Discounting utility without complaints: proposing a new theory of complaint-free discounted utilitarianism

Abstract

Complaint-free discounted utilitarianism is presented as a new moral theory that says we have to choose the option that has the highest sum of discounted utilities. People have a right to discount the utility increments of others as long as no-one can validly complain. As a right involves a relationship between two parties, right-holders and duty-holders, there are two ways to invoke this discount right without complaints. If duty-holders are not made better off when either the right-holders or the duty-holders do not exist, the duty-holders cannot complain against the right-holders invoking the discount right. Considering the non-existence of either right-holders or duty-holders, the discount right turns into respectively the right to bodily autonomy, which is related to the mere-means principle in deontological ethics, and the right to procreation autonomy, which is related to the person-affecting principle in population ethics. These rights state that people do not have the duties to use their own bodies for the happiness of others or to bring into existence happy people. Introducing this discount right allows to avoid two classes of counter-intuitive implications of classical utilitarianism that show up in two paradigmatic cases: the trolley problem in deontological ethics and the repugnant conclusion in population ethics. The assumed priority of complaints above compliments introduces an asymmetry that underlies the asymmetry between positive and negative duties in deontological ethics as well as the procreation asymmetry in population ethics. If the discount right is not absolute, a neutral-range utilitarian theory is obtained.

Keywords: Utilitarianism; Rights; Population ethics; Repugnant conclusion; Trolley problem

Introduction

Classical or total utilitarianism says we should choose the option that maximizes the sum of utilities (Blackorby, Bossert & Donaldson, 2003). 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 utility of an individual in a world history is a real-valued number that measures the personal value of the life of that individual in that world history. The utility is zero if the individual does not exist. The utility can be a concave function of lifetime well-being, in which case we have a prioritarian or generalized utilitarian theory (Blackorby, Bossert & Donaldson, 2003): 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 (Broome, 1991; Parfit, 1991). 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 faces counter-intuitive implications that can be classified in two categories related to deontological ethics and population ethics. A paradigm case for deontological ethics is the famous thought experiment of the footbridge trolley problem (Thomson, 1985). 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.

The trolley thought experiment involves two eligible options. In the option 'Push', the five people are saved and each of them gets lifetime well-being or utility of 100, 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 (Hauser, Young & Cushman, 2008). 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.

The paradigm case for population ethics is the repugnant conclusion (Parfit, 1984), or the more extreme version of the very repugnant conclusion (Arrhenius, 2003). 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, a huge number of 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 utility increments of others as long as no-one can validly complain. If people invoke this complaint-free discount right, we get a restricted utilitarian theory that only includes discounted utilities instead of full utilities in the sum.

The complaint-free right to discount utility

Assume that the bystander in the footbridge trolley problem has a deontological right to deduct an amount from one's own utility in the dispreferred option. When the bystander is sacrificed in option 'Push', that person gets utility 50. This is lower than the utility in 'No push', so option 'Push' is the dispreferred option according to the bystander. Suppose that person is allowed to deduct an amount from that utility of 50. If the deducted amount is more than 200, such that the bystander has a reduced utility less than -150, the sum of (reduced) utilities in option 'Push' is lower than in option 'No push'.

The right to deduct an amount of utility is equivalent to the right to discount the utility of others. For example, by deducting 250 units of utility, the bystander is actually fully discounting the total utility increase that the five people get when option 'Push' is chosen. When the deducted amount is 250, it is as if all the benefits (utility increases) received by the five people in option 'Push' do not count. The sum of reduced utilities in 'Push' is 50 (the utility of the bystander) minus 250 (the reduced amount) plus five times 100 (the utilities of the five people), which equals 300.

Of course, not only the bystander, but all people involved should have the right to discount the utility of others. That means the five people could equally discount the utility of the bystander in option 'No push'. If the group of five people fully discounts the utility increase of the bystander in option 'No push', which equals 50, then the sum of reduced utilities in 'No push' equals 300. This is the same as the sum of reduced utilities in 'Push' when the bystander was fully discounting the utility increase of

the five people. 'Push' and 'No push' become morally indifferent, and 'Push' becomes a permissible option. This is counter-intuitive. It gets worse when each one of the five people fully discounts the utility increase received by the bystander in 'No push'. In that case, the total deducted amount is five times 50. This equals 250, the same as the total amount deducted by the bystander in option 'Push' when fully discounting the total utility increase that the five people get in option 'Push'. Hence, if everyone invokes the right to fully discount the utility increases of others, then we are back at square one: accept the utilitarian obligation to push the bystander.

