Discounting Utility Without Complaints: Avoiding the Demandingness of Classical Utilitarianism

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Abstract: Classical utilitarianism is very demanding and entails some counter-intuitive implications in moral dilemmas such as the trolley problem in deontological ethics and the repugnant conclusion in population ethics. This article presents how one specific modification of utilitarianism can avoid these counter-intuitive implications. In this modified utilitarian theory, called 'discounted' or 'mild' utilitarianism, people have a right to discount the utilities of others, under the condition that people whose utility is discounted cannot validly complain against such discounting. A complaint made by a utility discounted person is not valid if either the existence of the discounting people in that option is in a specific sense necessary or the existence of the discounted person is in a sense not necessary. According to mild utilitarianism, we should choose the option that maximizes the total validly discounted or complaint-free discounted utility, i e. the sum of everyone's utility minus the complaint-free discounts. As there are two conditions that make a complaint invalid, this right to discount can be translated into two versions: the right to bodily autonomy and the right to procreation autonomy. The former right relates to the mere means principle in deontological ethics, the latter right is useful in avoiding the repugnant conclusion problem in population ethics. The possibility of democratically imposing an upper bound on the permissible amount of discounting is discussed.

Keywords: Utilitarianism, Rights, Population Ethics, Repugnant Conclusion, Trolley Problem

1. Introduction

Classical or total utilitarianism says we should choose the option that maximizes the sum of (expected) utilities [3]. The options are eligible world histories, the sum runs over all possible individuals (i e. individuals who exist in at least one eligible world history) and the (expected) utility of an individual in a world history is a real-valued number that measures the (expected) personal value of the life of that individual in that world history. The utility can be a concave function of welfare or lifetime well-being, in which case we have a prioritarian or generalized utilitarian theory [3]: we have to improve everyone's lifetime well-being, giving priority to the worst-off people who have the lowest levels of lifetime well-being [5, 19]. If the option involves uncertain outcomes (different world histories having certain probabilities), the utility can be represented as an expected value over the possible outcomes.

Total utilitarianism is rather totalitarian because of its demandingness [7, 10, 11]. The theory entails huge sacrifices: without further qualifications, we have to give away our money and resources to the poorest people until we become as miserable as the poorest person and live lives at the subsistence level, we have to donate our kidneys and other organs for transplantation until an organ shortage in the hospitals is eliminated, we have to donate blood until we become anemic, we have to have more children than we would like until an extra child gets a zero or negative welfare, we have to prioritize helping the poorest children instead of our own children, we have to sacrifice everything in order to cause the existence of huge numbers of extra people in the far future even when those extra people will have lives barely worth living, we have to help all present and future animals and other sentient beings as much as we would help our closest friends and family members, we have to perform medical experiments on our bodies to find cures for other people, we have to save and invest almost all of our income for the benefit of future generations, we have to spend most of our time figuring out how to improve total welfare, and so forth. For many of these

examples, utilitarians may succeed in arguing that they do not have those duties, but it is unlikely that they can argue themselves out of all those duties. For many non-utilitarians, it is clear that no-one lives exactly according to the many demands of total utilitarianism.

The demandingness of total utilitarianism, and its many counter-intuitive implications, can be reduced to two paradigm cases related to deontological ethics and population ethics. A paradigm case for deontological ethics is the famous thought experiment of the footbridge trolley problem [25]. A runaway trolley is about to hit five innocent people trapped on the tracks, and the only way to save the lives of those five people is by pushing an innocent bystander from a footbridge. The bystander will fall on the tracks and is heavy enough to block the trolley, but by doing so, the bystander will die.

The trolley thought experiment involves two eligible options. In the option Push, the five people are saved and each of them gets a lifetime well-being or utility of say 100 units, corresponding to a full life. The bystander, on the other hand, is killed, and this premature death gives that person a utility of 50. The option No Push entails the five people being killed, each getting utility 50, and the bystander surviving and getting utility 100. As the sum of utilities is higher in Push, total utilitarianism entails one should push the bystander. That is counter-intuitive according to most people [8]. A more realistic example is the forced organ transplantation dilemma, where there is an organ shortage and the lives of five patients in the hospital can only be saved by sacrificing an innocent person and transplanting five of that person's organs. Total utilitarianism in fact says that the bystander on the footbridge and the innocent person in the hospital should sacrifice themselves, making this theory very demanding.

The paradigm case for population ethics is the repugnant conclusion [18], or the more extreme version of the very repugnant conclusion [2]. There are again two options. In the first situation, everyone of the existing people is maximally happy. In the second situation, that same group of people exist, but all of them become extremely miserable. Next to these people, a huge number of extra people are brought into existence, each having a life barely worth living (i e. a positive but very small utility). If the number of lives barely worth living is large enough, the total sum of utilities in the second option will be larger than in the first. Hence, total utilitarianism prefers the second option, but this seems counter-intuitive to many people.

