Political Legitimacy" (2019) 6 *Moral Philosophy and Politics* 175 at 181; Andreas Miklós and Attila Tanyi, "Consequentialism and Its Demands: The Role of Institutions,"

<https://www.academia.edu/18043101/Consequentialism_and_Its_Demands_The_Role_of_Institutions_with_Andras_Miklos_>.

⁴⁸ Dana S. Howard, "The Scoundrel and the Visionary: On Reasonable Hope and the Possibility of a Just Future" (2018) 27 *Journal of Political Philosophy* 294 at 294-5.

⁴⁹ Matthias Brinkmann defines “indirect consequentialism” as the claim that “there will be a gap between the criterion of rightness and the right decision procedure.” (Brinkmann, above note 47 at 180). See also Larry Alexander, "Pursuing the Good-Indirectly" (1985) 95 *Ethics* 315.

court, or a basketball court. The members of Smallville’s municipal council conduct a welfare-consequentialist analysis: an effort to identify the option that can rationally be expected to make affected individuals’ lives go best for them, overall.

How is evidence to be gathered for this analysis? Consultation– e.g. holding town halls, or soliciting comments about which option people would prefer – may be helpful. However, it is ultimately welfare predictions that will ground the recommendation. Even if consultation participants overwhelmingly favour a tennis court, building the basketball court might be the correct recommendation. This could be true if more people would use the latter facility, if the average user would get more welfare benefit from it, or (under egalitarian or prioritarian specifications) if the would-be basketball players are worse off than the would-be tennis-players.

4.2. Exclusion Error Exemplified

Parochial Analysis

Who should count in this analysis? A parochial specification would count only expected welfare effects on living, human subjects of Smallville. Smallvillians can easily cross the border to neighbouring TINYTOWN. A municipal basketball court already exists in TINYTOWN, which accommodates some of the demand from Smallvillians. Thus, building a new basketball court in Smallville would create a predicted welfare gain of only 1x for each Smallville basketball player. There is no tennis court anywhere in either Smallville or TINYTOWN, so building a tennis court would create a predicted welfare gain of 2x per Smallville tennis player.

The outcome of the parochial welfare-consequentialist analysis now depends on the number of players of the two sports within Smallville. If the councillors estimate that there are 150 basketball players and 55 tennis players in town, the analysis would be as follows:

Table 1a

If Smallville builds the basketball court:

	Smallville	Gain from 1st basketball court in two-town area (2x)	Gain from 2nd basketball court in two-town area (1x)
Basketball players	150	-	150
Tennis players	55	-	-
Total welfare gain: 150			

If Smallville builds the tennis court:

	Smallville	Gain from 1st tennis court in two-town area (2x)	Gain from 2nd tennis court in two-town area (1x)
Basketball players	150	-	-
Tennis players	55	110	-
Total welfare gain: 110			

The outcome of this parochial analysis is a recommendation to build the basketball court.

Inclusive Analysis

Suppose there is no good reason why Tinytowners' welfare should, as a matter of ethical ideal, matter any less than Smallvillians' welfare vis-à-vis this policy question. In Tinytown, there are an estimated 100 basketball players and 90 tennis players. All of them would be able to cross the municipal boundary and use Smallville's new basketball or tennis court.

Table 1b

If Smallville builds the basketball court:

	Tinytown	Smallville		
			Gain from 1st basketball court in two-town area (2x)	Gain from 2nd basketball court in two-town area (1x)
Basketball players	100	150	-	250
Tennis players	90	55	-	-
Total welfare gain: 250				

If Smallville builds the tennis court:

	Tinytown	Smallville		
			Gain from 1st tennis court in two-town area (2x)	Gain from 1st tennis court in two-town area (1x)
Basketball players	100	150	-	-
Tennis players	90	55	290	-
Total welfare gain: 290				

This more inclusive analysis weighs the welfare of Tinytown subjects equally with the welfare of Smallville subjects. It is now evident that the recommendation from the original parochial analysis ("build the basketball court") constitutes an exclusion error, because building a tennis court can be rationally expected to create a larger total welfare gain in the two-town area.

