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FAIR INNINGS

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ABSTRACT
In many societies, the aging of the population is becoming a major problem. This raises difficult issues for ethics and public policy. On what is known as the fair innings *view, it is not impermissible to give lower priority to policies that primarily benefit the elderly. Philosophers have tried to justify this view on various grounds. In this article, I look at a consequentialist, a fairness-based, and a contractarian justification. I argue that all of them have implausible implications and fail to correspond to our moral intuitions. I end by outlining a different kind of consequentialist justification that avoids those implications and corresponds better to our considered moral judgments.*

1. INTRODUCTION

Many societies, especially in the developed world, have a 'greying problem'. Their populations are aging. Dependency ratios (the ratio of the numbers of those who are not in the labour force and those who are) are getting higher, and fertility rates in many of these countries have fallen below replacement levels. As people live longer and fewer children are born, the elderly make up an ever larger share of the population, putting increasing pressure on healthcare and pension systems.

According to projections by the United Nations, about one billion working-age adults and about 1.25 billion people aged over 60 will be added to the global population by 2050, while the number of people under 25 will remain about 3 billion. By the middle of the century, over a fifth of humanity will be over 60, doubling the current 11%. The developed countries, however, have already reached this level. By 2050, nearly one third of their population will be over 60. Currently, on average in OECD countries, 65-year old women can expect to live another 19.9 years and men can expect to live another 16.4 years. By 2050, life expectancy at 65 for women is forecast to increase to 23.5 years, and for men 19.5 years. In these countries, spending on pensions is projected to grow 40% faster than GDP in the next several decades, doubling the proportion of national income spent on old-age income support. There is universal agreement that current trends are unsustainable and significant reforms are needed.[1]

The trends in spending on health care are broadly similar. In many developed countries, government healthcare spending per capita has been increasing by almost twice the size of per capita GDP growth for several decades. In the United States, government spending on health care could amount to one-third of GDP by 2050, unless current trends are reversed. Already in 1999, over a third of healthcare expenses were spent on people aged 65 and over (their share in Japan has already increased to more than half). These costs increase with age: the average healthcare spending on a person over 80 is over 11 times more than the average healthcare spending on a person between 50 and 64. As more and more

[1] There are, of course, significant variations between the situation of individual countries. For detailed data, see United Nations, *World Population Aging 2009*, Working Paper ESA/P/WP/212, UN Department of Economic and Social Affairs, Population Division, New York, 2009, and OECD, *Pensions at a Glance 2011: Retirement-income Systems in OECD and G20 Countries*, OECD Publishing, 2011, http://dx.doi.org/10.1787/pension_glance-2011-en; for an overview of policy options, see J. Bongaarts. Population Aging and the Rising Cost of Public Pensions. *Popul Dev Rev* 2004; 30: 1–23.

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people survive into very old age, these costs are going to get higher in both absolute and relative terms.[2]

These trends raise difficult issues for ethics and public policy. Faced with an aging population and increasing resource constraints, how should societies allocate resources between different age groups? Is it permissible to give lower priority to policies that primarily benefit the elderly? Should older people have weaker claims on social resources than younger people? Is discrimination by age morally different from other forms of discrimination – for instance, from discrimination based on race or sex?

We know from empirical research that, at least in the context of health care, many people agree that it is not impermissible to give lower priority to the healthcare needs of the elderly.[3] It appears that there is broad support for what I will call the *fair innings view*. The general idea behind this view is roughly that it is permissible to pursue policies in health care (and perhaps beyond) that favour younger people. While nobody's healthcare needs should be completely ignored, we should set limits on the elderly's share of healthcare resources, especially when they compete directly for these resources with younger people.[4]

If we accept the fair innings view, many of our policies will have to change. For instance, old-age public income support should be less generous, so that people will have to work longer and rely more on their accumulated assets and private savings for retirement income. In health care, it could be justified to provide only palliative rather than life-extending care at the end of life for elderly patients. The primary aim of geriatric medicine would become the maintenance of quality of life, rather than prolonging life. Research priorities would have to be altered from chronic, long-term conditions that often correspond to the healthcare needs of older people towards conditions which mainly affect younger people.

It's not only policies that have to change, but also the way policies are made and evaluated. A particularly striking example is from the United States. In the US, federal agencies are required to carry out cost-benefit analyses of proposed policies and regulations. One way the benefits of a policy can be evaluated is by calculating the value of a statistical life year, and use it to place a value on the overall number of life years that would be saved by implementing the policy. Setting the technical details aside, the idea is to put a monetary value on the reduction of mortality risk that a policy or regulation – for instance, curbing diesel exhaust from highway traffic – could achieve. The more life years a policy will save, the better. But policies that benefit older people might be less valuable, since the older the people who benefit from regulation are, the fewer life years can be saved. Nevertheless, a few years ago the federal government forbid agencies to take this into account or to use any age-adjustment factor in their cost-benefit calculations. The government even argued that the value of a statistical life year should be *greater* for senior citizens. In effect, this means that the benefits of regulation whose primary beneficiaries are older people are systematically *overvalued* compared to the benefits of policies and regulations whose beneficiaries are the general population.[5]

Consequently, whether the fair innings view can be morally justified has direct practical implications. It has more than mere theoretical interest. Evidently, in the absence of moral argument, people's judgments in

[2] Once again, there are significant differences between different countries; in particular, countries vary with respect to the degree to which spending on the elderly is responsible for the overall increase in health care spending. For details, see C. Hagist & L.J. Kotlikoff. Health Care Spending: What the Future Will Look Like. *NCPA Policy Report* No. 286, 2006, National Center for Policy Analysis, Dallas, TX; S.P. Keehan, H.C. Lazenby, M.A. Zezza & A.C. Catlin. Age Estimates in the National Health Accounts. *Health Care Financing Review* 2004; (Web exclusive 1:1), 1–16, http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/HealthCareFinancingReview/Downloads/Keehan.pdf.

