

How we ought to choose when uncertainty aversion conflicts with avoiding inequality

Amending egalitarianism under severe uncertainty

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Section 1: Introduction

Many of us have to make decisions impacting other people's lives daily. And yet, we are often severely uncertain about the consequences our actions will have. In February 2020, for instance, governments around the globe were facing a severely uncertain situation when deciding on shutting down their countries. Lacking sufficient evidence about the novel Covid-19 virus, policymakers could not tell how likely it would be that this virus would kill many people or almost nobody if left to spread uncontrolled. And still, they had to decide how to proceed, impacting many people's lives tremendously. But, when faced with such severe uncertainty, how ought we choose in deciding on the fate of others?

In "Egalitarianism under Severe Uncertainty" (Rowe and Voorhoeve 2018) Thomas Rowe and Alex Voorhoeve propose an answer. They extend a pluralist egalitarian theory of distributive justice to such decisions under severe uncertainty. According to their pluralist egalitarianism, we are morally required to improve people's prospects and how well they end up (Rowe and Voorhoeve 2018, 243f). We are also morally required to avoid inequality in people's prospects and in how well they end up (inequality aversion).

Rowe and Voorhoeve combine this theory of distributive justice with an attitude many people show when faced with severe uncertainty (Rowe and Voorhoeve 2018, 247ff): when unable to assess how likely the possible consequences of their actions are, many people are cautious and give more weight in their decisions to the worst-case scenario than to more favourable ones. According to Rowe and Voorhoeve, these people are uncertainty averse. For the authors, such uncertainty aversion is not just an attitude many people show. It is also rational and morally permissible, including for people making decisions on the fate of others. Thus, Rowe and Voorhoeve address the moral requirements a pluralist egalitarian theory imposes on uncertainty averse people when they make decisions impacting other people's lives.

In this paper, I focus on a class of particularly problematic situations that such an uncertainty averse person can face. Sometimes, the egalitarian concern to avoid inequality conflicts with the concern to avoid uncertainty (Rowe and Voorhoeve 2018, 260f): an action that avoids inequality in how well people end up comes with severe uncertainty about whether those people end up well. Here, Rowe's and Voorhoeve's pluralist egalitarianism does not demand to avoid inequality at the cost of uncertainty or to avoid uncertainty at the cost of inequality. The authors only claim that when deciding what to do one ought to consider avoiding inequality and may permissibly consider avoiding uncertainty. Uncertainty averse people may then decide depending on how they trade-off their uncertainty aversion and inequality aversion.

In this paper, I suggest amending the proposed pluralist egalitarianism for situations in which uncertainty aversion conflicts with inequality aversion. As I argue below, when deciding what to do in such cases, a concern to avoid uncertainty should not be considered. Instead, whenever uncertainty aversion conflicts with avoiding inequality, even uncertainty averse people ought to choose as if they were not uncertainty averse. They may then decide depending on how inequality averse they are.

The paper is organized as follows: In Section 2, I will introduce severe uncertainty and uncertainty aversion. In Section 3, I will describe a case in which uncertainty aversion conflicts with avoiding inequality and how we, according to Rowe and Voorhoeve, ought to choose in this case. In Section 4, I will argue

that uncertainty aversion should not be considered when conflicting with inequality aversion. Instead, whenever both concerns conflict, even uncertainty averse people should choose as if they were indifferent to uncertainty. In Section 5, I will conclude my paper.

Section 2: On severe uncertainty and uncertainty aversion

In this section, I first distinguish the severely uncertain situations I am concerned with from other uncertain situations. I then introduce uncertainty aversion.

To start, in many situations, we are uncertain which consequences our actions will have. Take the following example:

RiskyTreatment: You are a doctor. You want to decide which treatment to give to two patients (call them Lea and Felix). They both have a severe infection, which will leave them brain-damaged if not treated successfully. There are two possible treatments for them: A and B. You know that treatment A will cure Lea but not Felix if their infections are caused by a type 1 virus. In case of a type 2 virus, Treatment A will cure Felix but not Lea. Treatment B will cure both of them if it is a type 1 virus but none of them in case of a type 2 virus. Due to resource constraints, you have to give the same treatment to Lea and Felix. Running some blood tests, you find out that their infections are caused by the same virus. However, the blood tests leave open whether Lea and Felix have a virus infection with a type 1 or a type 2 virus. Luckily though, the tests give you enough information to confidently believe that the chance of Lea and Felix having a type 1 virus is 0.8 and of them having a type 2 virus only 0.2. You now have to choose: do you give Lea and Felix treatment A or treatment B?