4.3. Misprediction Error Exemplified

Parochial Analysis

The councillors conducting the analysis cannot know exactly how many users there would be of the two facilities, especially given that some people will develop an interest in a certain sport only if the facility for it is built. The councillors can only estimate the numbers, using tools such as surveys, public consultations, and formal knowledge of various kinds. Suppose these tools yield a range, within which the actual number of players is certain to fall. Thus a more accurate version of Table 1a would be Table 2a, which shows the councillors' estimate range for the number of players of the two sports. The midpoint in each of these ranges equals the number in the corresponding box of Table 1.

Table 2a

If Smallville builds the basketball court:

	Smallville	Gain from 1st basketball court in two-town area (2x)	Gain from 2nd basketball court in two-town area (1x)
Basketball players	Min: 135 Mid: 150 Max: 165	-	Min: 135 Mid: 150 Max: 165
Tennis players	Min: 49.5 Mid: 55 Max: 60.05	-	-
Total welfare gain: between 135 and 165, expected value 150			

If Smallville builds the tennis court:

	Smallville	Gain from 1st tennis court in two-town area (2x)	Gain from 2nd tennis court in two-town area (1x)
Basketball players	Min: 135 Mid: 150 Max: 165	-	-
Tennis players	Min: 49.5 Mid: 55 Max: 60.05	Min: 99 Mid: 110 Max: 121	-
Total welfare gain: between 99 and 121, expected value 110			

In this parochial analysis, the minimum number is 90% of the midpoint estimate, and the maximum number is 110% of the midpoint estimate. Assuming that each number within the range is equally likely to be the correct one, the expected total welfare gains from the two options are equal to the numbers from Table 1, and the advice remains the same (build the basketball court). The smallest possible welfare gain from building the basketball court (135 welfare units) is larger than the largest possible gain from building the tennis court (121 units). There is therefore no risk of misprediction error arising from the analyst's estimates of player numbers.⁵⁰

⁵⁰ Misprediction error could still arise from estimates of the welfare gain per player, or from another component of the analysis.

Inclusive Analysis

When Smallville Council adopts a more inclusive analysis, it must estimate the number of basketball and tennis players in TINYTOWN as well as Smallville. These estimates will be less precise than those made under the parochial approach. The councillors will be less able to draw on tacit knowledge, tradition, or democracy to inform these new estimates. TINYTOWNERS are relatively unlikely to participate in Smallville town consultations, communicate with Smallville councillors, or otherwise provide information to the analysts about how the decision will affect their welfare. Because the estimates are less precise, in the following table the minimum and maximum values are 70% and 130% of the midpoint estimates from Table 1b, respectively.

Table 2b

If Smallville builds the basketball court:

	TINYTOWN	Smallville		
			Gain from 1st basketball court in two-town area (2x)	Gain from 2nd basketball court in two-town area (1x)
Basketball players	Min: 70 Mid: 100 Max: 130	Min: 105 Mid: 150 Max: 195	-	Min: 175 Mid: 250 Max: 325
Tennis players	Min: 63 Mid: 90 Max: 117	Min: 38.5 Mid: 55 Max: 71.5	-	-
Total welfare gain: between 175 and 325, expected value 250				

If Smallville builds the tennis court:

	TINYTOWN	Smallville		
			Gain from 1st tennis court in two-town area (2x)	Gain from 1st tennis court in two-town area (1x)
Basketball players	Min: 70 Mid: 100 Max: 130	Min: 105 Mid: 150 Max: 195	-	-
Tennis players	Min: 63 Mid: 90 Max: 117	Min: 38.5 Mid: 55 Max: 71.5	Min: 203 Mid: 290 Max: 377	-
Total welfare gain: 203 and 377, expected value 290				

Based on the midpoint expected welfare gains, the recommendation remains what it was in Table 1b: build the tennis court. However, the analyst really only has a basis to say that the basketball court would create a welfare gain of somewhere between 175 and 325 units, while the tennis court would create a gain of somewhere between 203 and 377 units. The smallest possible welfare gain from the tennis court (203 welfare units) is much smaller than the largest possible gain from the basketball court (325 units). Because the ranges overlap, there is now a large

chance that the tennis court recommendation is wrong, due to misprediction error. In becoming more inclusive, the analyst has reduced exclusion error but introduced a major risk of a misprediction error.

