The Republican Tragedy of the Commons: The Inefficiency of Democracy in the Light of Climate Change

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Abstract
This paper argues that an analysis of the dissatisfactory outcomes of international negotiations concerning climate change must take into account procedures of political decision-making in democracies. Although the normative ideal of republican democracy has means of dealing with such dissatisfactory results, political processes in republican democracies take too much time and risk becoming stuck in tragic or dilemmatic decision structures when facing challenges such as climate change. Consequently, this paper discusses possibilities for redesigning republican democratic institutions to counter-act these negative forces. However, all possibilities discussed either call into question the normative ideal of republican democracy itself or would take too much time to be realized.

The global policy agreements reached in response to the impact of climate change give much cause for pessimism. In view of the outcomes of the recent conferences of the UNFCCC it is doubtful – although promised in the agreement of Durban for 2015 latest – that concrete and binding international agreements will be reached in the near future to drastically reduce greenhouse gas (GHG) emissions, a necessary means to prevent the catastrophic consequences of climate change. A widespread philosophical approach to addressing this difficulty is to call, on a global level, for a fair distribution of mitigating burdens which might need effective global political institutions. This paper argues that one must be rather optimistic to think that such a goal might be reached in the near future if one accepts the normative framework used in philosophy to defend democratic legitimacy from a republican perspective. This framework makes it unlikely that all nation-states – especially all democracies – will legitimise an international agreement on mitigating GHG emissions in due time. Hence, the conclusion of this paper is pessimistic with regard to the question of whether moral challenges with a global impact, such as climate change, will lead to the establishment of any global institutional framework.

According to Stephen M. Gardiner, at least part of the dissatisfactory outcomes of international negotiations concerning climate change can be explained if one accepts his description of the case: such negotiations have a tragic or dilemmatic structure. This paper argues, firstly, that the analysis of such a dilemmatic structure at a global level must consider nation-states’ procedures of political legitimacy (I). Although a normative understanding of republican democracy has some theoretical resources to deal with dilemmatic decision structures, political processes take too much time and risk becoming stuck in tragic or dilemmatic struct-

1 I would like to thank Johan Rochel, Fabian Schuppert and Anton Leist for helpful comments on earlier drafts of this paper.
2 United Nations Framework Convention on Climate Change.
tures when facing challenges such as climate change (II.). Therefore, possibilities for redesigning republican democratic institutions to counter such time consumption and risk are briefly discussed below. However, all possibilities for redesign discussed here call into question the normative ideal of republican democracy itself or take too long to be realized (III.).

The argument in this paper is restricted in three respects. First, it provides no defence for the need of an international agreement on mitigating GHG emissions. It just presumes that such an agreement is necessary to mitigate the consequences of climate change. Second, it takes Gardiner’s analysis of the potentially dilemmatic decision structure concerning climate change for granted. Third, the paper only deals with the republican tradition of democracy. Discussion of similar problems arising from the normative ideal of liberal democracy must be reserved for another occasion.6

I. Democratic Legitimacy and Climate Change

For normative theory of democracy, climate change has two problematic dimensions. First, to mitigate the consequences of climate change, international and binding agreements on reducing GHG emissions must be reached. Second, those living today have to bear the costs of mitigating GHG emissions, but the beneficiaries of such efforts will be future generations, especially those yet unborn. The first dimension is problematic for the normative ideal of democracy because it usually defines legitimate political decision-making as being locally bound. Only those decisions which find a majority or consent amongst citizens of a nation-state are legitimised. The second dimension challenges democracy theory because those who legitimise political decisions are living today and might or might not care for future generations. Within a democratic framework of legitimacy, both these stances are justifiable.

According to Gardiner, these two dimensions of climate change show why the difficulty of reaching international agreements concerning climate change must be understood as a tragedy of the commons. However, while he believes that the first, the intragenerational dimension, can become a simple coordination problem, the second, the intergenerational dimension, creates what he calls the real tragedy of the commons (A.). Gardiner’s analysis takes nation-states or generations as a whole as the main actors negotiating for international agreements concerning climate change. Admittedly, with regard to democracies this analysis is too narrow in focus. It fails to grasp the special challenges climate change poses for democracies. These challenges can be understood if one acknowledges the right to national self-determination how it is defended in the tradition of republican democracy (B.).