[3] See, for instance, J.J.V. Busschbach, D.J. Hessing & F.T. de Charro. The Utility of Health at Different Stages in Life: A Quantitative Approach. *Soc Sci Med* 1993; 37: 153–158; M.L. Cropper, S.K. Aydede & P.R. Portney. Preferences for Life Saving Programs: How the Public Discounts Time and Age. *J Risk Uncertain* 1994; 8: 243–265; M. Johannesson & P.-O. Johansson. Is the Valuation of a QALY Gained Independent of Age? Some Empirical Evidence. *J Health Econ* 1997; 16: 589–599; E. Nord, A. Street, J. Richardson, H. Kuhse & P. Singer. The Significance of Age and Duration of Effect in Social Evaluation of Health Care. *Health Care Analysis* 1996; 4: 103–111; E. Rodríguez & J.L. Pinto. The Social Value of Health Programs: Is Age a Relevant Factor? *Health Economics* 2000; 9: 611–621, A. Tsuchiya, P. Dolan & R. Shaw. Measuring People's Preferences Regarding Ageism in Health: Some Methodological Issues and Some Fresh Evidence. *Soc Sci Med* 2003; 57: 687–696; A. Tsuchiya. Age-Related Preferences and Age Weighting Health Benefits. *Soc Sci Med* 1999; 48: 267–276. These papers present and review research from Australia, Japan, the Netherlands, Spain, Sweden, the United Kingdom, and the United States. However, a Citizens Council meeting in the UK, convened by the National Institute for Health and Care Excellence, did not come to a clear conclusion about the moral relevance of age in healthcare resource allocation (NICE. *Citizens Council Report: Age*. National Institute for Health and Care Excellence. 2012: http://www.nice.org.uk/media/065/9F/Citizenscouncil_report_age.pdf.).

[4] There is an ambiguity in the name that I must address. 'Fair innings' is sometimes used to refer to the general view that it is not impermissible to allocate resources in health care in ways that disadvantage the elderly. At other times, it is used to refer to a narrower view – the kind that I will call the fairness-based justification in the next section. In this article, I mean the general view about resource allocation by fair innings, and I treat the narrower view as one possible justification of it. Similarly, I treat the prudential lifespan account that I discuss later as one justification of the fair innings view in this broad sense. (I thank Norman Daniels for discussion on this issue.)

[5] See *Memorandum to the President's Management Council on Benefit-Cost Methods and Lifesaving Rules*, Office of Management and Budget. 2003: http://www.whitehouse.gov/omb/inforeg/pmc_benefit_cost_memo.pdf; *Circular A–4 on Regulatory Analysis*, Office of Management and Budget, 2003: http://www.whitehouse.gov/omb/circulars_a004_a-4. I thank John Broome for calling my attention to this example.

empirical surveys are insufficient to justify the fair innings view. They might simply reflect 'ageist' prejudice. Philosophers, however, have attempted to provide arguments for the view on a broad range of grounds. In this article, I present examples of consequentialist, fairness-based, and contractarian arguments. I argue that all of them have unpalatable implications or fail to capture the moral intuitions underlying the fair innings view. I conclude by providing a different kind of consequentialist argument that has the least implausible implications and best reflects our moral intuitions. If we want to defend the fair innings view, this is the best justification we have.

Since the fair innings view is usually presented in the context of health care, my examples will be drawn from healthcare resource allocation.

2. CONSEQUENTIALIST AND FAIRNESS-BASED ARGUMENTS

Consider the following case. There are two patients who need a life-saving drug, but you only have one drug and you can't get more. The only difference between the two patients is their age: neither of them is more deserving of the drug, neither of them is responsible for their condition, neither of them has family responsibilities, neither of them would have worse quality of life if they are saved, and so on. So you have to choose between giving the life-saving drug to:

(A) a 20-year old patient who will live for many years if she gets the drug; or
(B) a 70-year old patient who will live for only a few more years if she gets the drug.

In the choice between A and B, most people would say that it is more important to save the life of the younger person. Empirical surveys on people's preferences in healthcare resource allocation choices support this judgment.[6]

A straightforward justification for favouring the younger person is that saving a person who has many years ahead of her does more good. If resources are scarce, we should use them in the most cost-effective way. Since the two patients need the same resource and the only difference is how long their lives would be prolonged, giving the drug to the younger patient provides a greater benefit. Since younger people have greater life expectancies, discriminating in favour of them is justified on benefit-maximizing grounds. This sort of argument has been called *utilitarian ageism*. Evidently, it is a kind of consequentialist argument for the fair innings view.[7]

Most defenders of the fair innings view, however, do not want to appeal to utilitarian ageism. They argue that the view should be justified by a different moral consideration. That consideration is *fairness*. In the choice between A and B, the decisive consideration shouldn't be that the 20-year old patient would enjoy a healthy life for a longer time. Rather, she ought to be given a chance of a 'full' or 'complete' life – something the older person has already had. Benefit maximization is not the right reason for choosing A.