This article argues how the above two counter-intuitive implications of utilitarianism can be avoided by introducing a discount right: a right to discount the utilities of others as long as those people whose utility is discounted cannot validly complain against their utility being discounted. If people invoke this discount right, we get an extended utilitarian theory that includes not only the utilities but also the discounts in the sum. This new utilitarian theory, called 'discounted' or 'mild' utilitarianism, avoids the many demandingness problems faced by classical utilitarianism.[1]

2. The Right to Discount Utility Without Complaints

Why is total utilitarianism so demanding? Because we have to take into consideration the utilities of everyone else. If the utilities of other people matter, we may have to sacrifice ourselves to increase the utilities of others. If only we could discount the utilities of others, we could avoid the sacrificial demandingness problems of total utilitarianism.

Suppose everyone has a right to discount the utilities of other people. Discounting the utility of a person in a situation means deducting an amount from the utility value that person has in that situation. It does not mean actually reducing that person's utility: it only means a mathematical operation of subtracting an amount from a utility value. The amount can also be larger than the person's utility, i e. the discount rate may be higher than 100%. Someone with a positive utility of say +10 can get a negative discounted utility of -10 when the discount is 20. In this case, the discount rate is 200%.

Instead of maximizing the sum of utilities of all individuals, as in classical total utilitarianism, one could maximize the sum of utilities minus discounts. This sum is the total discounted utility. Of course, the option with the highest total discounted utility may not be the one that is preferred by the people whose utilities are being discounted. So in general those people could complain against their utilities being discounted. The crucial idea is that there are two cases in which we can declare the complaints to be invalid. To understand why there are two such cases, we have to consider a basic property of a right: its two-sidedness.

A right is always a relationship between two parties: the right-holders, or more accurately right-invokers[2], who invoke or claim the right, and the duty-holders who have the duty to respect the invoked right of the right-invokers. When it comes to the right to discount utility, the right-invokers are the discounting people, the people who discount the utility of others. The duty-holders are those others, the discounted people, i e. the people whose utilities are being discounted by the discounting people.

As there are two parties, the discounting people and the discounted people, there are two conditions for which a complaint is invalid:

1) if the option in which a person's utility is being discounted is impossible or unfeasible (or if the outcomes of that option for the non-discounting people would change) if the people who do the discounting did not exist, and

2) if the option with the highest total discounted utility (the sum of utilities minus discounts) is one in which the

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2 Note that a right-invoker has to be right-holder, because one cannot invoke a right that one does not have. A duty-holder can be, but is not necessarily, a right-holder.

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1 Other modified versions of utilitarianism that attempt to avoid the

person whose utility is discounted does not exist.

The first condition relates to deontological ethics and the right to bodily autonomy, the second relates to population ethics and the right to procreation autonomy. The next two sections discuss these two conditions in more detail. For the moment it suffices to note what both conditions have in common: they both refer to the non-existence of one of the two parties involved. For both parties we can ask the question: is the existence of those people necessary? What if that group of people was absent or did not exist? If a discount is applied in an option in which the existence of the discounting people is in a sense necessary (the option cannot be chosen if the discounting people did not exist) or the existence of the discounted people is in a sense not necessary (the option that should be chosen is one where the discounted people do not exist), a complaint against that discount becomes invalid.

For clarity, a right-invoker may discount the utilities of more than one person, and may choose different discount values in different options. The right-invoker does not necessarily have to be the agent who chooses an action. In the trolley problem, the bystander is the right-invoker, whereas the agent is the one who chooses whether to push the bystander. The agent has to choose the option with the highest total discounted utility, where the discount is chosen by the right-invoker. Also, there may be more than one right-invoker. If there are many right-invokers, the chosen discounts of all the right-invokers have to be added. The right-invokers have to be considered as a group, which means we have to ask the question whether the existence of this group is necessary. For example, it may happen that there are two bystanders on the footbridge, each of them can be pushed to stop the trolley. Hence, the existence of one bystander is not necessary to save the five people, as the other bystander can always be pushed. In this case, the two bystanders can choose to be considered as a group of right-invokers. As a group, they can discount the utilities of the people on the track. The existence of this group of bystanders is necessary to save the five people.

Now we can formulate the basic principle of the new theory of complaint-free discounted utilitarianism: choose the option that has the highest sum of everyone's utility minus complaint-free discounts, i e. the highest total complaint-free discounted utility. Only utility discounts that do not generate valid complaints are allowed. As will be shown in the next sections, this new theory avoids the demandingness problems of total utilitarianism.