A. The Tragedy of Climate Change

According to Gardiner, the tragic structure in negotiating for international agreements concerning climate change is similar to the one proposed by Garrett Hardin when developing his tragedy of the commons.7 This tragedy occurs in situations in which, on the one hand, it is rational for all parties involved to preserve a commons for mutual advantage, but on the other hand, it is in the interest of each individual party to exhaust the commons to maximize its own profit while risking the depletion of the commons in the long run. Preserving the commons is in the interest of all parties involved because otherwise there would be no possi-

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bility of at least maintaining a certain level of welfare. It is rational for an individual party to want to maximize his or her own profits for two reasons. First, it is rational to exhaust the commons in small steps, which by themselves do not lead to their corrosion. Second, it is rational to exhaust the commons if there is no mechanism to control such behaviour. Thus, it is rational for every individual party to exhaust the commons because it might be at a disadvantage if all the other parties continue depleting the commons. According to Hardin, such a decision structure necessarily leads to a situation which corrodes the commons.8

This decision structure can also be applied to pollution. It is rational for all to preserve our atmosphere, but because there is no mechanism of control it is also rational for all individuals to pollute the environment in an effort to maximize their gain.9 With regard to climate change Gardiner believes that the real tragedy of the commons should not be understood as consisting of a structural dilemma for those parties living today but as a dilemma occurring between generations.10 Gardiner argues that the tragedy of climate change should be understood as an intergenerational tragedy because a tragedy of the commons among living parties can be overcome if they reciprocally have the capacity to control their collaborators by influencing their behaviour in some way.11 Such influence can either be reached by social interaction among the parties involved or through institutional design. In the first case, this would mean that the involved parties’ behaviour changes because they are in regular exchange.12 In the second case, the institutional framework to manage the commons had to be changed in a way to ensure the preservation of the commons.13 Therefore, if an adequate regulatory framework exists or develops, a tragedy of the commons can always become a simple coordination problem. But for such a framework to develop on a global level, a lot of additional difficulties have to be overcome.14

The crucial point here is that all depends on social and cultural circumstances relevant for such a framework to come into existence. If such a regulatory framework does not exist, the risk of a tragedy of the commons is difficult to overcome. Hence, since among the nation-states that are trying to reach an international agreement on binding GHG emission reductions such a framework does not exist today, respective decision structure is potentially dilemma. Although reducing emissions in order to prevent the drastic consequences of climate change might be understood as contributing to a common good, it is in the interest of nation-states either not to enter into such agreements or not to comply if they have signed. For economic development, it is better for a nation-state not to enter into such an agreement and easy to argue that it does not do so because others will not do so either. It is easy to pre-

9 Ibid., 1245f.
11 Ibid., 394.
12 Ibid.
tend to comply, because although protocols to measure the source and quantity of each country’s emissions exist, the exact link between their findings and mitigating duties of nation-states is anything but clear.\(\text{15}\) Therefore, for nation-states it seems better to behave as if they did conform to an agreement than to actually mitigate GHG emissions.

Such behaviour could lead to a tragedy of the commons. But whether such behaviour occurs depends on empirical matters. For instance, if a subgroup of all nation-states can drastically slow-down climate change by deciding to mitigate GHG emissions without a binding international agreement, the situation would become a simple coordination problem among these states, without dilemmatic structure. In addition, their example will put pressure on at least some other states to also adopt such mitigating behaviour.\(\text{16}\) This again would change a dilemmatic situation into a coordination problem. However, whether such a situation occurs depends on whether a portion of nation-states able to fulfil the task takes the necessary measures without an international agreement binding all nation-states globally. Moreover, it depends on further interdependencies among nation-states such as economic and military power relations whether a potential tragedy of the commons can be overcome. Although literature critical of Hardin’s analysis shows that a tragedy of the commons must not occur necessarily with regard to common goods, quite a number of (structural and contextual) obstacles must be absent for such a dilemmatic decision structure not to occur. And if such obstacles are absent a tragedy of the commons is not necessarily the consequence.\(\text{17}\)

Considering this possibility, Gardiner argues that although the intragenerational challenge of climate change might merely be a coordination problem without dilemmatic structure, it should be treated as if it had such structure. The reason for this is that the effects of not reaching mitigating goals have catastrophic consequences. In addition to this, a potential for an intergenerational tragedy of the commons still exists.\(\text{18}\) To see the problem of climate change as an intergenerational problem seems plausible because the drastic consequences of high GHG emissions today will arrive in the far future. If the tragedy of the commons involves parties of different generations, then it is hard to see how non-existing future generations might have an impact on the behaviour of the now living generation.\(\text{19}\) Thus, the empirical circumstances which might turn an intragenerational tragedy into a simple coordination problem cannot arise.