In a situation like RiskyTreatment, you face what is known as risk (see Rowe and Voorhoeve 2018, 240f): you do not know what the consequence of your possible actions will be. Here, you do not know what will happen to Lea and Felix if you give them treatment A or B. However, you have sufficient evidence to believe how likely each of the different possible outcomes are.¹ For instance, based on the blood tests, you believe that the chance of treatment A curing Lea but not Felix is 0.8.

Unfortunately, we sometimes face even more severe uncertainty than in RiskyTreatment. Consider the following amendment to the above example:

SeverelyUncertainTreatment: You face the same situation as in RiskyTreatment. However, now the blood tests you run give you no information at all on whether Lea and Felix are more likely to have a type 1 or a type 2 virus. You also have never met Lea and Felix before, have no medical record of them and cannot run any other tests. In contrast to before, you now lack any evidence or prior beliefs on which to base your assessment of how likely it is that they have a type 1 or a type 2 virus. You still have to choose: do you give Lea and Felix treatment A or treatment B?

In SeverelyUncertainTreatment, you face severe uncertainty² (Rowe and Voorhoeve 2018, 248; see also Bradley and Drechsler 2014, 1233–37; Ellsberg 1961): based on your evidence and prior beliefs, you cannot tell how likely each of the different possible consequences of your potential actions is. In contrast to before, you only believe that the chance of these consequences occurring is within some range.³ For instance, based on the poor evidence of your blood test, you might believe that the chance of treatment A curing Lea but not Felix is between 0.2 and 0.8. But, in contrast to your previous situation, you lack sufficient evidence to reasonably believe that it is precisely 0.8.

¹Following Rowe and Voorhoeve, I use risk as a subjective concept, that is as referring to the beliefs about how likely some outcome obtains that a rational person can form based on their evidence and prior beliefs (Rowe and Voorhoeve 2018, 241).

²Severe uncertainty about the possible states of the world is also referred to as ambiguity (Bradley and Drechsler 2014).

³I also use severe uncertainty as a subjective concept (Rowe and Voorhoeve 2018, 241; see also footnote 1).

Now, suppose you could choose between facing RiskyTreatment and SeverelyUncertainTreatment. Which situation would you prefer to be in? There is evidence that many people would choose RiskyTreatment (Rowe and Voorhoeve 2018, 247ff; see also Trautmann and Kuilen 2015). These people behave uncertainty aversely.

According to Rowe and Voorhoeve, such uncertainty averse behaviour is motivated by a cautious attitude in light of severe uncertainty (Rowe and Voorhoeve 2018, 248f): uncertainty averse people cautiously give greater weight in their decision to the least favourable probability of an outcome occurring which they deem possible than to more favourable ones. To illustrate, consider treatment B in SeverelyUncertainTreatment. Recall this treatment cures both Lea and Felix if they have a type 1 virus but none of them in case of a type 2 virus. Suppose you believe that the probability that they have a type 1 virus is between 0.2 and 0.8. Then, the least favourable probability you consider possible is 0.2. It is least likely then that treatment B cures both Lea and Felix. The most favourable probability you consider possible is 0.8. It is most likely then that treatment B cures both Lea and Felix. According to Rowe and Voorhoeve, as an uncertainty averse person, you then give the former possibility, 0.2, greater weight in your decision on Lea's and Felix' treatment than more favourable possibilities such as 0.8. In such a way, you express a cautious attitude in light of your severe uncertainty. For Rowe and Voorhoeve, you are uncertainty averse.

Rowe and Voorhoeve maintain that it is rational and morally permissible to be uncertainty averse (Rowe and Voorhoeve 2018, 248–50). For them, however, it is not rationally or morally required (Rowe & Voorhoeve, 2018, p. 243). One could also give the same weight to all probabilities of the consequences of one's actions that one deems possible. For instance, you could give the same weight in your decision to 0.2 and 0.8. You would then not express a cautious attitude when faced with severe uncertainty – you would be uncertainty neutral. You could also give less weight to the least favourable probability that you deem possible than to other more favourable ones. For instance, you could give less weight to 0.2 than to 0.8. You would then express an adventurous attitude towards uncertainty – you would be uncertainty seeking.