The main reason for formulating the fair innings view in terms of fairness is to avoid some of the implications of consequentialist views. Many people believe that one troubling implication of such views is their answer to the *aggregation problem*. If you allocate resources with the aim of maximizing benefits, small benefits to a large number of people can outweigh large benefits to a few people. Thomas Scanlon introduces the following example to illustrate the problem. Suppose that a worker, Jones, has an accident in the transmission room of a TV station during a World Cup match. He is receiving painful electronic shocks, but his condition is not going to get worse if he is not rescued immediately. There are many people who enjoy watching the match, and they would all suffer a minor inconvenience if the transmission was suspended while Jones is rescued. On consequentialist views, it would be better to let Jones suffer until the match is over, provided that the number of those who would be inconvenienced is sufficiently great. But it would be wrong not to rescue Jones. The enjoyment of millions of others should not outweigh his suffering.[8]

The aggregation problem might arise the following way for the fair innings view. Older people need a lot more routine medical care. They often need to take several drugs on a daily basis to manage chronic conditions, they have more frequent doctor's visits, and they are ill more frequently than younger people. In graying societies, the small benefits from meeting the needs of many old people may add up and outweigh substantial benefits to younger people (for instance, the benefits of maternal and early childhood medical care). The frequent consumption of minor healthcare services by the elderly might use up the available resources to the detriment of major but relatively rarely needed healthcare services for

[6] See the references in note 3. For discussion, see also G. Bognar. Age-Weighting. *Econ Philos* 2008; 24: 167–189.

[7] I borrow the name ' utilitarian ageism' from Nord et al., *op. cit.*, note 3. Another kind of consequentialist argument is *productivity ageism*. On this argument, good health is more valuable at younger ages due to the greater contribution of younger people to economic welfare as well as their responsibility for the wellbeing of others (e.g. their children and elderly parents). For discussion, see Tsuchiya, *op. cit*., note 3.

[8] For this example, see T.M. Scanlon. *What We Owe to Each Other*. Cambridge (MA): Harvard University Press; 1998: 235. See also N. Daniels. Four Unsolved Rationing Problems: A Challenge. *Hastings Cent Rep* 1994; 24: 27–29.

younger people. On consequentialist arguments, there would be nothing wrong with this. Thus, if you chose A in the example above on consequentialist grounds, you should be committed to reject A if there are sufficiently many 70-year old patients who could be helped with the drug, regardless of the fact that a 20-year old patient would live for many more years than any of them.

Defenders of fairness-based arguments for the fair innings view want to resist this implication. As a response to the aggregation problem, they may want to claim that *no* amount of small benefits to many people can outweigh large benefits to a few. Thus, no amount of modest life extension for people who have lived a long life can outweigh saving the life of a person who has so far only lived a short life.[9]

In practical terms, accepting utilitarian ageism could mean that research funds should be allocated for research into chronic conditions that afflict older people, since due to the number of older people in a greying society, the prevalence of these conditions is higher. Fewer funds would be left for more severe conditions that affect children and young people.

There is another implication of consequentialism that many defenders of the fair innings view are eager to avoid. Utilitarian ageism gives higher priority to giving the drug to the younger person in the choice between A and B because of her greater life expectancy. But the central feature of the fair innings view is the idea that it is *age* – rather than life expectancy – that has moral importance. To see the difference, consider the following case. Once again, you have only one drug and there are two patients who need it. The only difference between the two patients is their age. Everything else is just as it was in the choice between A and B, except that the outcomes are slightly different. You have to choose between saving:

(C) a 20-year old patient who will live for 10 more years if she gets the drug; or
(D) a 70-year old patient who will live for 10 more years if she gets the drug.

Both patients would spend the remaining ten years of their lives in good health. So there is no difference in expected benefit. The only difference is how much they have already lived when they receive the benefit.

On utilitarian ageism, giving the drug to C or D is equally good. On this view, you should prefer A to B, but you should be indifferent between C and D. On the fairness-based argument for the fair innings view, you should prefer A to B, and you should also prefer C to D. Hence the fairness-based and the utilitarian defenses of the fair innings view are distinct. They have different implications for this sort of case.

John Harris is one well-known proponent of the fairness-based argument. On his view, there is a threshold that should be considered a fair innings – a length of life that is sufficient for a complete or full life. For example, the threshold might be at three score and ten, or 70 years. Having that lifespan is enough to carry out the major projects of life: complete one's education, build a career, start a family and see one's children grow up and start families of their own. It is a reasonable amount of time for most life plans. Just as all players should get enough playtime ('innings') in a friendly game, everyone should have a chance for a full, complete life. A life that ends prematurely has not had enough time for carrying out these plans and for enjoying the pleasures distinctive of all ages. This is why it is a tragedy to die young. As Harris puts it:

> The fair innings argument requires that everyone be given an equal chance to have a fair innings, to reach the appropriate threshold but, having reached it, they have received their entitlement. The rest of their life is the sort of bonus which may be canceled when this is necessary to help others reach the threshold.[10]

On this argument, everyone should have a chance to reach their fair innings. But once they have, the strength of their claims for social resources sharply diminishes. Their health needs should be given low priority compared to the health needs of younger people. While no one would suggest that society should abandon them, people over the fair innings threshold might be held ineligible for expensive life-saving treatment. They should only be provided with palliative care. The rest of their lives is 'bonus time' without any obligation on the rest of us to maintain or extend.

An obvious question about this argument is why we should accept that there is a threshold of fair innings. If we believe that fairness requires that people are given an equal chance to complete their life plans, why shouldn't

[9] A weaker response is also possible. You could argue that the life-saving drug should be used for extending the lives of older people only if there are many more who can be helped this way. For instance, if both the 20-year old and the 70-year old in the example would live to 80, it takes more than seven 70-year old people whom you can save for 10 years to tip the balance against saving the one 20-year old. I will return to this response in section 4.

[10] J. Harris. *The Value of Life*, London: Routledge & Kegan Paul. 1985: 91. Harris argues that this consideration is relevant only if we need to choose between saving the life of a person below and saving the life of a person above the threshold. He believes that normally, we all suffer the same misfortune or injustice if our lives are cut short, because every person wants to go on living just as much as any other, and every person would lose something that is of equal value – the rest of their lives. Hence everyone should have the same chance of having their lives saved, regardless of expected benefit. But it does not seem to be true that every person has an equally strong desire to go on living, and those who would die younger would certainly lose more if they die than others. For this criticism, see J. Broome. Good, Fairness and QALYs. In: J.M. Bell, S. Mendus, editors. *Philosophy and Medical Welfare*. Cambridge: Cambridge University Press; 1988: 57–73.

we also believe that it is equally important that people are given an equal chance to complete *more* of their life plans – especially when they have no chance to fully complete them? If a person's age diminishes the strength of their claims after reaching the threshold, why don't those who have lived less have relatively stronger claims than those who have lived more, even if none of them has yet reached the threshold?