As convincing as this line of argument looks, from the perspective of normative democracy theory it is too narrow in focus. In the following, it is argued that the potential for the structural problem of an intragenerational tragedy of the commons with regard to climate change is inbuilt into the normative ideal of republican democracy. Because procedures for political legitimacy which accompany this ideal are at risk of leading to a tragedy. Although the ideal provides some normative resources to overcome such risk, if it materializes the necessary political processes to overcome it will simply take too much time. In consequence,

\(\text{15}\) Edward A. Page, Distributing the Burdens of Climate Change, Environmental Politics 17, 556–575, 558f.


\(\text{19}\) Ibid., 403.
there is a risk that republican democracies will not support an international agreement on mitigating GHG emissions in due time. If this is the case, it becomes difficult to believe that binding international agreements will be reached in the near future without changing the institutional framework for legitimate decision-making within democracies.

B. Relevance of Legitimacy

To see what role democratic legitimacy plays in negotiations for international agreements, it is helpful to introduce Miller’s two-stage model for dealing with climate change.20 In a first stage, according to Miller, the principles by which costs concerning emission reductions are distributed should be applied to nation-states. These principles should be fair because only a fair distribution of these costs makes it plausible to expect that nation-states will subscribe to and comply with such an agreement. In a second stage, it should be up to the nation-states to implement those policies which can be legitimized through the nation’s procedures for legitimate political decision-making. This second stage is necessary because it allows to respect the right to national self-determination and the economic capacities as well as cultural differences of nations. This is necessary in order to increase the likelihood of domestic acceptance and implementation of an international agreement.

This model lacks two important steps from the perspective of democracy. Miller wants to preserve national self-determination when it comes to implementation of an international agreement. But he neither considers the relevance of processes to authorize representatives of nation-states to negotiate for such agreements in the first place nor does he take into account problems of ratification after an agreement is put down on paper. The way the model is presented it is simply presumed that agreements at a global level can be reached and implemented domestically by political leaders of nation-states without being bound by national political decision processes. This seems inconsistent. By arguing for the relevance of national self-determination when it comes to the implementation of an international agreement while ignoring political processes necessary to legitimize negotiating for and ratify such an agreement misses important steps in the overall procedure to realize such an agreement. The following discusses in further detail the special characteristics of these political processes as they are conceived by normative theories of republican democracy.

From a republican perspective the relevance of national legitimization procedures can be defended on two grounds, either by relying on a contractarian defence of democracy or by arguing for the right to national self-determination itself. The first line of argument can be modelled with Rousseau’s defence of democratic institutions.21 The second can be found in the neo-Roman understanding of free nation-states.22 As convincing as these two defences might be, they cannot explain why republican nation-states remain stable and working. This problem provides a further argument for why democratic decision procedures should be taken into account when analysing the problems connected with the dissatisfactory results of international negotiations concerning climate change. Taken together, these three arguments show why the right to self-determination of nation-states is a central feasibility constraint for international climate policy.

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For Rousseau, the central question to be asked with regard to political institutions is the following: How can humans enter civil society without losing their natural liberty? In contrast to liberals such as Locke, Rousseau does not believe that the main goal of a civil society is to protect natural or God-given human rights. Rather, in his view, entering civil society means relinquishing all of one’s naturally given rights to society due to a social contract. Thus, liberty in a civil society is a product of a society’s creating social institutions. Civil society can guarantee each individual’s liberty because all those entering a social contract relinquish their naturally given rights to society equally. In turn, all receive the same socially secured rights and control over respective rights of all others via the established civil institutions.\(^\text{23}\) This means that a society can only guarantee liberty if all citizens are equal with regard to what they lose and gain.

In consequence, such a society cannot be governed by an executive installed without consent among citizens and a corresponding power of control or at least influence by citizens. In civil society, government must be elected, controlled and guided by citizens as a common political body.\(^\text{24}\) In this sense, from a republican perspective national legitimation bears relevance to negotiating and subscribing international agreements. International agreements without such legitimization would disturb citizens’ rights to control and influence their government and to codetermine what direction the common will of their nation-state should take. Hence, representatives of nation-states operating at a global level are only entitled to do so if their participation in negotiations and their signing of an agreement follow the common will of their co-citizens.