Nevertheless, for Rowe and Voorhoeve, uncertainty aversion is a common and permissible attitude. Therefore, they focus on uncertainty averse people (Rowe and Voorhoeve 2018, 250). They discuss how an uncertainty averse person ought to choose when deciding on the fate of others, as in SeverelyUncertainTreatment.

In this paper, I focus on a class of particularly problematic situations uncertainty averse people can face - situations in which avoiding uncertainty comes at the cost of inequality. SeverelyUncertainTreatment is such a case. In the next section, I use this example to describe the conflict between uncertainty aversion and avoiding inequality and how we, according to Rowe's and Voorhoeve's pluralist egalitarianism, ought to choose in this case.

Section 3: When uncertainty aversion conflicts with inequality aversion

Before explaining the conflict between uncertainty aversion and avoiding inequality, I first describe the decision you face in *SeverelyUncertainTreatment* from a pluralist egalitarian perspective.

Section 3.1: SeverelyUncertainTreatment from a pluralist egalitarian perspective

Let us consider the choice you face in *SeverelyUncertainTreatment* from the viewpoint of Rowe’s and Voorhoeve’s pluralist egalitarianism (see Rowe and Voorhoeve 2018). I illustrate your choice in Table 1.

Possible action		Type 1 virus	Type 2 virus	Prospective value of individuals’ prospects	Prospective value of possible anonymized distributions of final well-being
		$0 \leq p \leq 1$	$0 \leq p \leq 1$	$\alpha = 0.6$	$\alpha = 0.6$
Treatment A	Lea	90	30	54	$v\{90,30\}$
	Felix	30	90	54	
Treatment B	Lea	90	30	54	$0.6 * v\{30,30\} + 0.4 * v\{90,90\}$

Table 1: Your choice in SeverelyUncertainTreatment

To start, we can measure how well Lea and Felix would end up if treated successfully or not (see Rowe and Voorhoeve 2018, 244). Recall that, if not treated successfully Lea and Felix end up with brain damage. Their final well-being would be quite low (measured as 30). By contrast, if treated successfully they would be fully cured. Their final well-being would be quite high (measured as 90).

Furthermore, in *SeverelyUncertainTreatment*, you do not assign precise probabilities to Lea and Felix having a type 1 or a type 2 virus. I will assume here that you consider any probability of them having either virus possible. In other words, you believe that the probability of a type 1 virus or of a type 2 virus is respectively between 0 and 1 ($0 \leq p \leq 1$).

Rowe’s and Voorhoeve’s pluralist egalitarian theory then cares about (a) improving people’s prospects, (b) avoiding inequality in people’s prospects, (c) raising total final well-being and (d) avoiding inequality in final well-being (Rowe and Voorhoeve 2018, 243f). To apply this theory to our severely uncertain situation, we have to understand how to evaluate the consequences of our actions for individuals’ prospects and distributions of final well-being in such situations.⁶ In other words, we need to understand how to obtain the prospective value of individuals’ prospects and of the possible distributions of final well-being (Rowe and Voorhoeve 2018, 253). Let us start with Lea’s and Felix’ prospects.

To calculate the prospective value of an individual’s prospects under severe uncertainty, Rowe and Voorhoeve use a particular decision criterion called α -maxmin (Rowe and Voorhoeve 2018, 251).⁷ According to α -maxmin, the prospective value of an individual’s prospect is α times the expected value of the prospect under the worst possible probability distribution and $1-\alpha$ times the expected value of the prospect under the best possible probability distribution.⁸ For *SeverelyUncertainTreatment*, we get: $\alpha * (30 * 1 + 90 * 0) + (1-\alpha) * (90 * 1 + 30 * 0)$.

Which value does α have for an uncertainty averse person? Recall, for Rowe and Voorhoeve, an uncertainty averse person gives more weight to the worst possible probability distribution over possible outcomes of their actions than to more favourable ones (see previous section). In the α -maxmin criterion, this is expressed

⁶We cannot calculate the expected value of Lea’s and Felix’s prospects and of the distribution of final well-being. To do so we would need to assign a precise probability to the different possible final well-being levels and the distributions of final well-being. In a severely uncertain situation, according to Rowe and Voorhoeve, we cannot assign such precise probabilities.