To illustrate the problem, consider the following choice. Just as before, you have to decide to whom you give the only life-saving drug:

(E) a 30-year old patient who will live for 10 more years if she gets the drug; or
(F) a 40-year old patient who will live for 10 more years if she gets the drug.

A defender of the fairness-based argument for the fair innings view holds that you should prefer C to D, but you should not prefer E to F, or F to E. A defender of utilitarian ageism holds that C, D, E and F are all equally good. But it's not implausible to believe that you should prefer E to F: doesn't the 30-year old patient have a complaint if she is not given priority compared to the 40-year old patient? After all, she has had less life than the 40-year old. Isn't that unfair?

Harris tries to defend the idea of a fair innings threshold by appealing to an analogy.[11] Suppose that two people are given the chance to run a mile, which most people can do in seven minutes. One of them is given four minutes, but the other is only given three. It is not true, he argues, that the former is given a 'fairer' running time. It is no more possible to run a mile in four minutes than it is in three minutes. The unfairness to the second person is no greater than the unfairness to the first person.

The problem with this analogy is that it provides no new argument. It just restates the original claim that the fair innings should be a threshold. After all, the runners may value not only finishing the mile but covering as much ground as they can. While neither can hope to finish the whole mile in their time, it very much matters to them how much ground they can cover. Thus, if what is valuable is to give people a fair go at making the most of their lives, the 30-year old patient will be disadvantaged. She has a stronger complaint than people who have lived more.

But perhaps there is another way to understand the analogy. Finishing the mile is not just valuable because you have run 1,609 meters. It is valuable because it is an achievement. But the value of that achievement does not come at any particular part of the distance. It comes from completing the whole distance. Thus, it is no more of an achievement to have reached 1,600 meters than it is to have reached 1,599 meters.

Similarly, much that is valuable in life does not accumulate like steps taken toward the mile. The full value that bringing up children, or writing a book, or undertaking some important project brings to a life only appears at their completion. If these plans and projects cannot be completed, you lose more than the value they would bring in the time until their completion. You lose the value of the whole, completed project. That value cannot be 'decomposed' and distributed between different phases of the project. This is why a *complete* life is valuable. Death at the end of a complete life is regrettable, but not a tragedy. Death before a life can be complete is a tragedy.[12]

But this defence of the fair innings threshold leads to another difficulty. Consider another variation of the sort of cases I have been using. Suppose the fair innings threshold is 70, and this time you have to choose between saving

(G) a 30-year old patient who will live for 10 more years if she gets the drug; or
(H) a 60-year old patient who will live for 10 more years if she gets the drug.

The defender of the fairness-based argument, on the current interpretation, advances the idea that the full value of having a complete life cannot come before the threshold is reached. But in this example, the 60-year old patient can turn the argument on its head. She can argue that even though neither she nor the 30-year old patient has reached the threshold, her treatment should be given priority. After all, being 60, only she can reach the threshold – she's the only one who has a chance at a complete life with all its value. The 30-year old patient has no chance for a complete life at all. If death before the fair innings threshold is a tragedy, then the 60-year old patient should get the drug, since that way there will be only half as many tragedies. That is, on the fairness-based argument, H should be preferred to G.

What the example highlights is that defenders of the fairness-based argument face a dilemma. On the one hand, this argument implies that H should be preferred to G. But many people would find this implication counter-intuitive. Defenders of the fairness-based argument are likely to want to reject it. On the other hand, if the argument is rejected, the fairness-based argument still implies that you should not prefer G to H, and you should not prefer H to G. But this seems counter-intuitive too. Many people would argue that G should be preferred to H.

[11] Ibid: 92–93. It is not entirely clear to me whether Harris accepts the analogy. His discussion is ambiguous. Ultimately, he seems to accept the fairness-based argument for fair innings. So I am going to attribute this defense to him, admittedly at some risk of misrepresenting his view.

[12] This interpretation of the analogy is inspired by D.J. Velleman. Well-Being and Time. *Pac Philos Q* 1991; 72: 48–77.

3. THE PRUDENTIAL LIFESPAN ACCOUNT

There is another, more complex argument for the view that it is not impermissible to give lower priority to the healthcare needs of the elderly. It does not directly appeal to fairness, but to the idea of rational and prudential choice. It is a kind of *contractarian* argument. It has been proposed in several works over the years by Norman Daniels.[13]

Daniels argues that the *intergenerational* problem of allocating resources between the young and old can be reduced to an *intrapersonal* allocation problem to be solved by rational and prudent decision-makers behind a veil of ignorance. Just as in Rawls' version of contractarianism, *interpersonal* conflicts of interests can be resolved by using a thought experiment that posits a choice problem that involves only self-interest.[14]

There are two considerations that support taking a contractarian approach. The first begins from the distinction between age groups and birth cohorts. A birth cohort is a group of people who were born at a particular time – for instance, between 1944 and 1949, or in 1954, or 1994. An age group is a group of people who are at a particular age at a particular time. Each age group is comprised by a birth cohort at a particular time. Currently, the birth cohort of 1944–1949 occupies the 65 to 70-year old age group. People born in 1994 occupy the 20-year old age group.