To avoid this line of reasoning that results back to the counter-intuitive utilitarian implication, we can put restrictions on the right to discount utility of others. That right is not absolute: it cannot be invoked in all situations.

A right is always a relationship between two parties: the right-holders, or more accurately right-invokers[1], who invoke or claim their right, and the duty-holders who have the duty to respect the invoked right of the right-invokers. As there are two parties, a right has at least one of two properties: it can give an advantage to the right-invokers or a disadvantage to the duty-holders. When receiving an advantage, the right-invokers can compliment or thank the duty-holders. When receiving a disadvantage, the duty-holders can complain against or condemn the right-invokers.

It is possible that right-invokers cannot compliment or that duty-holders cannot validly complain. As the next two sections demonstrate, there are two cases where the right to discount utility does not cause valid complaints. In these two cases, the complaints of the duty-holders become invalid in the sense that the duty-holders do not become better-off when either the right-invokers or the duty-holders are absent or do not exist. There are only two such cases, due to the fact that there are two parties involved: right-invokers and duty-holders. For both parties we can ask the question: what if those people were absent or did not exist? In the first case, which deals with deontological ethics in general and the footbridge trolley problem in particular, the presence or existence of the right-invokers (e.g. the bystander on the footbridge) is important. In the second case, which deals with population ethics in general and the repugnant conclusion in particular, the presence or existence of the duty-holders (e.g. the extra people with lives barely worth living) is important.

There is a symmetry between compliments and complaints: the presence of compliments is good, the presence of complaints is bad. In order to avoid the counter-intuitive implications of utilitarianism, such as the obligation to push the bystander or to accept for the very repugnant conclusion, we have to break this symmetry. When it comes to the right to discount utility, the absence of complaints becomes more important than the presence of compliments. Hence, we are going to consider only complaints. In particular, we are going to restrict the right to discount utility only to the cases where invoking that right does not generate valid complaints. In other words, only the complaint-free right to discount utility is valid. As discussed in the next section, when the bystander invokes the right to discount the utility of the five people, that right is complaint-free. But when the five people invoke the right to discount the utility of the bystander, that right is not complaint-free.

As this symmetry-breaking introduces some arbitrariness (why should avoiding complaints be more important than seeking compliments?), it is arguably the most important subjective judgment underlying our new moral theory of complaint-free discounted utilitarianism.

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[1] Note that right-invokers have to be right-holders, because one cannot invoke a right that one does not have. Duty-holders can be, but are not necessarily, right-holders.

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The deontological mere-means principle

In the 'Push' option of the footbridge trolley problem, the bystander invokes the right to discount the utility increases of the five people on the track. As a result, the 'No push' option should be chosen, the bystander may not be pushed, and the five people die. Can those five people complain? No, because if the bystander, who is the right-invoker, were absent or did not exist, the five people would not be made better off. 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.

In cases like the footbridge trolley problem, the complaint-free right to discount 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 (e.g. Kant, 1785; Korsgaard, 1996; Kerstein, 2009). '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 (Howard-Snyder, 2011), the difference between positive and negative duties (Singer, 1965; Belliotti, 1978), and the permissibility of partiality in imperfect duties of beneficence. These principles can all be derived from the mere-means principle (Bruers, 2016). 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 used 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 (Hooker, 2009) can be avoided.

With the complaint-free right to discount utilities, 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 (2014). 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.

The issue of negative externalities and required presence of victims can be explored further by combining the footbridge trolley problem with the other famous trolley case: the switch trolley problem (Thomson, 1985). In the integrated switch-footbridge trolley problem, N number of people are on the track, about to be killed by a runaway trolley. You can save those people by turning a switch on a footbridge, that sends the trolley in the direction of a side track where M innocent people are trapped. However, a bystander stand next to the switch on the footbridge, such that if you turn the switch, the bystander will be pushed from the bridge, block the trolley and save the M people on the side track.