This example of policy analysis is simplified in many ways, but it illustrates phenomena that occur more broadly. Whenever a decision affects the welfare of individuals who should ideally count, exclusion error can result if the decision procedure does not count those individuals. Adopting a more inclusive decision procedure reduces the likelihood of such error. However doing so also requires welfare predictions to be made regarding more dissimilar individuals, and this increases the chance of misprediction error.

5. Minimizing Combined Errors

In welfare-consequentialist decision procedures, the “who counts” question should be answered in a way that minimizes the combined rate of exclusion and misprediction errors. The dilemma is that inclusiveness is inversely correlated with exclusion error, but directly correlated with misprediction error. This Part considers ways to minimize the combined error rate.

Most policy applications of welfare-consequentialism simply exclude some individuals from the analysis. Those who have a sufficient degree of biological, political, or temporal similarity to the decision-maker are counted; other welfare-bearing individuals are not. actually do. For example, cost-benefit analysis of proposed federal regulations in the United States disregards costs and benefits accruing to foreigners,⁵¹ and to non-human animals.⁵²

The combined error rate may be minimized by including individuals who are only somewhat dissimilar -- e.g. those to be born in the next 100 years but not those to be born thereafter. However, discounting dissimilar beings increases exclusion error rate without any expected reduction in misprediction error rate. This is because predicting but then discounting the welfare of a dissimilar being does not reduce the difficulty or error-proneness of the prediction.⁵³

5.1. Systems of Parochial Governments

A system of governments can reduce exclusion error across the system, while members of the system follow parochial analyses that minimize misprediction error. Governments with the power to delegate can unilaterally create such systems. For example, in many countries a municipality like Smallville would be created by a subnational or national government. Senior governments routinely delegate decisions which have only local welfare effects to local governments, which have good access to epistemic resources regarding these effects. Compared to a system in which senior governments micromanage everything, this reduces the misprediction error rate.

Senior governments must decide what types of policy local governments will be responsible for, and draw their geographic boundaries. They can also require local governments to follow the recommendations of welfare-consequentialist analyses, and specify a degree of inclusiveness for these analyses. Suppose a senior government instructs each municipality to exercise their assigned powers pursuant to parochial welfare-consequentialist analyses which

⁵¹ Per-Olov Johansson and Ginés de Rus, "On the Treatment of Foreigners and Foreign-owned Firms in the Cost-benefit Analysis of Transport Projects" (2019) 53 *Journal of Transport Economics and Policy* 199 at 199.

⁵² Olof Johansson-Stenman, "Animal Welfare and Social Decisions: Is It Time to Take Bentham Seriously?" (2018) 145 *Ecological Economics* 90 at 91.

⁵³ The author is grateful to an anonymous reviewer for this point.

count only their own respective living human subjects. This should minimize misprediction error, according to the argument in Part Prediction, and Misprediction Error 3. If the welfare effects of each municipality's decisions are also confined to local living humans, the exclusion error rate will also be zero.

However many municipal policy decisions— such as Smallville's basketball/tennis decision -- have welfare effects on a broader group. Even assuming this decision has no effects on non-humans or the unborn, Smallville and Tynytown are too small to apply parochial analyses to recreation facility decisions without major exclusion error risk, as illustrated by Table 1b above. Because their subjects can easily cross the municipal border, welfare would be maximized if there were one court of each type in the two-town area, but if they follow parochial analyses then each will build a basketball court. A similar problem occurs (with much graver consequences) when municipal zoning decisions, designed to maximize the welfare of subjects, increase housing prices to the detriment of those who are not subjects of the municipality at the time the decision is made.⁵⁴

One way for a senior government to prevent exclusion error when such “spillover” effects are present is to require municipalities to govern based on more inclusive welfare-consequentialist analyses. This, however, is expected to increase misprediction error according to Part 3. An alternative which should produce a lower combined error rate is to increase the size of the municipalities. If Smallville and Tynytown are amalgamated, and the amalgamated council conducts a parochial analysis of the basketball/tennis decision, that analysis will correctly identify the policy that maximizes welfare for the living human subjects of the two-town area (building the tennis court).

As J.S. Mill argued, the optimal size of municipalities depends on how many individuals are affected by municipal decisions.⁵⁵ To maximize aggregate expected welfare, the senior government would draw the map of municipal borders so that each local government has, as subjects, all those (and only those) who are affected by its decisions. Another alternative is to create an upper-tier municipality responsible for decisions which have spillover effects, while leaving truly local questions (without spillover effects) in the hands of the lower tier.