Note that in order to avoid the demandingness and the counter-intuitive implications of total utilitarianism, this new theory is based on four crucial assumptions. First, only utility discounts are allowed. People do not have a right to augment the utilities of others. One can only subtract but not add an amount to the utility value of someone else. Second, a person can only discount the utilities of others, not one's own utility. Third, only complaints are considered. Compliments do not count. A right can give an advantage to the right-invoker or a disadvantage to the duty-holder. When receiving an advantage, the right-invoker can compliment or thank the duty-holder. When receiving a disadvantage, the duty-holder can complain

against or condemn the right-invoker. When it comes to the right to discount utility, the absence of complaints becomes more important than the presence of compliments. Hence, the theory only considers complaints. Fourth, only people whose utilities are discounted can complain against their discounting. The complaints of third parties (non-discounted people) are always considered invalid.

These assumptions contain some arbitrariness. Why should avoiding complaints be more important than seeking compliments? Why should one only have the right to discount someone else's utility and not one's own? Why should one only have the right to subtract but not to add an amount to the utility of someone else? Why should only those people whose utilities are discounted be allowed to complain, and not other people whose utilities can be affected by the discounting? The reasons for these assumptions, are that they allow us to avoid counter-intuitive implications (for example the repugnant conclusion) and to avoid indeterminateness (for example the problem of canceling discounts). These assumptions are arguably the most important subjective elements underlying our new moral theory of complaint-free discounted utilitarianism.

3. Deontological Ethics and the Right to Bodily Autonomy

In the Push option of the footbridge trolley problem, the bystander invokes the right to discount the utilities of the five people on the track. As a result, the total discounted utility in option Push becomes lower than the total utility in option No Push. If the discount does not generate valid complaints, the theory of discounted utilitarianism says we should choose option No Push. The bystander may not be pushed, and the five people die.

The crucial question is: can those five people complain? No, because if the bystander, who is the right-invoker, was absent or did not exist, the five people would not be made better off. The existence of the bystander is necessary in the option Push. Without the bystander, one could not push that bystander. In particular the body of the bystander is required in order to block the trolley and save the five people.

The same goes for innocent people who are sacrificed for their organs in the forced organ transplantation case. If there is no-one to be sacrificed, there are no organs, and the patients in the hospital cannot be made better off. If the presence of the body of the victim is required, we can say that the victim is used as a means for the ends of others. If the victim does not want to be treated that way, the victim is used as merely a means when sacrificed.

When the existence of the bystander (s) is not necessary, the discounted people can validly complain. An example of this situation is the switch trolley problem, the other famous trolley dilemma discussed by [25]. In the switch case, a runaway trolley is about to kill five people on the main track, but you can turn a switch that sends the trolley to a side track where it will kill one person. The utilitarian prefers option

Turn, i e. turning the switch, as one person killed is better than five people killed. Suppose the person on the side track invokes her right to discount the utilities of the five people on the main track in the option Turn. If this discounting results in choosing the option No Turn, the five people will die. Those people can now validly complain against their utilities being discounted, because if the right-invoker, i e. the discounting person on the side track, did not exist, one could still choose the option that saves the five, i e. choose option Turn. The presence of the person on the side track is not necessary for you to turn the switch. As the complaints are valid, no utilities can be discounted and we end up with the total utilitarian conclusion: choose option Turn to save the maximum number of people.

It may be the case that the person on the side track is your child, and that you prefer not turning the switch. Then you can discount the utilities of the five people in option Turn. Those people cannot complain against you, because if you did not exist, you would not be present to turn the switch. Assuming no-one else can turn the switch, the option Turn becomes impossible. Your existence is necessary for the option Turn. As the complaints are invalid, you can invoke your right to discount the utilities of the five people, and hence you may choose option No Turn. You do not have the duty to sacrifice your child. You are allowed to prioritize your child's life above the lives of the five people on the main track.

In general, people have the right to discount the utility of others in some options if those options are not possible if none of the people who do the discounting existed. An option is not possible if one cannot act in a way that generates the same outcomes of that option for everyone except the group of discounting people who were assumed not to exist. If an option is only possible if the discounting people are present, the existence of those people is in a sense necessary for that option, and in that case the complaint against discounting becomes invalid.

In cases like the footbridge trolley problem, the right to complaint-free discounting someone else's utility becomes the right not to be used as merely a means for someone else's ends, or the right to bodily autonomy. People who have this right do not have a duty to use their bodies as means for someone else's ends. They do not have a duty to make other people happy by the use of their own bodies. This right corresponds with the famous deontological mere-means principle [13-15]. 'Bodily autonomy' and 'mere means' both contain two words, which means two conditions have to be met in order to say that the mere-means right of a victim is violated: 1) the presence of the victim is required (this refers to the words 'bodily' and 'means'), and 2) the victim has to do or undergo something unwanted (this refers to the words 'autonomy' and 'mere').