If the bystander was absent, we have the simple switch trolley problem. Suppose all the N plus M people on the tracks have the complaint-free right to discount utility. If the M people on the side track invoke this right, the switch may not be turned, and the N people on the main track are killed. Those N people can complain, because they rather prefer the absence of the people on the side track. If the M people were absent, the switch may be turned and the N people would be made better off. Therefore, the M people cannot invoke the right to discount the utilities of the N people. That right is not complaint-free in this case. As a consequence, no utilities can be discounted, and we end up with the utilitarian conclusion that it is good to turn the switch if N is larger than M and bad if M is larger than N.

Now let us introduce the bystander next to the switch. If the switch is turned (and the bystander is pushed from the footbridge), the N people are saved and hence receive an increased utility. What if the bystander invokes the right to discount the utility increases of the N people? If M is larger than N, the bystander can validly invoke this right, because the switch may not be turned in the absence of the bystander. The presence of the bystander does not make the N people worse off. The N people cannot validly complain against invoking the right to discount their utility increases.

However, if N is larger than M, invoking that right becomes invalid. By invoking that right, the switch may not be turned and the N people will die. Those N people would be better off if the bystander was absent, because in that case the switch may be turned. Hence, the N people can validly complain against invoking the right, and we end up with the utilitarian conclusion: turning the switch becomes good. As invoking the right to discount the utility increases of the N people is invalid, the switch may be turned, which means the bystander will be pushed from the footbridge and will be used as merely a means to save the M people on the side track. What if the bystander invokes the right to discount the utility increases of those M people? That is also invalid: if that means the switch should not be turned, the N people on the main track can complain, because they are made worse off than in the absence of the bystander. And the M people themselves cannot complain about their utilities being discounted, because in the absence of the bystander, the switch will still be turned, such that the M

people die anyway. As a consequence, we now have an example where it becomes permissible to use the bystander as merely a means to save the M people. This use can be considered as a side effect of saving the N people by turning the switch. This only works if M is smaller than N. If M is larger, the switch may not be turned, the bystander may not be used as a means, even if it is a side effect of saving the N people. This sheds some new light on the application and interpretation of the doctrine of double effect (McIntyre, 2019), but that is for future research.

Next to the right-invokers and the duty-holders, there may exist other people, and those third parties may have for example classical utilitarian preferences. Those utilitarians may have a weak complaint against people invoking the right to discount the utilities of duty-holders, because invoking that right violates the utilitarian dictum to maximize the sum of (undiscounted) utilities. In general, for many people it may be counter-intuitive to say that a few people should not be used as a means only slightly against their will in order to save a huge number of other people. If for example a small pinprick for one person would be required to stop a huge genocide, giving that pinprick may be permissible and this permissibility may not be so counter-intuitive. In other words: the right not to be used as merely a means may not be absolute: when the benefits to other people are much higher than the costs for the victim, the victim may be used as a means. The right-invoker may not always fully discount the utility increases of others. There is an upper bound on the discount factor, and that upper bound may depend on the specific situation.[2] As the choice for such an upper bound on the discount factor is always arbitrary, it has to be determined in a democratic way. Everyone has an equal say in the value of the upper bound. Utilitarians would vote for a zero upper bound, which means no discounting, but Kantians may vote for a very high upper bound, close to 100% discounting. The choice for an upper bound on the discount factor is left for future research.

The population ethical asymmetric person-affecting principle

In the footbridge trolley problem, we can ask the question whether the duty-holders would be better off if the right-invoker was not present or did not exist. If the duty-holders are not better off, they cannot validly complain against the right-invoker invoking the right to discount utility increases 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.

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[2] Relatedly, multiple discounting of the same person's utility should not be allowed. Consider two bystanders on the footbridge. If pushing them both from the bridge was necessary to save the five people on the track, those two bystanders can both invoke their right to discount the utility increases of the five people. But double discounting of someone's utility should not be permitted. If the first bystander fully discounts someone's utility, the second bystander may not subtract an extra amount of utility. We have to consider the two bystanders as one group of right-invokers, and this group as a whole has the right to discount the utility increases of others only once.

Considering right-invokers as a group is also relevant when testing for the condition of using someone as a means. Suppose two bystanders are on the footbridge, and only one of them needs to be pushed in order to save the five people on the track. One could say that the bystander is not used as a means when pushed, because the presence of that bystander is not necessary to save the five people: if that bystander were absent, one could push the other bystander instead. When the two bystanders are considered as a group, however, we can say that this group is used as a means: if the group were absent, there is no-one to be pushed, and saving the five people becomes impossible. Therefore, the right-invokers should always be considered as a group, and it is this group that has the right not to be used as merely a means, or the right to discount utilities of others.