One difference between age groups and birth cohorts is that age groups do not age, but birth cohorts do; as time passes, members of a birth cohort move through different age groups. We all belong to one birth cohort only, but successively we belong to many age groups. Daniels argues that because of this feature, discrimination by age groups is unlike discrimination by race or sex (or, for that matter, discrimination by birth cohort). Normally, a person's racial or sexual membership does not change. But since we all age, discrimination by age is not open to the same objections as other forms of discrimination. We might be compensated for the disadvantages suffered when we belong to one age group by advantages that we enjoy when we belong to another. Age discrimination, therefore, isn't necessarily unfair.

The second consideration derives from self-interest. Since we all move across age groups, the interpersonal problem of distributing resources between different age groups is formally identical to the intrapersonal problem of prudential resource allocation between different periods within one life. Thus, it can be modelled as a choice behind the veil of ignorance. We have to imagine that the decision-makers behind the veil do not know their own age and work with the assumption that they will live through all ages from childhood to old age. The sort of trade-offs between stages of life that they would accept behind the veil are not unfair when applied to different age groups, since the veil ensures impartiality and absence of bias.

Consequently, age discrimination might be fair under certain conditions. On the one hand, its advantages and disadvantages can be arranged in such a way that there are no unequal burdens on different people from the perspective of their whole lives. It's obviously impossible to arrange the burdens of discrimination by race or sex this way. On the other hand, resource allocation trade-offs between different age-groups can be in each person's self-interest. This is obviously not true of other forms of discrimination.

Nevertheless, these considerations are not without problems. Imagine a very unequal society in which half of the people are very well off and the other half is very badly off. But suppose also that the well off and the badly off change places every few years. The disadvantages that each person suffers when she is badly off are compensated by the advantages she enjoys when she is well off. Thus, the advantages and disadvantages are distributed such that no unequal burdens are put on different people. Suppose also that under the circumstances the arrangement is also in everyone's self-interest. Therefore both of the considerations above are satisfied. Regardless of this, many people would agree that a society marked by this peculiar pattern of inequalities is unfair, even if it is equal in terms of whole lives.[15]

But a further feature of Daniels' view might be able to deal with this problem. Daniels argues that the reason we should care about the fair allocation of healthcare resources is primarily not the impact of health on well-being, but its impact on opportunities. Justice requires fair equality of opportunity, which in turn requires that people be provided with their fair share of opportunities. Protecting people's health is important for protecting their range of opportunities and providing them with their fair share.[16]

At different stages of life, however, people's ranges of opportunities differ. In particular, a lot of opportunities of the elderly are in the past. Their range of opportunities is smaller. But it is still important to protect people's

[13] Most recently, in N. Daniels. Justice between Adjacent Generations: Further Thoughts. *J Polit Philos* 2008; 16: 475–494. See also N. Daniels. *Am I My Parents' Keeper? An Essay on Justice between the Young and the Old*. New York: Oxford University Press; 1988.

[14] See J. Rawls. *A Theory of Justice*. Cambridge (MA): Harvard University Press; 1971.

[15] For the example, see D. McKerlie. Equality and Time. *Ethics* 1989; 99: 475–491; D. McKerlie. Justice between the Young and the Old. *Philos Public Aff* 2002; 30: 152–177; D. McKerlie. *Justice between the Young and the Old*. New York: Oxford University Press; 2013.

[16] For his most recent statement of the view, see N. Daniels. *Just Health: Meeting Health Needs Fairly*, Cambridge: Cambridge University Press; 2008.

age-relative opportunities, and that involves protecting the age-relative opportunities of the elderly as well. Society can satisfy fair equality of opportunity by setting up institutions that allocate healthcare resources with this aim. But it does not follow that all healthcare needs need to have the same importance. That depends on their role in protecting opportunities.

The sort of unequal society that we've just imagined is unlikely to satisfy the aim of fair equality of opportunity. Lack of opportunity at one time cannot easily be compensated by more opportunities at another time. Opportunities are not the sort of thing that can be traded off this way. Since opportunities are age-relative, it is unlikely that a society where the advantaged and the disadvantaged change places every few years could maintain equality of opportunity over a lifetime – or even equality of well-being over a lifetime. So it seems to me that Daniels can meet this challenge.

On Daniels' contractarian argument, we are asked to imagine rational and prudent decision-makers behind the veil of ignorance who allocate healthcare resources over their whole lives. Prudence is a principle of the maximization of the satisfaction of self-interest in a temporally neutral way: a prudent person aims to maximize her own welfare without giving different weights to benefits that she enjoys at different times. An imprudent person might give less weight to harms and benefits that come further in the future just because they are further in the future. But a prudent person's intrapersonal trade-offs are not going to be distorted by the temporal location of harms and benefits.

Because of the veil of ignorance, decision-makers do not know their own age. They also assume that they will live through all parts of life from childhood to old age. They do not take premature mortality into account. They then choose an allocation for their share of health care resources between different parts of their lives. On this account, rationing these resources by age might be permissible under certain circumstances, since even when the age-relativity of opportunities is taken into account, the available resources might not be sufficient to protect opportunities at all ages. Prudent decision-makers will want to make sure that their opportunities are protected throughout most of their lives, but not necessarily at very old age. They would prefer not jeopardizing their opportunities in youth and middle age.

Therefore, the prudential lifespan account implies priority for younger people. In the choice between A and B, it would recommend A; in the choices between C and D, E and F, and G and H, it is likely to recommend C, E, and G, respectively. Thus, it differs from utilitarian ageism, which recommends indifference between C and D, E and F, and G and H; and it also differs from the fairness-based argument that would recommend indifference between E and F and (perhaps) G and H. Arguably, the prudential lifespan account corresponds to most people's moral intuitions about these cases.

But things might be more complicated than this. As always with contractarian arguments, one worry is whether the 'solution' – the choice of allocation by prudent and rational decision-makers – is built into the assumptions of the choice situation. If they are, the contractarian argument does no independent work. It presupposes what it is supposed to establish. Ultimately it provides no independent argument.