The condition that the victim has to be present also relates the mere-means principle to other important deontological principles, such as the difference between doing versus allowing [12], the difference between positive and negative duties [4, 24], and the permissibility of partiality in imperfect duties of beneficence. These principles can all be derived from the mere-means principle [6]. For example, doing implies the

presence or existence of the agent, whereas allowing does not require that presence. A positive duty to help someone requires the presence of the helper, whereas the negative duty not to harm someone is automatically fulfilled if the agent were absent or did not exist. The abovementioned choice for the priority of complaints above compliments in the case of the right to discount utility, breaks the symmetry between positive and negative duties and between doing and allowing harm.

The required presence of the agent in the case of a positive duty of beneficence also implies that the duty of beneficence becomes imperfect. Bystanders do not have the duty to sacrifice themselves by jumping in front of runaway trolleys in order to save people on the tracks. Therefore, the duty to block a runaway trolley, or more generally the duty to help someone at a personal cost, is imperfect or supererogatory. Such imperfect duties of beneficence permit partiality. Suppose in a burning house you can save either one person you hold dear, or five other, unknown people trapped in another room. The utilitarian would say you have the duty to save the five, because the majority gets priority. But your presence is required to save those people, and saving them is against your will, as you prefer to save the one person you hold dear. These are the two conditions of the violation of the mere-means right. Hence, if the utilitarian condemns you when you save the one person, you are considered as merely a means and your mere-means right is violated. If you may not be condemned for choosing to save the one person, you are allowed to be partial towards the one you hold dear. With this permissible partiality, the demandingness objection to utilitarianism [11] can be avoided.

With the right to discount utilities without complaints, which result in the right to bodily autonomy or the right not to be used as merely a means, we arrive at many deontological principles that satisfy moral intuitions held by many people. The idea that this right is unique in the sense that it is complaint-free, was first argued by Walen [27]. This right does not have negative externalities in the sense that it does not impose costs on others: introducing extra people who have this right does not make other people worse off. No matter how many bystanders come into existence and stand on the footbridge, if they all have the right not to be used as merely a means, the people on the track still face the same bad outcome as if the bystanders did not exist: they are still killed by the trolley. This is different from the right to be saved (the right not to be killed). If the five people on the track have the right to be saved, the bystander on the footbridge has a duty to save those five people by jumping in front of the trolley. But that person would be better off if the five people on the track were not present.

There is a caveat with Walen's theory of externalities of rights [27]. In the footbridge trolley problem, the bystander's right not to be sacrificed (or not to be used as merely a means) does not impose a negative externality on the five people on the track, as these people could not be made better-off in the absence of the bystander. However, in a later section, an extended footbridge trolley dilemma will be presented where

the right of the bystander does impose negative externalities on others, which means that Walen's theory needs to be slightly revised. The gist of his theory remains intact, however.

4. Population Ethics and the Right to Procreation Autonomy

In the footbridge trolley problem, we can ask the question whether the duty-holders would be better off if the right-invokers were not present or did not exist. If the duty-holders are not better off, they cannot validly complain against the right-invokers invoking the right to discount the utilities of the duty-holders. But there is a second way to make a complaint invalid: asking the question whether the duty-holders would be better off if the duty-holders themselves did not exist. This is where we enter population ethics.

In population ethics, a distinction can be made between necessary people, who exist in all possible world histories or all eligible options, and possible people, who do not exist in all possible world histories.

Just like the right to bodily autonomy in deontological ethics, we can introduce a right to procreation autonomy in population ethics. Procreation refers generally to a choice that causes the existence of possible people. The necessary people can invoke this right, and the possible people are the duty-holders. Invoking the right to procreation autonomy means that the necessary people have a right to discount the utilities of the possible people.

Let us apply the right to procreation autonomy to the problem of the very repugnant conclusion [2]. There are two options. In the first option No Sacrifice, a very happy person exists with a high, positive utility. In the second option Sacrifice, that person sacrifices a lot of welfare, receiving a very large negative utility, by bringing into existence a huge number of extra people who have lives barely worth living (small positive utilities). Those extra people are possible people, as there is an eligible option No Sacrifice in which those people do not exist.

If the number of extra people in option Sacrifice is large enough, the total utility in that option is higher than in option No Sacrifice. That means option Sacrifice should be chosen according to total utilitarianism. To avoid this counter-intuitive, very repugnant outcome, the one person can discount the utilities of the extra people in option Sacrifice. Now, the total utility in option No Sacrifice is higher than the total utility minus the discounts in option Sacrifice. Option No Sacrifice has the highest total discounted utility. If this option is chosen, the people with lives barely worth living do not exist and hence cannot complain against their utilities in option Sacrifice being discounted. By invoking the right to discount the utilities of the possible people if they cannot validly complain, the large sacrifice of the one person, and hence the very repugnant conclusion, can be avoided.

With the right to discount the utilities of possible people, we can avoid some demandingness issues of total utilitarianism. For example, we do not have to give birth to more children than we would like and we do not have to sacrifice everything in order to cause the existence of huge numbers of extra people in the far future even when those extra people have lives barely worth living, with a positive but very small utility.