In population ethics, a distinction can be made between necessary people, who exist in all possible world histories of 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. If the utilities of possible people are fully discounted, they are not included in the sum of utilities.

Excluding or fully discounting the utilities of the possible people from the sum of utilities gives us a reduced utilitarian theory that corresponds with the person-affecting view (Narveson, 1973; Heyd, 1988; Parfit, 2017), 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. The case of the very repugnant conclusion shows that total utilitarianism is not person-affecting. Total utilitarianism entails that the first, non-repugnant option, where the necessary people are very happy, is worse than the second, very repugnant option, because the non-repugnant option has a lower sum of utilities. But for no-one who exists in the non-repugnant option is that option worse than the very repugnant option. By deleting the utilities of the possible people (the lives barely worth living), we avoid the repugnant conclusion and arrive at a person-affecting utilitarian theory.

But simply deleting the utilities of possible people may cause complaints, especially when it results in bringing into existence possible people with negative utilities. By definition, a zero utility means the person is indifferent between existence and non-existence, all else equal (i.e. the utilities of everyone else are not changed), and a negative utility means that that person prefers non-existence above having a live with that utility. If you have a negative utility, you would prefer a situation where you do not exist and everyone else remains equally happy (keeps the same utilities). Hence, when someone is brought into existence with a negative utility, that person can complain against the choice to be brought into existence.

To make the right to procreation autonomy complaint-free, only the utilities of possible people who have positive utilities may be discounted. Just as a right-invoker of the right to bodily autonomy has the right to exclude from the utilitarian sum the utility increases of the duty-holders, the necessary people have the right to exclude the positive utilities of the possible people. These positive utilities of possible people are nothing but the utility increases when compared with a zero utility, i.e. the utility corresponding to non-existence. Hence, people who have the right to procreation autonomy do not have a duty to cause the existence of happy people, just like people who have the right to bodily autonomy do not have the duty to use their bodies as merely a means to make people happy.

Using the complaint-free right to procreation autonomy, we do not have to consider the total utility, but only the sum of the utilities of the necessary people and the possible people who have negative utilities. In other words: the necessary people should choose the option that maximizes a restricted sum of utilities, including only the utilities of the necessary people and the possible people with negative utilities.

No-one can complain against this right to exclude the positive utilities of possible people. Consider again the case of the very repugnant conclusion. Avoiding this conclusion by choosing the first, non-repugnant option, the huge number of possible people with small but positive utilities (lives barely

worth living) are not brought into existence. These possible people could have had happy lives (although barely worth living, their lives were still positive), but as they do not exist, they cannot complain against choosing the non-repugnant option. Non-existent people cannot complain at all, and hence cannot complain against the necessary people exercising their right to exclude the positive utilities of possible people.

Excluding only the positive utilities of possible people introduces an asymmetry. This asymmetry is the consequence of the abovementioned symmetry-breaking by prioritizing complaints above compliments. Due to this focus on complaints, the person-affecting utilitarian theory entails the procreation asymmetry (Narveson, 1967; McMahan, 1981; Algander, 2012): it is always bad to cause the existence of a life with negative utility (all else equal), but not always good to cause the existence of a life with positive utility (all else equal). Possible people with negative utilities are included, but possible people with positive utilities may be excluded from the sum of utilities. Necessary people have to take into consideration unhappy possible people but not happy possible people.

By making the distinction between necessary and possible people, a person-affecting theory entails an intransitivity (Norcross, 1999). Consider three situations. In situation A, one person exists with utility 100. In situation B, that same person gets utility 101, and a second person is brought into existence with utility 1, which corresponds with a life barely worth living. In situation C, the same two people as in situation B exist, the first person gets utility 99 and the second utility 4.

The intransitivity arises when we compare two situations. According to the dominance addition condition (Arrhenius 2000, p159), adding an extra life with positive utility and increasing the happiness of the rest of the population, cannot make a situation worse. Hence, comparing situations A and B, situation B is as least as good as situation A. Both total and person-affecting utilitarianism are in agreement with this dominance addition condition. The second person in situation B is a possible person whose utility does not count in person-affecting utilitarianism. So we choose the situation that has the highest utility of the necessary person, which is situation B where that person has a utility of 101.