There is another potential problem with leaving decisions about outdoor recreation facilities to parochial local governments. If each is required to fund services exclusively from local taxation, then subjects of less affluent municipalities will have fewer and poorer recreation facilities than subjects of wealthier ones.⁵⁶ Recreation spending would produce greater welfare benefits if it were spread more equally across municipalities. This is especially true if the welfare-consequentialist specification is egalitarian or prioritarian and the subjects of less affluent municipalities have lower lifetime welfare than subjects of wealthier municipalities. Again, however, this problem can be resolved without abandoning parochialism in local government decision-making. Senior governments can provide extra funds to less affluent municipalities, or create upper-tier municipalities encompassing affluent and less-affluent neighbourhoods.

⁵⁴ Richard Briffault, “Our Localism” (1990) 90 Colum. L. Rev 1 at 1.

⁵⁵ John Stuart Mill, “Chapter XV—Of Local Representative Bodies” in *Considerations on Representative Government* (London: Parker, Son, and Bourn, 1861).

⁵⁶ Robin W. Boadway and Anwar Shah, *Intergovernmental Fiscal Transfers: Principles and Practice* (Washington, D.C.: World Bank, 2007) at 19.

The point is that a well-designed *system* of governments can care for an inclusively-defined human population, while still instructing individual governments within the system to use the parochial welfare-consequentialist decision procedures that minimize misprediction error. Legislative fiat by a senior government is not the only way to bring about such a system. The negotiation of a federal constitution can allocate powers or responsibilities within a system of governments using similar functionalist reasoning. The global system of nation-state governments can be justified in a similar way.⁵⁷ If everyone is a citizen of at least one state, *and* resources are redistributed to poorer states,⁵⁸ *and* there are mechanisms for dealing with problems that transcend national borders, then it may maximize humankind's aggregate welfare for nation states to generally care for only their own subjects, whose welfare they can best predict.⁵⁹

However systems of parochial governments cannot care for unborn and non-human welfare-bearing individuals. Only inclusive analyses can count non-humans, because they are dissimilar to all human governments. Unborn humans may have their own parochial governments to care for them in the future. However their welfare is permanently affected by policy decisions in the present. Serious exclusion error will occur if policy recommendations to today's governments do not factor in the effects of (for example) greenhouse gas emissions on the unborn.

5.2. Differential Sensitivity

A differentially sensitive analysis would be designed to detect only relatively large welfare effects on dissimilar individuals, along with smaller welfare effects on similar individuals. Suppose Smallville is growing, and must decide whether or not to allow a piece of tree-covered land at the city's border to be developed. Analysis of the decision might be sensitive to a wide range of welfare effects on humans, mediated by the price of housing, road congestion, employment, etc.

Regarding welfare effects on non-human animals, the familiar options are: (i) not counting them at all, and (ii) attempting predictions of the proposed development's full welfare consequences for each affected welfare-bearing non-human individual. Under a preferentist definition of welfare, for example, this would include the loss of welfare caused by the animals' being forced to move to less-preferred habitats. The former option involves high expected exclusion error; the latter involves high expected misprediction error given the weak epistemic resources available to Smallville for the predictive task.

A third option, based on differential sensitivity, is to predict how many more welfare-bearing animals will die, due to loss of habitat, if the land is developed. Premature death, under a preferentist theory of welfare, constitutes a large welfare loss. An analysis which is sensitive only to this large welfare effect economizes on prediction (thereby reducing misprediction error), but does so in a way that also prevents at least some exclusion error.

5.3. Inclusive Review

Another option is to reserve inclusive analysis for the review of policy decisions which a "red flag" indicates are likely to have a major welfare effect on dissimilar individuals. Smallville

⁵⁷ Robert E. Goodin, *Utilitarianism as a Public Philosophy* (Cambridge, UK: Cambridge University Press, 1995) at 26; Miller, .

⁵⁸ Robert E. Goodin, "What is So Special about Our Fellow Countrymen?" (1988) 98 *Ethics* 663 at 685

⁵⁹ Miklós and Tanyi, at 285-6.