In general, people have the right to discount the utilities of others in some options if the option with the highest total discounted utility is one in which the people with the discounted utility do not exist. If the discounted people do not exist in the chosen option with the highest total discounted utility, the existence of the discounted people is in a sense not necessary, and in that case the complaint against discounting becomes invalid.

The theory of discounted utilitarianism can be illustrated with the example of happy animal farming. Is it permissible to bring into existence farm animals that are overall happy, but are prematurely killed for their meat? The human consumer who enjoys eating meat gains welfare, and the farm animal has a positive (but perhaps small) welfare. But once the farm animal is brought into existence, it also becomes possible not to kill that animal, but to take care of that animal for example at an animal sanctuary. So we have three options: No Farming (in which the animal is not brought into existence), Farming (in which the animal is brought into existence, lives a slightly happy life on a farm but is prematurely killed and eaten by a human) and Sanctuary (in which the animal is brought into existence and lives a very happy and long life because she is taken care of by a human).

Choosing option Sanctuary, the human can no longer enjoy eating the meat of that animal, but instead has to sacrifice time and resources to help the animal at the cost of her own welfare. In the animal sanctuary option, the human may have a lower welfare than in the situation No Farming where the animal was never brought into existence.

The human prefers option Farming. If that situation has the highest sum of utilities, that situation can be chosen. But we can expect that the situation Sanctuary has the highest sum of utilities, as the animal is much better-off and the human is only slightly worse-off than in option Farming. According to total utilitarianism, the human should choose option Sanctuary. In extremis, total utilitarianism could come to the repugnant conclusion that the human should choose an option Large Sanctuary, where the human breeds many happy animals and gives up a lot of her own time and resources to take care of those animals on a large animal sanctuary. The large welfare of the many animals trumps the huge welfare loss for the human. The human has to make a huge sacrifice for the animals.

For the human, option Sanctuary (and definitely Large Sanctuary) is the least preferred, as the human has the lowest utility in that option. To avoid option Sanctuary, the human can discount the utility of the animal in option Sanctuary, such that the sum of the utilities minus the discount in option Sanctuary is lower than the sum of the utilities of the human and the animal in option Farming. However, this does not yet justify the selection of option Farming, because in that option,

the animal exists. And as the animal in option Farming has a lower welfare than in option Sanctuary, the animal in option Farming can complain against the discounting of its utility in option Sanctuary. Hence, discounting the animal's utility in option Sanctuary is not valid. But the human can still avoid the selection of option Sanctuary, by also discounting the animal's utility in option Farming. If the welfare of the animal in both options Farming and Sanctuary is sufficiently discounted, option No Farming becomes the option with the highest total discounted welfare (the highest sum of welfare minus discounts). The selection of option Sanctuary is avoided at the cost of option Farming becoming impermissible. The only permissible option is No Farming.

Neither the human nor the non-existing farm animals can complain against this choice of No Farming. Hence, according to this discounted utilitarian theory, animal farming is not permissible, not even when the farm animals would have a positive welfare (unless they would not complain against their utility in option Sanctuary being discounted, for example they woud have such a high welfare in option Farming that they would never complain against being used for their meat).

This conclusion shows that discounted utilitarianism differs from person-affecting utilitarian theories [9, 17, 20]. The person-affecting view is famous for its slogan: "We are in favor of making people happy rather than making happy people." A theory is person-affecting when one option is better than another option if and only if the first option is better than the second for at least someone, and worse than another option if and only if it is worse for at least someone. In the above example, discounted utilitarianism says that option No Farming is better than option Farming, even though there is no-one in option No Farming for whom No Farming is better. By putting option No Farming above option Farming, this conclusion violates the dominance addition condition [1], which says that adding an extra life with a positive utility (the farm animal) and increasing the happiness of the rest of the population (the human in option Farming), cannot make things worse.

This conclusion that No Farming is preferred over Farming depends on the fact that a third option Sanctuary is available and that the animal in option Farming is the same individual as the animal in option Sanctuary. Suppose that option Sanctuary was not possible, or that the animals in options Sanctuary and Farming are not the same individual. The animal in option Farming does not exist in option Sanctuary. That means the animal in option Farming gets the highest utility in option Farming. If the human now discounts the utility of the other animal in option Sanctuary, the animal in option Farming will not complain. In this case, discounted utilitarianism will select option Farming. Similarly, if option Sanctuary was not possible, discounted utilitarianism will select option Farming.

Finally, assume the human has the same welfare in both options Farming and Sanctuary, and higher than the welfare in option No Farming. Then the human will not discount the utilities of the animals and option Sanctuary will be selected, even when the animal in option Sanctuary is not identical to the animal in option Farming. Hence, the non-identity

problem [18] of person-affecting theories is avoided. Person-affecting theories are indifferent between creating a life barely worth living and creating another, extremely happy life, all else equal. Discounted utilitarianism, on the other hand gives preference to creating the extremely happy life, as shows by putting option Sanctuary above option Farming if the human is indifferent between those options.