The relevance of political self-determination from a republican perspective gains even more weight if one takes into account the neo-Roman defence of the right to freedom for nation-states. According to the neo-Roman republicans of England in the 17th century, a nation-state can only be free if it is able to act freely in a similar vein as humans. Humans can only act freely if they are able to act according to their will. The same applies to nation-states; nation-states are free only under the condition that they are able to form and realize their own will. Such will can only be formed if it is determined through free will formation by the citizens of a society. Hence, a state can only be free if it is neither controlled by a foreign nation nor by a government that is not controlled or at least influenced by its citizens.\(^\text{25}\)

In contrast to Rousseau, central to this argument is not the maintenance of citizens’ natural liberty in civil society but a society’s self-determination, which was central to Miller’s second stage when it comes to the implementation of international agreements. However, neo-Roman republicans would not only think that it is important to respect a nation-states’ right to self-determination when it comes to the implementation of international agreements; they also believe that, for a state to be free, its citizens should have control of or at least influence on what agreements their officials negotiate and which agreements they subscribe to on a global level. Again, such agreements are only legitimate if the political actors who negotiate subscribe to such agreements have been authorised by the citizens of their society to do so.

\(^\text{24}\) Ibid., 15f.
From these two lines of argument, it becomes clear why republicans defend democratic institutions. Such institutions can ensure that nation-states either secure civil liberty or a nation’s freedom. Admittedly, basing democratic institutions solely on these arguments would render such social constructs very unstable. Following Jean Hampton, such arguments can lead to a structural problem for democracies, similar to the prisoners’ dilemma.  

These arguments show that there is no guarantee that citizens are ready to support democratic decision procedures and to accept decisions resulting from these procedures as legitimate. Therefore, as soon as citizens believe that political decisions do not advance the common good the way they think it should be realized, it is probable that they might try to reach the realization of their political beliefs via instruments which are undemocratic in character. If this argument is correct, there is a risk that social instability occurs. A nation-state becomes unstable as soon as some citizens stop respecting political decisions established through democratic procedures as legitimate and fight for their political beliefs while avoiding institutions for democratic decision-making.

According to Hampton, to see why nation-states can and have overcome this risk, it is necessary to assume that nation-states are guided by governing conventions which developed during their history. Development of such governing conventions can explain why citizens identify with the social institutions of their nation-states and are ready to accept political decisions as legitimised. Only the development of such identification and acceptance over time can guarantee the social stability of a society. Seen this way, it is not normative argument (a social contract or the nature of a free state) which ensures the stability of democracies but a factual historical process. Hence, with regard to international agreements, democratic legitimacy is not only relevant because of the role it plays in the normative defence of republican democracy but also because it ensures a democracy’s social stability. Instability in nation-states renders it doubtful that such states will sign, implement and enforce international agreements. Thus, it is unlikely that international agreements will be reachable without respecting national processes of legitimisation.

In consequence, from a republican perspective, international agreements can only be acceptable if they are not in conflict either with the common will or states’ (and citizens’) right to self-determination. This means in the first place that those taking part in negotiations on international agreements have to be authorized by their co-citizens to negotiate such agreements. And if such agreements are signed, it must be possible for citizens to contest them through processes of democratic decision-making. Only such a possibility of contestation allows citizens to control and influence government. Hence, although there might be strong ethical arguments for mitigating GHG emissions, it is not enough that the respective international agreements are fair. First, they have to be negotiated by those who are legitimately authorized to do so and second, they have to be ratified via further political decision procedures.

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26 Jean Hampton, Political Philosophy (1997), 64f.
27 Ibid., 78–80.
28 Citizens’ right to contestation does not exclude the possibility that experts prepare the content of policy decisions and international agreements. It only demands that citizens can have a say when it comes to the decision of whether a policy or an international agreement should be implemented.
If one accepts this argument, a new field is opened which may involve a risk for a tragedy of the commons. Democratic processes to authorize political actors to negotiate for international agreements or to ratify agreements concerning climate change can involve dilemmatic decision structures. This is possible if these processes allow for behaviour by individuals or the citizen body as a whole which could lead to a tragedy of the commons. The next section explores this risk that republican democracies face when it comes to international agreements such as necessary to mitigate the consequences of climate change. However, similar challenges are faced by theories of democracy in general. This is especially true if democracy is understood as a purely procedural ideal.

II. Institutions of Republican Political Decision Making

So far, this paper has argued for the following theses: If one accepts that the challenges of climate change can lead to a tragedy of the commons, and if one is ready to acknowledge the relevance of democratic legitimation to the establishment of international agreements, then institutionalization of the latter might allow for dilemmatic structures to occur within republican democracies. Such structures would form the foundation for a tragedy of the commons on an international level because those authorized to negotiate international agreements to mitigate GHG emissions would be bound by this institutional framework. Hence, it is possible that these political actors would try either not to enter into such an agreement or maximize their country’s advantage, even though this might hamper the mitigation of the catastrophic consequences of climate change. Furthermore, citizens’ right of contestation when it comes to the ratification of international agreements bears the risk that, even if political leaders sign an international agreement, it may not be implemented.