Consider, for instance, an assumption that Daniels makes at some places.[17] The decision-makers are assumed to have to allocate a fixed amount of resources for their own healthcare needs throughout their lives. But why should they think that they have to work with a fixed amount? Even if they are each entitled to a fair or equal share of healthcare resources, they are aware of premature mortality. As their birth cohort ages, more and more of its members die. Birth cohorts get smaller with time. Some of those who die prematurely will not have used up all of the resources in their fair share. Thus, there might be more available for the surviving members of the particular birth cohort. If decision-makers knew the rates of premature mortality, they could even calculate their expected share of remaining resources. Hence they might find it rational to shift more of their resources to earlier ages, gambling on the windfall they receive if they survive to very old age.

Daniels could reply that the decision-makers should not count on the remaining resources this way, since they would be redistributed to later birth cohorts. But this is not a satisfactory reply. First, it is unclear why decision-makers behind the veil of ignorance would agree to this. If each person starts out with an equal share of resources, then each birth cohort will overall have equal resources (assume, for the moment, that each cohort is equal in size). It would not be rational for earlier cohorts to give up resources for later cohorts. If it would not be rational, then, on this sort of argument, it would not be fair either. Second, the reply would concede that there is no fixed amount that decision-makers have to allocate, since if there is such redistribution, they would be able to count on the remaining resources of earlier cohorts. It amounts to dropping the assumption that Daniels began with.

Perhaps the idea is that resources are so scarce that even with premature mortality there wouldn't be any left over to redistribute to other members of society. But this would amount to assuming that it is impossible to protect health and opportunity throughout a normal life. People would run out of resources long before their life ends. Under such extreme conditions of scarcity, it's unclear

[17] See N. Daniels. *Just Health Care*, Cambridge: Cambridge University Press, 1985: 83 and Daniels 1988, *op. cit.* note 13, p. 53.

whether there is any scope for fairly distributing health care resources.

Daniels also makes another assumption. His decision-makers have to assume that they will live through all parts of life from childhood to old age. They are aware of premature mortality, but they are not allowed to take it into account. This is a very strange assumption. Behind the veil of ignorance, you do not know your age, but it's unclear whether you know your genetic predispositions or socioeconomic status – factors that correlate with premature mortality. If you knew these factors, it would be irrational to assume that you live through all parts of life. If you knew that you would live in poor socioeconomic conditions once the veil is lifted, you should not discount the possibility of early death.[18] If you did not know your own socioeconomic position, but you knew mortality rates at different ages, you should take that into account as well. Only if the veil was so thick that you did not know any of these factors can you assume that you live through all parts of life.[19]

Daniels simply assumes away the problem.[20] He argues that abstracting from the problem of premature mortality is a simplification. My point is that the assumption fundamentally changes the contractarian argument. In its absence, it is unclear what allocation prudent decision-makers would choose. Recall that in Rawls' original position, uncertainty plays a central part: people do not know the probability of ending up in the least advantaged position. This gives them a powerful rationale to choose principles that favour the least advantaged. Daniels, in contrast, simply assumes away the uncertainty.

Let us go on. What justifies age discrimination in Daniels' contractarian argument is that 'differential treatment by age may make each life go better if it prudently takes differences in needs at different ages into account.'[21] Age-relative opportunity ranges can be best protected if healthcare spending is not equalized throughout different parts of life. Such differentiated use of resources is in each person's interests – at least when viewed from behind the veil of ignorance. For differential treatment by age will most assuredly *not* make each person's life go as well as possible once the veil is lifted. There will be conflicts of interests between those who can look forward to a long life and those who are predisposed to have shorter lives (perhaps for genetic or socioeconomic reasons). Interpersonal conflicts over resources are not removed by contractarian arguments. Rather, their resolution is justified by them.

In other words, it isn't clear what Daniels takes to justify his solution to the intergenerational allocation problem. On the one hand, is it that the allocation agreed to behind the veil of ignorance *in fact* makes each person's life go as well as possible? If that's the idea, then we don't really need the contractarian argument. We could appeal directly to the benefits of the allocation. On the other hand, the idea might be that the allocation chosen behind the veil can be *expected* to make each person's life go as well as possible. If that's the idea, then a lot of work will be done by the concept of *prudence* – the principle that guides the choice behind the veil. The fair innings view will be justified by appealing to what each of us would prudentially choose in a hypothetical situation of ignorance to advance our own interests.

In his most recent defence of the prudential lifespan account, Daniels modified his view on prudence.[22] He now argues that we have to reject a simple 'maximizing' view of the satisfaction of self-interest. The decision-makers do not try to allocate resources throughout their lives in order to maximize some measure – like life expectancy or health-adjusted life years (HALYs). That would invite the objection that they might disproportionately discount their healthcare needs in old age for the sake of many smaller health benefits earlier. (Notice that this is an intrapersonal variant of the aggregation problem.) A maximizing view of prudence would allow such trade-offs. But in Daniels' view, this would not make people's lives as good as possible, and hence would not be prudent.

Notice how far we have come from standard contractarian arguments. First, Daniels assumed away the uncertainty that is a central feature of the choice behind the veil of ignorance. Now he rejects the idea that decision-makers aim to maximize the satisfaction of their own self-interest. Is there anything left?

It seems that Daniels wants to reject the maximizing view of prudence in favour of a *deliberative conception*. On this deliberative view of prudence:

> Judgments about what is prudent become contested in the way that interpersonal judgments about fairness are. If we invoke accountability for reasonableness to resolve disagreements about what counts as prudent in general or about what health care allocation makes a life as well as possible, then [. . .] even if some of the

[18] Daniels has pointed out to me in personal communication that when we come to the prudential allocation of health care resources over a lifespan, we should assume that interpersonal distribution has been already addressed. In other words, we should assume perfect background justice. But I fail to see how that assumption would solve the problem. Even given perfect background justice, there will be differences in socioeconomic conditions (due to, for instance, differential effort), as well as mere bad luck. Premature mortality would not be eliminated. There are mortality risks even in a perfectly just society.