5. Externalities and an Upper Bound on the Amount of Discounting

If people could discount utilities of others with arbitrarily high amounts, counter-intuitive results are possible. Consider the following problem in population ethics. There are two necessary people P1 and P2 who exist in all possible options or states of the world, and they can choose one of the following 201 states, where the numbers refer to the utilities.

S1: P1=100, P2=1
S2: P1=99, P2=3, P3=1
S3: P1=98, P2=3, P3=3, P4=1
S4: P1=97, P2=3, P3=3, P4=3, P4=1
…
S201: P1=-100, P2=3, P3=3, P4=3, P4=3,… P202=1

The individuals P3 to P202 are possible people, as they do not exist in all possible states. State S201 is the least preferred by person P1, but has the highest total utility. As P1 has a very negative utility and the other people have lives barely worth living (small but positive utilities), this is the very repugnant conclusion.

To avoid selecting the state S201, person P1 can discount the utility of person P202 in state S201 with say 1000%. That means person P202 gets a discounted utility of -9. The total discounted utility in S201 becomes lower than in S200. In fact, P1 can discount utilities of all possible people P3 to P202 in all states S2 to S201, in order to select that person's most preferred state S1. As the possible people do not exist in state S1, their complaints against the discounting are invalid. Hence, discounted utilitarianism would indeed select S1.

However, person P2 has the lowest utility in state S1, and hence would like to complain against the selection of S1 and hence against the discounting. In the above description of discounted utilitarianism, it was assumed that the complaint of person P2 is not valid because the utility of P2 was not discounted. Only people whose utilities are discounted could complain. This assumption was necessary in order to avoid the very repugnant conclusion in the above example.

The above example shows that someone's right to discount the utilities of the possible people can impose negative externalities on others. P1's right to discount P3's utility results in making P2 worse off by selecting state S1 instead of S2. This externality on P2 can be large: suppose P2 would get a utility of 100 instead of 3 in state S2. Even then, discounted utilitarianism says that P2 cannot complain and hence S1 should be selected above S2. This is counter-intuitive, because the total utility doubles, P2 is much better off, P3 has a positive utility, and P1 is only slightly worse-off in S2 than in

S1.

A similar externality problem arises in deontological ethics, in particular with the mere means principle or the right to bodily autonomy. Consider the footbridge trolley problem, but this time there are ten people under the footbridge and the footbridge is about to collapse due to the weight of the bystander on the footbridge. Not pushing the bystander not only means that the five people on the tracks will die, but also that the ten people under the bridge will die from the collapse of the bridge. Assume the bystander had no permission to walk on the unstable footbridge and that he would survive the collapse of the footbridge. Also assume the bystander, when pushed from the bridge, would not be killed if there was no trolley approaching. This means in the absence of the trolley, it would be permissible to push the bystander in order to avoid the collapse of the bridge.

In this scenario, the bystander can choose to discount the utilities of the five people on the track in the option Push. The five people cannot validly complain, as they would not be better off in the absence of the bystander. But if that means option No Push is selected, the people under the footbridge will die. Option No Push makes those ten people worse off. Hence, discounting the utilities of the five people on the track imposes a negative externality on the ten people under the footbridge. Those people would have been better off in the absence of the bystander, as the bridge will not collapse in his absence. In this sense, Walen's theory of externalities [27] and his version of the deontological mere means principle needs to be revised.

As our discounted utilitarianism is concerned, we can modify it by allowing third parties to complain against utility discounting, but assuming their complaints are weaker than the complaints of the discounted people. What does it mean to have a weaker complaint? One way to interpret this, is saying that a third party can impose an upper bound on the discounted amount. The discounting people are not allowed to apply an arbitrarily large discount.

We can give another justification for limiting the amount of discount. Without the right to discount utility, we have total utilitarianism that is too extreme in the sense of being too demanding. However, if the right to discount the utility of people is absolute or infinite in strength, we have no duties at all to help others and we can completely neglect the positive welfare of possible or future people. This may be too extreme in the other direction. The pendulum swings too far in the opposite direction of non-demandingness.

In an intermediate position, everyone has a bounded right to discount the utilities of others if the discounting cannot be validly objected. The right is finite in strength. There is an upper bound on the amount of permissible discounting. That means we do have some duty to help others if it is at a sufficiently large benefit for the beneficiaries and a sufficiently small cost of our own welfare. We do have to be altruistic (and impartial) to some degree. We do have non-zero duties to guarantee the existence of (larger populations of) happy future generations. In general, when the total utility in one option is sufficiently much higher than in the other options,

one should choose that option. That means the total amount of discount should be smaller than the gain in total utility one gets by choosing the option with the highest total utility.