⁷Rowe and Voorhoeve maintain that their results hold for other popular decision criteria one could use (Rowe and Voorhoeve 2018, 250–51).

⁸This implies that the pluralist egalitarian view does not consider only the worst possible scenario.

⁹This number is arbitrary.

as $\alpha > 0.5$ (Rowe and Voorhoeve 2018, 251). For SeverelyUncertainTreatment, using $\alpha = 0.6$, we get the following prospective value of Lea's and Felix' prospects for both treatments: $0.6 \cdot (30 \cdot 1 + 90 \cdot 0) + 0.4 \cdot (90 \cdot 1 + 30 \cdot 0) = 54$.

Next, we need to consider the prospective value of the possible anonymized distributions of final well-being. To understand how this prospective value is calculated, we need to understand how pluralist egalitarianism evaluates distributions of final well-being. Following Rowe and Voorhoeve, I use $v\{x,y\}$ for the value of a distribution in which one person has x final well-being and the other y final well-being (Rowe and Voorhoeve 2018, 257 footnote 28). The authors' pluralist egalitarianism then cares both about avoiding inequality in final well-being and improving final well-being (see Otsuka and Voorhoeve 2018, 81f; and also Voorhoeve and Fleurbaey 2016). Taking these concerns into account, possible distributions of final well-being are evaluated as follows:

An equal distribution of final well-being is evaluated as the average of final well-being in it. For instance, $v\{60,60\} = 60$. The pluralist egalitarian concern to avoid inequality then reduces the value of an unequal distribution of final well-being below the average of final well-being in it. Suppose, for example, that you ought to be indifferent between a distribution of 90 final well-being for one person and 30 final well-being for another person and a distribution of 50 for both persons. This means $v\{90,30\} = 50$ instead of $v\{90,30\} = 60$. Moreover, the pluralist egalitarian concern to improve well-being implies that a distribution with lower average final well-being is less desirable than one with higher average final well-being. This means $v\{50,50\} < v\{60,60\}$. In such a way, the pluralist egalitarian view assigns a value to each possible distribution of final well-being. In SeverelyUncertainTreatment, we get: $v\{90,30\}$, $v\{30,30\}$ and $v\{90,90\}$.

To calculate the prospective value of the possible distributions of final well-being, Rowe and Voorhoeve again use α -maxmin (Rowe and Voorhoeve 2018, 257 footnote 28). The only difference to the case of individuals' prospects is to replace individuals' possible final well-being levels with the possible values of the distributions of final well-being. Here this means:

$$\begin{aligned} \text{prospective value of possible distributions of final well-being in A} &= \alpha \\ &\cdot (1 \cdot v\{90,30\} + 0 \cdot v\{90,30\}) + (1 - \alpha) \cdot (0 \cdot v\{90,30\} + 1 \cdot v\{90,30\}) = v\{90,30\} \\ \text{prospective value of possible distributions of final well-being in B} &= \alpha \\ &\cdot (1 \cdot v\{30,30\} + 0 \cdot v\{90,90\}) + (1 - \alpha) \cdot (0 \cdot v\{30,30\} + 1 \cdot v\{90,90\}) = \alpha \cdot v\{30,30\} + (1 - \alpha) \cdot v\{90,90\} \end{aligned}$$

According to the proposed pluralist egalitarianism, you then ought to choose an action yielding the highest prospective value of possible distributions of final well-being (see Rowe and Voorhoeve 2018; and also Otsuka and Voorhoeve 2018, 81f; Voorhoeve and Fleurbaey 2016, 941f).

Having described your choice in SeverelyUncertainTreatment from a pluralist egalitarian perspective, I turn now to how uncertainty aversion conflicts with inequality aversion in SeverelyUncertainTreatment.

Section 3.2: Pluralist egalitarianism when uncertainty aversion conflicts with inequality aversion

Let us look at what the proposed pluralist egalitarianism requires you to consider when deciding on Lea's and Felix' treatments in SeverelyUncertainTreatment.

Rowe's and Voorhoeve's pluralist egalitarian theory requires you (a) to improve people's prospects and (b) to avoid inequality in people's prospects (Rowe and Voorhoeve 2018, 243f). Here, both treatments give Lea and Felix the same prospects. Thus, neither fares better concerning these.