[19] Even then, there are things you must know. You must know that people do not live to 1,000 years. So you must know at least roughly the average life expectancy in your society to make sense of the idea of living through all parts of life. In any case, Daniels suggests that the decision-makers know the mortality rates at different ages in their society. See Daniels 2008, *op. cit.* note 13, p. 484, note 23.

[20] Ibid: 475, note 2.

[21] Ibid: 478.

[22] Ibid.

simplicity of the proposal is reduced, we can in this way reach some agreement on what allocations of health care resources make lives go as well as possible. If we then apply such schemes to all persons over their lifespan, then we are not treating age groups unfairly.[23]

Accountability for reasonableness is Daniels' proposal for a fair, deliberative process for making health care resource allocation choices.[24] It is a purely procedural method for arriving at legitimate allocation choices. Very roughly, an allocation is legitimate on this account if it is made in a public process, relies on relevant reasons, open to challenge and revision, and it is ensured that these conditions are met throughout the deliberative process. If these conditions are fulfilled, policy makers are accountable for the reasonableness of their decisions.

The introduction of the deliberative view of prudence, however, comes at a very high price.[25] In particular, it makes the prudential lifespan account dispensable. If it is the outcome of a process that determines how resources between different age groups should be allocated and what sort of trade-offs can be made, then there is no need for the contractarian argument at all. There is no work left for it to do.

Consequently, Daniels has now retreated to the point from which we started. We know from empirical research that many people agree that it is not impermissible to give lower priority to the health care needs of the elderly. Our original question was whether a contractarian argument can justify this judgment. The answer seems to be that it depends on the outcome of a deliberative process. People's judgments are mere inputs. We have no independent grounds to decide whether they should have any moral weight.

4. ANOTHER CONSEQUENTIALIST ARGUMENT

The contractarian argument undermines itself. The fairness-based argument has counter-intuitive implications and it is unable to defend the idea of a fair innings threshold. The utilitarian argument is sensitive only to life expectancy instead of age. If you are attracted to the fair innings view, none of these arguments provide a justification.

The sort of argument we are looking for would both take age into account as a relevant consideration and would provide the 'intuitive' answers in the choices between A and B, C and D, E and F, and G and H. In particular, it would recommend A over B, C over D, E over F, and G over H.

My proposal is a different kind of consequentialist argument. The version we have looked at is utilitarian ageism. The fundamental problem with this argument is that it gives the same value to additional life years, regardless of the age at which those years would be added. It assumes that additional life years have the same value no matter when they are added.

This assumption can be dropped. We can attribute different value to additional life years. We can assign different weights to them. This is still a consequentialist and maximizing view, except that what we maximize in allocating resources for life extension is not the sum of life years. It is the *weighted sum* of life years.

The idea of assigning different weights to additional benefits has been developed, and by now is fairly well known, as the *prioritarian view*. Prioritarians hold that benefiting a person matters more the worse off that person is. A benefit to a worse off person is morally more important than the same benefit to a better off person, and the worse off the person is, the more important the benefit. That is, benefits have different moral weight. More precisely, benefits are weighted according to an increasing, strictly concave function. The values of such a function increase at a decreasing rate. A greater benefit is more valuable but its value gets smaller as the beneficiary gets better off.[26]

The idea is to apply moral weights to additional life years to provide an argument for the fair innings view. It is an application of prioritarianism to life years to defend the fair innings view.

The argument is best explained through a figure (see Figure 1). For convenience, I selected the choice between C and D to illustrate the argument. In this choice, you have to decide whether you save (C) a 20-year old patient who would live for 10 more years if she gets your life-saving drug, or (D) a 70-year old patient who would also live for 10 more years if she gets the drug. The horizontal axes of the two graphs represent life years. The vertical axes represent the value of these life years.

The left-hand side graph represents utilitarian ageism. On this view, each additional life year has the same value regardless of the age when it is added to a life. There is no

[23] Ibid: 488.

[24] See N. Daniels & J.E. Sabin. *Setting Limits Fairly: Learning to Share Resources for Health*. 2nd ed. New York: Oxford University Press; 2008.

[25] For one thing, it's unclear why we should rely on a fair process to determine what would make people's lives go as well as possible. That seems a factual question whose answer should not depend on people's agreement.

[26] For a seminal formulation of prioritarianism in philosophy, see D. Parfit. Equality or Priority?, reprinted In: J. Harris, editor. *Bioethics*. Oxford: Oxford University Press; 2001. pp. 347–386. In economics, the view has a much longer history; see, for instance, A. Sen. *On Economic Inequality*. Oxford: Clarendon Press; 1973. In health economics, the view was introduced by A. Wagstaff. QALYs and the Equity-Efficiency Trade-Off. *J Health Econ* 1991; 10: 21–41, but he applied it to quality-adjusted life years (QALYs), rather than life years. Since QALYs are calculated on the basis of expected life years, Wagstaff's proposal does not directly consider age. It is different from the view discussed here.