When comparing situations B and C, the second person exist in both situations and hence counts as a necessary person. According to both total and person-affecting utilitarianism, situation C with a total utility of 103 is better than situation B with a utility of 102.

Finally, comparing situations A and C, the second person should again be considered as a possible person whose utility does not count in person-affecting utilitarianism. That means situation A is better than C.

In summary, the person-affecting theory prefers B over A when the choice is between A and B, C over B when the choice is between B and C, and A over C when the choice is between A and C. Intransitivity becomes especially irrational when it allows for a money pump (Davidson, McKinsey & Suppes, 1955): one is willing to pay to exchange A for B, willing to pay to exchange B for C, and again willing to pay to exchange C for A. Running in circles, one pays an infinite amount to end up with the initial option. However, in the population ethical situation, once B or C are chosen, one cannot return back to situation A, as this would involve undoing the existence of the second person. As a money pump is avoided, some might be willing to accept the intransitivity of person-affecting utilitarianism (Temkin, 1987).

Nevertheless, person-affecting utilitarianism entails a dynamic inconsistency (Simaan and Cruz, 1973; Kydland & Prescott, 1977) that brings us back towards the very repugnant conclusion. Suppose we have a fourth option D, which is the same as C, but the first person gets utility 100, the second

person keeps a utility 4 and a third person is added with utility 1. According to the dominance addition condition, D is at least as good as C. But option D is worse than a fifth option E in which the same three people exist, the first person has utility 98 and the third gets utility 4. Continuing in the same way, we see that the utility of the first person gradually decreases to an arbitrary low level, by adding extra people with lives barely worth living. This arguments shows how difficult it is to escape the repugnant conclusion (Budolfson & Spears, 2018; Zuber e.a., 2021): even person-affecting utilitarianism entails this repugnant conclusion.

To avoid the intransitivity, dynamic inconsistency and repugnant conclusion, we can introduce a deontological, forward-looking constraint or decision consistency condition. If an eligible option, which initially seems to be the best, is later (when the option is chosen and the possible people become necessary people) dominated by another eligible option which initially seems worse, the initial better-seeming option should be excluded from the available options of the initial choice set. If you know in advance that if you choose the best option (e.g. situation B), that best option will no longer be the best option in the future (e.g. situation B will be dominated by situation C once B is chosen), then you should not choose that best option in the initial decision.

This forward-looking constraint, i.e. excluding from the initial choice set the options that will become dominated by other options once chosen, is a direct consequence of the complaint-free right to discount utility: once possible people are brought into existence, those people can complain against their utility increases being discounted. The forward-looking constraint is a deontological constraint, which means our population ethical theory is no longer axiological. An axiological theory (Greaves, 2017) only looks at the aggregate utility function (e.g. a sum of utilities) over all available options and does not impose restrictions on the choice set of available options. Deontological constraints impose boundary conditions on the maximization of the aggregate utility function.

The forward-looking, asymmetric, person-affecting utilitarian theory faces two counter-intuitive implications. First, the theory is indifferent between creating a life barely worth living and creating another, extremely happy life. This is the non-identity problem (Parfit, 1984). Second, the theory entails the extinction conclusion: if only the negative utilities of possible people are counted, the future cannot become good. It may be better not to procreate, because a possible person with a positive utility does not add any value to the world, but any possible person with a negative utility adds a disvalue to the world. That means adding people (creating future generations) cannot make things better, and could easily make things worse. The total negative utility of all the many future people with negative utilities can easily become larger in absolute value than the total decrease in utility of the necessary people (the current generation) when the whole population goes extinct. In that case, the necessary people should choose for total extinction, such that no future generations with negative utilities can be born.

These counter-intuitive implications can be avoided by claiming that the right to procreation autonomy is not absolute, just like the right to bodily autonomy is not absolute. We can set a positive threshold value of utility, and state that the part of the utility of a possible person that is above this threshold value, is fully taken into account in the sum of utilities, and should not be discounted. With this threshold value, the theory becomes neutral-range utilitarianism. There is a neutral range of utilities, where a utility is neutral when 'it is neither better nor worse that this life is lived than that it is not lived' (Broome, 2004, p142), or when the addition to the global population of a life at this welfare level 'has no positive or negative value in itself' (p145).