Moreover, the proposed pluralist egalitarian view requires you to choose the highest prospective value of the

possible distributions of final well-being, expressing a concern to (c) raise final well-being and to (d) avoid inequality in final well-being (see Rowe and Voorhoeve 2018; and also Otsuka and Voorhoeve 2018, 81f; Voorhoeve and Fleurbaey 2016, 941f). Does treatment A or treatment B have a higher prospective value in SeverelyUncertainTreatment? This depends on two concerns: on your uncertainty aversion (i.e. on α) and on inequality aversion (i.e. on how low the value of the unequal distribution, $v\{90,30\}$, is).

In cases like SeverelyUncertainTreatment, these two concerns conflict (Rowe and Voorhoeve 2018, 260f). Treatment A will result in an unequal distribution of final well-being, while treatment B results in an equal distribution. Inequality aversion then speaks against A and in favour of B. But B involves uncertainty about the distribution of final well-being. You do not know how likely it is that you cure both Lea and Felix rather than none of them. By contrast, treatment A leaves you certain that the treatment will cure one person, leaving the other with brain damage. Your uncertainty aversion then speaks against B and in favour of A. In short, uncertainty aversion and inequality aversion suggest opposing actions.

Which action ought you choose if a concern to avoid uncertainty and one to avoid inequality point in opposite directions? Here, the proposed pluralist egalitarianism does not demand to choose inequality at cost of uncertainty or uncertainty at cost of inequality (Rowe and Voorhoeve 2018, 261). Instead, according to Rowe's and Voorhoeve's theory, so long as you also consider to avoid inequality in your decision, your uncertainty aversion can permissibly be a reason in favour of choosing an unequal distribution (Rowe & Voorhoeve, 2018, p. 265). You may then choose either action depending on how inequality and uncertainty averse you are (Rowe and Voorhoeve 2018, 261). If you care a lot about inequality but are only slightly uncertainty averse, B has a higher prospective value for you.¹¹ You choose B. By contrast, if you are very uncertainty averse but only slightly care for inequality, then A has a higher prospective value for you.¹² You choose A. For Rowe and Voorhoeve, both choices are permissible.

In the next section, I propose to amend Rowe's and Voorhoeve's theory for cases in which uncertainty aversion conflicts with avoiding inequality. I argue that when deciding in such cases it is not permissible to consider one's uncertainty aversion as a reason in favour of choosing an unequal distribution. Rather, whenever both concerns conflict, you ought to choose as if you were uncertainty neutral. You may then choose either action depending on how inequality averse you are.

Section 4: Amending pluralist egalitarianism for conflicts between uncertainty aversion and inequality aversion

The amendment I propose to the suggested pluralist egalitarianism relies on a difference in the moral importance of uncertainty and inequality within the view: inequality is per se morally objectionable while uncertainty is a moral burden only for uncertainty averse people. Let me start by explaining this difference. Consider inequality. As outlined above, Rowe and Voorhoeve extend pluralist egalitarianism to severely uncertain situations. This theory views inequality in individuals' prospects and final well-being as morally objectionable (Otsuka and Voorhoeve 2018; Voorhoeve and Fleurbaey 2016). Inequality ought to be avoided by any person.

Contrast this with uncertainty. Within the proposed pluralist egalitarianism under severe uncertainty, uncertainty is not per se morally objectionable such that any person ought to avoid it. This view only considers how uncertainty is a moral burden for an uncertainty averse person (Rowe & Voorhoeve, 2018, p. 252). Yet, as noted earlier, Rowe and Voorhoeve do not argue that uncertainty aversion is a morally required attitude (Rowe & Voorhoeve, 2018, p. 243). You could permissibly be uncertainty neutral or

¹¹This would mean for you: $\alpha * v\{30,30\} + (1-\alpha) * v\{90,90\} > v\{90,30\}$

¹²This would mean for you: $\alpha * v\{30,30\} + (1-\alpha) * v\{90,90\} < v\{90,30\}$

seeking. However, if it is permissible to be uncertainty neutral or seeking within this theory, then this theory does not claim that uncertainty should be a moral burden for any person. Hence, in the proposed theory, uncertainty is not per se morally objectionable – contrary to inequality.

One might object that Rowe's and Voorhoeve's pluralist egalitarianism could still imply that uncertainty is per se morally objectionable. This would be the case if uncertainty would constitute a moral burden for uncertainty neutral or seeking people in a similar way as it does for uncertainty averse people within pluralist egalitarianism.