We can assume that the upper bound on the discount is the same for everyone. Consider the loop trolley problem [25] (Thomson, 1985): the track with the five people circles back and forms a loop. On that piece of track, behind the five people, is a sixth person who is heavy enough to block the trolley. Doing nothing, which is the option No Turn, means the trolley will hit the five people who will die, but the trolley will stop and will not hit the sixth person. The presence of the five people is necessary to save the sixth person, so the five people are used as merely a means. Turning the switch, which is the option Turn, means the trolley takes the reverse direction on the loop and hits the sixth person first. That person dies by blocking the trolley, such that the five people are saved. In the option Turn, the presence of the sixth person is necessary to save the five people, so the sixth person is used as merely a means. In both options, there is always at least someone who is used as merely a means. That means all the people can validly discount the utilities of others. In the option No Turn, the five people can discount the utility of the sixth person, in option Turn, the sixth person can discount the utilities of the five people. However, if everyone chooses the maximum permissible discount, i.e. the upper bound B, then the five people can discount the utility of the sixth person with a total amount of 5B, whereas the sixth person can discount the total utility of the five people with a total amount of B. Hence, the total discount in option No Turn is five times higher than the total discount in option Turn, all discounts are valid (i.e. there are no valid complaints against them), such that option Turn should be selected.

With an upper bound on the discounting, we can call the theory 'mild utilitarianism' (whereas the term 'discounted utilitarianism' can be reserved for the case where unbounded discounts are permissible). Mild utilitarianism has a free parameter, the maximum amount of permissible discounting, that measures the maximum strength of the right to discount welfare. When the parameter is zero, we end up with total utilitarianism (no discounting is permissible), and when it is infinite, we end up with unbounded discounted utilitarianism.

So how strong is this discounting right? What is the upper bound on the amount of discount? This is a question for further research. One simple approach to answer this question would be maximally respecting the autonomy of moral agents. For individual choices that do not affect third parties (i.e. no externalities for non-discounted people), moral agents or decision-makers are free to choose for themselves how high they set the bar, how high they choose the upper bound, as long as it is not infinite. They have to pick a finite upper bound on the discount. And when it comes to collective choices or choices that affect third parties (i.e. with externalities), a democratic consensus procedure could be applied to determine the upper bound on permissible discounting. One such consensus procedure could be a veil of ignorance thought-experiment: the non-discounted people have to choose an upper bound behind a veil of ignorance, as if they

do not know which of the non-discounted people they will be. Consider again the modified footbridge trolley dilemma, with ten people under the bridge and one bystander on the bridge. Those eleven people are the non-discounted people. They can collectively choose an upper bound on the discounting behind a veil of ignorance, assuming they do not know whether they will be one of the people under the bridge or the bystander on the bridge. Similarly in the above population ethics problem, the two necessary people P1 and P2 are the non-discounted people. They have to choose how much they discount the utilities of the possible people (P3 to P202) from behind a veil of ignorance. All necessary people are behind this veil, which means they do not know which one of the necessary people they will be.

The theory of mild utilitarianism may also permit different upper bounds in different contexts, dilemmas or situations. More specifically, the upper bound may depend on the choice set (the set of available options). This flexibility allows to avoid for example the repugnant conclusion. If the upper bound was chosen independent of the choice set, then the repugnant conclusion may occur, because the finite amount of permitted discounting will not be enough to avoid the repugnant state. If one faces a specific choice set that entails the repugnant conclusion for the chosen upper bound, and one really wants to avoid that repugnant conclusion, then one can avoid it by simply choosing a sufficiently higher upper bound for that specific choice set.

6. Conclusion

According to total utilitarianism, we have to choose the option that has the highest sum of individual utilities. This theory is very demanding, as it entails two kinds of counter-intuitive implications: if it increases the total utility, a person may be sacrificed (used as a means against that person's will) for the sake of others, and people may have to drastically decrease their welfare by creating a huge population of individuals with lives barely worth living.

A modification of total utilitarianism is proposed that avoids the demandingness problems in a manner that causes the least amount of complaints. According to 'mild' or 'discounted' utilitarianism, we should choose the option that maximizes the total validly discounted or complaint-free discounted utility, i.e. the sum of everyone's utility minus the complaint-free discounts. In this theory, everyone has a bounded or limited right to discount someone else's utility in some options if those options are not possible if the people who do the discounting did not exist or if the option with the highest total discounted utility (the sum of everyone's utility minus discounts) is one in which the people whose utility is discounted do not exist. A complaint made by a utility discounted person is not valid if the existence of the discounting people in that option is in a sense necessary (i.e. if one cannot act in a way that generates the same outcomes of that option for everyone except the discounting people who are assumed not to exist) or if the existence of the discounted person is in a sense not necessary (i e. if the option that should

be chosen, the option that maximizes the total discounted utility, is one where the discounted person does not exist). The necessary existence of the discounting people and the non-necessary existence of the discounted people are the two conditions for a complaint to be invalid. For individual choices, people can freely choose for themselves a finite upper bound on the amount of discounting. For collective choices, this upper bound can be decided democratically.