Neutral-range utilitarianism is slightly related to so-called critical-range utilitarianism that recently became more popular (Blackorby, Bossert & Donaldson, 1996; Qizilbash, 2007, Rabinowicz, 2009;

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Gustafsson, 2020). Critical-range utilitarianism starts from critical-level utilitarianism, where instead of the sum of utilities, one takes the sum of relative utilities, where a relative utility is the utility minus a constant, positive critical level. Critical-range utilitarianism states that there is no single critical level, but there is a range of critical levels. The problem of critical-range utilitarianism is that options can be mutually incomparable or incommensurate. The theory entails an incompleteness or quasi-ordering of options: there are pairs of options which cannot be ordered. One option is neither better than, nor worse than, nor equally good as the other option.

Neutral-range utilitarianism does not entail such incompleteness: every pair of options can be compared. This theory also starts from critical-level utilitarianism, but the critical level is zero for a necessary person and a possible person with negative utility, it equals the utility of a possible person when that person has a positive utility between zero and a positive threshold value, and it equals a positive constant equal to the threshold value for a possible person with utility above this positive constant.[3]

A final question remains: what is the size of this neutral range? If you may choose the neutral range, the size of that neutral range represents your population ethical preferences. These preferences cannot be represented by the utility function, because they depend on the choice set of eligible options. If you have a strong preference to avoid (very) repugnant conclusions and you face a choice set that leads to a repugnant conclusion, you can choose a large neutral range, with a high threshold value. If everyone had the same population ethical preference and therefore chose the same large neutral range, the repugnant conclusion is easily avoided. But if you want to avoid the extinction conclusion, your chosen neutral range should not be too large.

As different people have different population ethical preferences, different people can choose different neutral ranges. To make social decisions practically feasible and to avoid arbitrariness, the necessary people can democratically decide the size of the neutral range, given the actual choice set faced by those necessary people.

Conclusions

According to utilitarianism, we have to choose the option that has the highest sum of individual utilities. This theory 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. These two kinds of counter-intuitive implications of utilitarianism can be avoided by introducing a complaint-free right to discount utility increases. This discount right is complaint-free when absence or non-existence of either the right-invokers or the duty-holders does not make the people whose utility is discounted better off.

As there are two parties, the right-invokers and the duty-holders, the discount right turns into two versions: the right to bodily autonomy that is characteristic in deontological ethics, and the right to

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[3] This theory is still indifferent between creating a life barely worth living and creating another, slightly happier life (with utility below the threshold value). This problem can be slightly mitigated, by introducing a small extensions of the theory, making it 'lexical' when there is a tie. Suppose there are multiple optimal options with equal total value, where total value is measured as a reduced sum of utilities. The reduced sum of utilities excludes the possible people with small positive utilities (i.e. whose lives are barely worth living). In that case, we can break the tie by choosing the option that has the highest sum of utilities of the excluded possible people.

procreation autonomy that is characteristic in population ethics. A duty-holder cannot complain against a right-invoker having and exercising the right to bodily autonomy, because the absence of the right-invoker does not make the duty-holder better-off. A duty-holder cannot complain against a right-holder having and exercising the right to procreation autonomy, because the non-existence of the duty-holder does not make the duty-holder better-off. Hence, these two rights are special in the sense that the duty-holders, i.e. the people affected by those rights, cannot complain against those rights.

These rights do not have to be absolute: they may have a finite strength and their limits can be democratically decided. With these two rights, we arrive at a restricted utilitarian theory that says we have to choose the option that has the highest sum of complaint-free discounted utilities. This entails neutral-range utilitarianism: maximize the sum of utilities of everyone except possible people with utilities between a neutral range. And it entails the deontological mere-means principle: we may not choose the option that involves the use as a means of the bodies of too many people that is too much against their will. In other words, right-holders of the right to bodily autonomy have the right to exclude the utility increments of the beneficiaries (those who benefit from the use of the right-holder as merely a means) from the utilitarian calculation (the sum of utilities), except when the sum of those utility increments is very large. Similarly, right-holders of the right to procreation autonomy have the right to exclude the utility increments (the positive utilities) of the possible people from the utilitarian calculation, except when the sum of those utility increments is very large. In general, people have the right to exclude the utilities of others, or the right to subtract a certain, large amount from their own utility in the sum of utilities, as long is no-one can complain against that.

Conflict of interest

The author declares no conflicts of interest.

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