However, Rowe's and Voorhoeve's pluralist egalitarian theory does not imply that uncertainty is per se morally objectionable. To see this, consider why uncertainty is a moral burden for uncertainty averse people: First, uncertainty reduces the prospective value of individuals' prospects for uncertainty averse people (see Rowe and Voorhoeve 2018, 265). Under uncertainty aversion, the more uncertain you are about individuals' prospects the lower is the prospective value of these prospects for you. The authors' pluralist egalitarian position requires both to improve these prospects and to avoid inequality in them (see previous section). Thus, the reductive effect of uncertainty about individuals' prospects is a moral burden for any uncertainty averse person. In *SeverelyUncertainTreatment*, given you are uncertainty averse, uncertainty reduces the prospective value of Lea's and Felix' prospects. Due to this reductive effect, uncertainty makes treatment A and B morally worse options than in the absence of such uncertainty.

Second, for uncertainty averse people, uncertainty reduces the prospective value of the possible distributions of final well-being. Under uncertainty aversion, the more uncertain you are about these distributions the lower is the prospective value of these distributions. Within pluralist egalitarianism, one ought to choose an action with a higher prospective value of the possible distributions of final well-being (see previous section). Hence, the reductive effect of uncertainty about the distributions of final well-being is a moral burden for an uncertainty averse person. In *SeverelyUncertainTreatment*, given your uncertainty aversion, the uncertainty about the possible distributions of final well-being in B reduces the prospective value of these distributions. Due to this reductive effect, uncertainty makes B a morally worse option than it would be in the absence of such uncertainty.

Now, consider what happens if someone is not uncertainty averse. For an uncertainty neutral or seeking person, uncertainty does not reduce the prospective value of people's prospects or of the possible distributions of final well-being. This is because this person would give equal or less weight to the least favourable possible probability distribution over the consequences of their actions. In lack of a reductive effect on the prospective value of people's prospects or of the distributions of final well-being, uncertainty is not a moral burden within pluralist egalitarianism. Thus, uncertainty is not a moral burden for uncertainty neutral or seeking people. Instead, it is only a moral burden for uncertainty averse people. Given this, uncertainty is not per se morally objectionable – contrary to inequality.

This difference in moral importance between uncertainty and inequality provides a reason to amend Rowe's and Voorhoeve's theory for cases in which uncertainty aversion conflicts with inequality aversion. Instead of allowing decision-makers to trade these concerns off, uncertainty aversion should be ignored whenever conflicting with inequality aversion.

To see why note first how uncertainty averse people consider avoiding morally objectionable inequality less in their decisions than uncertainty neutral or seeking people do. To illustrate, suppose you are very uncertainty averse and only slightly care for avoiding inequality in *SeverelyUncertainTreatment*. Your uncertainty aversion would drastically reduce the prospective value of the distributions of final well-being which treatment B could generate. This value would be very low, making treatment B a morally bad option for you. By contrast, your slight inequality aversion amounts to a relatively high prospective value of the

unequal distribution of final well-being generated by treatment A. Your slight inequality aversion makes A a morally acceptable option for you. The prospective value of A would be higher for you than the one of B. You would choose A – the unequal distribution.

Crucially, in your decision for A, you consider the morally objectionable inequality in A less than an uncertainty neutral or seeking person would. For an uncertainty neutral or seeking person, the prospective value of the possible distributions of final well-being under B would not be as low. B would be a morally better option for this person than it is for you as uncertainty averse. For the same slight inequality aversion, this uncertainty neutral or seeking person would then choose B – the equal distribution. In short, your uncertainty aversion leads you to consider avoiding morally objectionable inequality less in your decision than an uncertainty neutral or seeking person does.

Now, note, secondly, how ignoring your uncertainty aversion leads you to consider the moral burden of uncertainty less in your decision than if you uphold uncertainty aversion. In such a case, the prospective value of the distributions of final well-being under B would be higher for you. B would be a morally better option than it is if you uphold your uncertainty aversion. Even if you are still only slightly averse to inequality, you would now choose B – the equal distribution. Notably, even if you ignore your uncertainty aversion, uncertainty is still a moral burden for you as an uncertainty averse person. Hence, in this case, you consider the moral burden of uncertainty in B less in your decision than if you were upholding your uncertainty aversion.