As there are two parties, the discounting people (right-invokers) and the discounted people (the duty-holders), the discount right turns into two versions: the right to bodily autonomy that is applied in deontological ethics and is related to the deontological mere-means principle, and the right to procreation autonomy that is applied in population ethics. A discounted person cannot complain against a discounting person having and exercising the right to bodily autonomy, because the absence of the discounting person does not make the discounted person better-off. A discounted person cannot complain against a discounting person having and exercising the right to procreation autonomy, because the non-existence of the discounted person does not make the discounted person better-off. Hence, these two rights are special in the sense that the discounted person cannot complain against those rights.

Statements and Declarations

The author declares no conflicts of interest.

References

[1]   Arrhenius, G. (2000). *Future Generations: A Challenge for Moral Theory*. PhD dissertation, Uppsala University.

[2]   Arrhenius, G. (2003). The very repugnant conclusion. In: Segerberg, K. & Sliwinski R. (eds.), *Logic, law, morality: thirteen essays in practical philosophy in honour of Lennart Åqvist*, pp. 167–180. Uppsala philosophical studies 51. Uppsala: Department of Philosophy, Uppsala University.

[3]   Blackorby, C., Bossert W., & Donaldson, D. (2003). The axiomatic approach to population ethics. *Politics Philosophy Economics*, 2 (3): 342-381.

[4]   Belliotti, R. A. (1978). Negative duties, positive duties, and rights. *The Southern Journal of Philosophy*, 16 (1): 581-588.

[5]   Broome, J. (1991). *Weighing Goods*. Oxford: Basil Blackwell.

[6]   Bruers, S. (2016). Can deontological principles be unified? Reflections on the mere means principle. *Philosophia*, 44 (2): 407-422.

[7]   Bykvist, K. (2009). Is utilitarianism too demanding?. In: *Utilitarianism: A Guide for the Perplexed*. Continuum.

[8]   Hauser, M., Young, L., & Cushman, F. (2008) Reviving Rawls' Linguistic Analogy: Operative Principles and the Causal Structure of Moral Actions. In: Sinnott-Armstrong, W. (ed.) *Moral Psychology and Biology*. NY: Oxford U. Press.

[9]   Heyd, D. (1988). Procreation and value: Can ethics deal with futurity problems? *Philosophia,* 18: 151-170.

[10] Hills, A. (2010). Utilitarianism, contractualism and demandingness. *The Philosophical Quarterly*, *60* (239), 225-242.

[11] Hooker, B. (2009). The demandingness objection. In Chappel, T. (ed) *The problem of moral demandingness: New philosophical essays*, Palgrave Macmillan, pp 148-162.

[12] Howard-Snyder F. (2011). Doing vs. Allowing Harm. The Stanford Encyclopedia of Philosophy (Winter 2011 Edition), Edward N. Zalta (ed.).

[13] Kant I. (1785), translated by J. W. Ellington (1993). *Grounding for the Metaphysics of Morals,* 3rd ed.. Hackett.

[14] Kerstein S. (2009). Treating Others Merely as Means. *Utilitas*, 21 (2): 163-180.

[15] Korsgaard C. (1996). *Creating the Kingdom of Ends*. Cambridge: Cambridge University Press.

[16] Meacham, C. J. (2022). Utilitarianism, altruism, and consent. *Journal of Ethics and Social Philosophy*, 21 (1): 49-81.

[17] Narveson, J. (1973). Moral problems of population. *The Monist,* 57: 62-86.

[18] Parfit, D. (1984). *Reasons and Persons*, Oxford: Clarendon Press.

[19] Parfit, D. (1991). *Equality or Priority, The Lindlev Lecture*. Lawrence: University of Kansas.

[20] Parfit, D. (2017). Future people, the non‐identity problem, and person‐affecting principles. *Philosophy & Public Affairs*, *45* (2): 118-157.

[21] Portmore, D. W. (2008). Dual-ranking act-consequentialism. *Philosophical Studies*, *138*, 409-427.

[22] Scheffler, S. (1994). *The rejection of consequentialism* (Revised ed.). Oxford: Oxford University Press.

[23] Sider, T. (1993). Asymmetry and self-sacrifice. *Philosophical Studies*, *70* (2): 117-132.

[24] Singer, M. G. (1965). Negative and positive duties. *The Philosophical Quarterly*, 15 (59): 97-103.

[25] Thomson, J. J. (1985) The Trolley Problem. *The Yale Law Journal*, 94: 1395–415.

[26] Vessel, J. P. (2010). Supererogation for utilitarianism. *American Philosophical Quarterly*, *47* (4): 299-319.

[27] Walen, A. (2014). Transcending the Means Principles. *Law and Philosophy*, 33 (4): 427-464.