Council might conduct parochial analyses of its decisions as a matter of course, but have a policy of reviewing them, with a more inclusive analysis, when a red flag event occurs. A petition signed by a certain number of Tinytowners protesting a Smallville Council decision might be a red flag triggering a more politically-inclusive review, which would count effects on Tinytowners.

One way that governments can adversely affect the welfare of the unborn is by accumulating excessive debt, which unborn taxpayers will have to repay. Entities such as credit rating agencies and budgetary watchdogs monitor the effect of government policies on fiscal sustainability. A warning from such an agency could constitute a red flag, that would trigger a temporally-inclusive analysis of a government's fiscal policy (counting effects on the unborn). This more-demanding predictive exercise is undertaken for a decision which, because of the red flag, the analyst has reason to consider especially vulnerable to exclusion error.

5.4. Rules to Protect the Dissimilar

Rule-consequentialism offers a third way to “buy” a reduction of exclusion errors at a moderate price in terms of increased predictive difficulty. In lieu of predicting the welfare of a dissimilar group of individuals under alternative policies, an analysis can incorporate a rule that requires the analysis to recommend one of those alternatives if certain conditions are met. The conditions are designed to prevent the recommendation of policies that would seriously damage the welfare of certain groups of dissimilar individuals.

An environmental sustainability rule could serve this function, vis-à-vis both unborn and non-human individuals. Resources essential to life on earth could be identified, such as biodiversity, carbon sinks, and the ozone layer. A rule might preclude recommendation of any policy that would, if adopted by all similarly-situated governments, lead to the stock of any such resource being smaller once every living human is dead than it is at the time of the analysis.⁶⁰ Policies leading to outcomes in which the unborn enjoy smaller stocks of such resources than the living do might, consistently enough, also be policies whose recommendation would constitute an exclusion error.

Rules of this nature allow a welfare-consequentialist decision procedure to avoid the worst possible welfare effects on dissimilar individuals, without having to make welfare predictions for them. Checking alternative policies against this rule would be easier – and therefore less generative of misprediction errors -- than trying to predict the welfare of every individual who will live after we do under the alternative policies. This sort of rule would be justified, in welfare-consequentialist terms, if including it in a decision procedure would be rationally expected to increase the decision procedure's likelihood of delivering higher aggregate welfare.

6. Conclusion

If making individuals' lives better is the measure of good public policy, which individuals are these? This paper has asked who should count, in policy-oriented welfare-consequentialism. More precisely, the question is how biologically, politically, or temporally

⁶⁰ Joseph E. Stiglitz, Amartya Sen and Jean-Paul Fitoussi, "Report by the Commission on the Measurement of Economic Performance and Social Progress" (Paris, France: 2009): “ultimately, the sustainability issue is about how much stocks of resources we leave to future generations, and the question is whether we leave enough of these to maintain opportunity sets at least as large as the one we have inherited.”

similar individuals should have to be to a government, in order to be included in welfare-consequentialist analysis of that government's policies.

On the level of ethical ideals, who counts depends on the extent to which special obligations for governments to humans and subjects can be defended against the view that there is no rational and impartial reason to exclude any welfare-bearing being from the circle of concern. However even if one rejects all such special obligations, a new defence of parochialism arises when one moves from the level of ethical ideal to the level of decision procedures for human analysts. Making recommendations that deviate as little as possible from the ethical ideal depends on minimizing two kinds of error. Exclusion error results from not counting individuals who should count, and expected exclusion error goes down as inclusiveness increases. Misprediction error results from failure to correctly predict welfare effects on those whom the analyst does count, and expected misprediction error will increase as the analysis becomes more inclusive. This is because analysts' welfare predictions about dissimilar individuals draw on fewer sources of knowledge. Thus, inclusiveness cuts both ways, in terms of analysts' accurate identification of welfare-maximizing public policy.

The article concluded by identifying opportunities to escape this dilemma, and minimize the combined rate of exclusion and misprediction errors. Systems of government, differential sensitivity, inclusive review, and rule-consequentialism are ways to keep dissimilar individuals within the circle, while imposing only relatively moderate demands for prediction on the part of analysts. "Everybody counts for one" is not just ethically demanding, but also epistemically unrealistic as an ethical decision procedure for humans. If welfare-consequentialism can come to terms with epistemic limits, it will be more likely to identify public policy that really does make life as good as possible for everybody.