However, due to the difference in moral importance between inequality and uncertainty, considering the moral burden of uncertainty less in your choice is not en par with considering inequality less. Despite being a moral burden for you, uncertainty is not per se morally objectionable within the proposed pluralist egalitarianism. In contrast to upholding your uncertainty aversion, ignoring your uncertainty aversion then only reduces how much you consider what is a moral burden exclusively for uncertainty averse people rather than morally objectionable per se.

I maintain that from a moral point of view it is more important to fully consider what is per se morally objectionable than to fully consider what is a moral burden only for some people. Therefore, it should not be permissible for your uncertainty aversion to reduce how much you consider avoiding morally objectionable inequality, as Rowe and Voorhoeve claim. Rather, their pluralist egalitarian view should be amended: Upholding one's uncertainty aversion should not be morally permissible whenever it conflicts with avoiding inequality.

How should you then evaluate the possible distributions of final well-being in *SeverelyUncertainTreatment*? It follows that you should evaluate these as if you were uncertainty neutral.¹³ This avoids letting uncertainty aversion reduce how much you consider avoiding morally objectionable inequality.

Let me clarify: I do not propose to amend pluralist egalitarianism under severe uncertainty such as to require people to be uncertainty neutral. Instead, I argue that whenever uncertainty aversion would conflict with inequality aversion, one should decide as if one were uncertainty neutral. This does not imply that one should be uncertainty neutral when both concerns do not conflict (as in most cases Rowe and Voorhoeve discuss).

There is still an open question: what ought you choose in *SeverelyUncertainTreatment*? I have argued that you should be uncertainty neutral. This means you should adopt $\alpha=0.5$ to obtain the prospective values of the possible distributions of final well-being. Here, this means: $0.5 \cdot v\{90,90\} + 0.5 \cdot v\{30,30\}$ for B and $v\{90,30\}$ for A. You then still ought to choose the action with a higher prospective value of the possible distributions of final well-being.

¹³One should not decide as uncertainty seeking (implying $\alpha < 0.5$). This would imply that uncertainty is claimed to be morally desirable, which in the proposed pluralist egalitarian view it is not.

But which is higher? This depends on the values of the distributions of final well-being. This means it depends on how inequality averse you are. For instance, if you are very inequality averse, you choose B, accepting the uncertain chance of leaving both Lea and Felix with brain damage to avoid inequality in final well-being. If you are only slightly inequality averse, you choose A, allowing inequality in final well-being to avoid the uncertain chance of leaving them both with brain damage. I have not argued how you ought to evaluate the distributions of final well-being. Thus, I also leave open whether you ought to choose A or B. I only maintain that you should not give extra weight to the uncertain chance of leaving Lea and Felix both with brain damage. You should decide as if you were uncertainty neutral.

Section 5: Conclusion

In severely uncertain situations, decisions on actions impacting other people's lives are difficult to make. In such situations, we lack sufficient evidence to say precisely how likely different possible consequences of our actions are. In light of this, many people cautiously consider the worst-case scenario more than others in their decisions. According to Rowe and Voorhoeve, they express an uncertainty averse attitude. Rowe and Voorhoeve maintain that such uncertainty aversion is rationally and morally permissible. Their pluralist egalitarianism under severe uncertainty addresses how uncertainty averse people ought to choose when deciding on the fate of others. In some especially problematic cases, uncertainty aversion conflicts with their morally required concern to avoid inequality. Here, the authors do not demand a particular action. Instead, for them, uncertainty averse people may decide depending on how they trade off their concern to avoid uncertainty and the egalitarian concern to avoid inequality.

I have argued that we should amend Rowe's and Voorhoeve's pluralist egalitarianism for situations in which uncertainty aversion and inequality aversion conflict. Within their pluralist egalitarian view, inequality is morally objectionable, while uncertainty is only a moral burden for uncertainty averse people. This difference in moral importance gives a reason not to let uncertainty aversion be considered whenever conflicting with avoiding inequality. Considering uncertainty aversion reduces how much consideration is given to morally objectionable inequality. By contrast, ignoring uncertainty aversion only reduces how much consideration is given to uncertainty. And uncertainty is a moral burden exclusively for uncertainty averse people, rather than per se morally objectionable. Therefore, whenever uncertainty aversion conflicts with inequality aversion, one should ignore one's uncertainty aversion and decide as if one were indifferent to uncertainty.

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