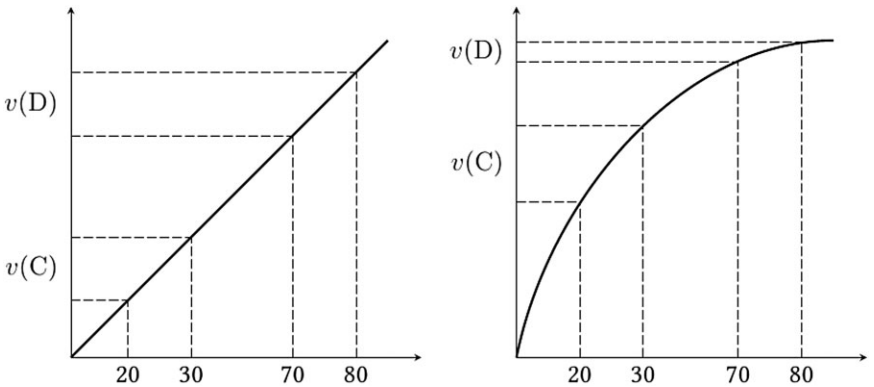

Figure 1. Utilitarian and prioritarian ageism.

weighting of life years. Thus, in the choice between C and D, utilitarian ageism would recommend indifference: C and D are equally good. That is, $v(C) = v(D)$. The extra ten years have the same value when they are added to the life of the 20-year old and when they are added to the life of the 70-year old.

The right-hand side graph represents the application of the prioritarian view to life years. According to this proposal, we should assign different weights to additional life years, but their value should be diminishing as they are added to the lives of older persons. In the choice between C and D, we should prefer C, because, as it can be seen on the vertical axis, adding ten extra years to the life of the 20-year old is more valuable than adding ten extra years to the life of the 70-year old. That is, $v(C) > v(D)$.

It is easy to see that on this argument, A is also better than B, E is better than F, and G is better than H. Arguably, this view reflects the moral intuitions of those who accept the fair innings view.

On this consequentialist argument for the fair innings view, life expectancy – the numbers of life years that can be added – also matters. In particular, if there is a sufficiently large number of additional years for which an older person can be saved, these might be more valuable than the smaller number of life years which could be added to the life of a younger person. I believe this is an advantage of the view: it allows trade-offs to be made between benefits to different people. Most people would agree that it matters how much benefit healthcare resources can provide. In the present context, it matters how many additional life years health care resource allocation results in.

Another advantage of this argument is that it deals adequately with the aggregation problem. Recall that defenders of the fairness-based argument reject utilitarian ageism because it allows small benefits to people who have reached their fair innings to outweigh greater benefits to people who have not, provided that there are sufficiently many of the former. For instance, minor life extensions to many older people might outweigh extending the life of a young person by a substantial time. On the current view, this is still possible, but much less likely: because of the diminishing value of additional years to older people, it takes *many more* minor life extensions for them to outweigh the value of extending the life of a young person by many years. As I mentioned in note 9, this is a weaker response to the aggregation problem than the claim that *no* number of small benefits to many can outweigh large benefits to a few. This response is much more plausible.

It is also supported by empirical data on people's judgments in healthcare resource allocation problems. In these surveys, respondents typically do not give absolute priority to saving the life of a younger person. In the trade-off questions they are asked, there is a number of older people whose lives can be saved that is judged equally valuable as saving the life of a younger person. For instance, in an Australian survey, respondents considered saving four 20-year old patients as important as saving ten 60-year old patients. A study in the United States found that saving one 20-year old patient is roughly equivalent to saving seven 60-year old patients. And in Sweden, saving one 30-year old patient was considered to be equally valuable as saving thirty-four 70-year old patients. These sorts of results obtained both when the benefits (life years) were held constant for the young and the old and also when no such assumption was made. Respondents do not judge that benefits to older patients do not matter at all.[27]

To be sure, this is not the only proposal to apply prioritarianism to resolve the issue of just resource allocation between the young and old. Dennis McKerlie, for instance, proposes a *time-specific priority view*.[28] He argues that it matters how well off people are at particular times during their lives, in addition to how well their lives go overall. People who are worse off at a particular time have a claim on the rest of us, even if their lives, considered as a whole, are no worse than the lives of others. This applies to, for instance, poverty at old age:

[27] See again the references in note 3.
[28] McKerlie 2013, *op. cit.* note 15.

the elderly should have a stronger claim on social resources if they are currently worse off, even if they have been well off throughout their youth and middle age.

It is clear that the time-specific priority view cannot be used as a justification for the fair innings view. Since it only takes into account how badly off people are at particular times, it is insensitive to age. In practice, since poverty and illness are more prevalent among the elderly, the time-specific priority view implies increasing, rather than decreasing intergenerational transfers to the elderly. If you are attracted to the fair innings view, you should reject McKerlie's proposal. His view does not address the specific moral concern about age that many people seem to share.[29]

[29] McKerlie believes that prioritarianism can also be applied to whole lives. That sort of view is closer to the view proposed here, except that it is not applied to life years but to overall well-being. Hence the time-specific priority view turns out to be irrelevant for the sort of choices that I have discussed. In fact, strictly speaking it isn't a view about intergenerational justice. A similar problem arises for the ' fair innings' view proposed by A. Williams. Intergenerational Equity: An Exploration of the 'Fair Innings' Argument. *Health Econ* 1997; 6: 117–132. He suggests a prioritarian weighting to reduce inequalities in life expectancy between different social classes. Williams is concerned with the fact that people in worse socioeconomic conditions tend to have smaller life expectancies. The weights would be assigned according to social class, rather than age. So this view is not concerned with age either; it is concerned with social inequality. Age is merely a convenient proxy for inequalities in health.

5. CONCLUSION

This article has addressed the increasingly pressing practical problem of allocating resources between different age groups. According to a popular view, it is not impermissible to give lower priority to the needs of the elderly. In the context of healthcare resource allocation, this is known as the fair innings view. It appears to be supported by common-sense morality.

I have argued that it needs a philosophical defence. I have considered examples of different arguments: utilitarian ageism (one kind of consequentialist argument), a fairness-based argument, and a contractarian argument. I argued that none of these succeed. I ended by sketching a different kind of consequentialist argument – an application of prioritarianism to valuing additional years at different ages. I suggested that those who are attracted to the fair innings view might be able to best defend it by using this argument.

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