This section looks more closely at the institutions defended by republicans to ensure political legitimacy or, more generally, citizens’ right to have an equal say in political decision-making. It is held that the particular institutions defended by republicans provide democracies with mechanisms of control to avert the risk of a tragedy of the commons (A.). However, when it comes to problems such as climate change, these mechanisms do not work reliably. They cannot have the effect needed because for these institutions to be able to effectively control and influence political actors’ and citizens’ political behaviour, climate change and its mitigating demands have to be accepted as being a common good by citizens of republican democracies (B.).

A. Screening and Sanctioning for Reasonableness

According to Rousseau, the main goal of political decision-making is to form a common will. Such a common will is not a compromise between citizens’ special and private interests but—mathematically speaking—a subset of their beliefs concerning what the common will of their nation-state should be. This goal for political decision-making leads to high demands concerning the institutionalization of proper political processes and concerning the behaviour of citizens. First, political institutions should abandon all influence which could subvert the formation of the common will. This is why Rousseau thinks that no political parties and interest groups should exist because they could promote their special interests rather than the common will. Second, citizens have a duty to abstain from their special and private interests when it comes to political decision-making and debate.

30 Ibid., 11.
These requirements are too idealistic. The first one is too idealistic because in democracies beyond a certain size citizens can only organise their interests if they affiliate and organise themselves into parties and other interest groups. (This is the reason why Rousseau claimed that his theory should ideally be applied to states no bigger than Geneva in his time.) With regard to the second requirement, it is unrealistic to assume that it is possible for humans to fully abstain from their private and special interests when it comes to politics. A normative political theory must always accept that at least some citizens are not able or willing to behave as theory assumes. Hence, a defence of republican democracy cannot only rely on an optimistic conception of human beings complying with the values of the ideal of republican democracy but must also provide institutions to deal with knaves.

A further difficulty arises with Rousseau’s understanding of the main goal of politics. Assuming that political decision procedures always form a common will morally exaggerates the role these procedures play in nation-states. Forming a common will in the way Rousseau understands it makes every political decision a decision about how citizens understand themselves and their political body as a whole. This makes every political decision a decision with high moral impact. In contrast, most often the goal of political decision-making is to solve specific social or economic problems which do not have strong relevance to a community’s self-understanding.31

Hence, if one accepts these arguments, then it is more convincing to weaken Rousseau’s requirements for political decision-making. Such weakening can be found in deliberative democracy theories. These theories claim that political actors and citizens should be bound by conditions of reasonableness and not necessarily by the condition of forming a common will the way Rousseau conceived it. In terms of political decision-making, citizens should respect certain rules, which include among others accepting the non-coercive enforcement of the best arguments and respecting equality among participants in deliberation.32 These requirements are much less idealistic than Rousseau’s were because they allow for parties and interest groups to develop. Such groups can bundle citizens’ interests and voice them in a reasonable way. Moreover, they allow for citizens and political actors to defend their private and special interests as long as they are ready and able to justify them under conditions of reasonableness. Furthermore, these requirements do not exaggerate the role political decisions play in nation-states. They only demand that taking part in such decision procedures follows certain modes of justification. This turns political decisions into coordination problems; parties look for the most reasonable, or at least the most agreeable, solution for specific social problems and will, therefore, abstain from maximising their own profit at the cost of the common good.

This is why neo-republicans such as Philip Pettit claim that the main goal of republican democracies is to ensure the absence of arbitrary domination. According to Pettit, the absence of arbitrary domination in political decision-making can only be ensured if all citizens are able to influence and contest political decisions. Otherwise, there would be a risk that government or political actors in power could arbitrarily dominate their co-citizens by enforcing their private interests and beliefs.33 To ensure influence and contestation, Pettit

31 Jürgen Habermas, Inclusion of the Other, Studies in Political Theory (2000), 245.
32 Ibid., 260.
believes political decisions and debate must be based on conditions of reasonableness (in Pettit’s words: following conditions of deliberation). To ensure these conditions, an adequate institutional framework is needed.

Most importantly, it must be ensured that citizens can participate in political decision-making by effective direct or indirect influence. For such influence to be effective, it must be guaranteed that there are channels through which citizens can voice their beliefs. Participating in political deliberation has no value if it cannot somehow be made public. Another condition is directly linked to this: political institutions must provide citizens with opportunities to gather relevant information. This is necessary because conditions of reasonableness can only be met if the arguments voiced are based on relevant information. In addition to the first two conditions, democracies must ensure that political actors defend their positions based on reasonable grounds. This is necessary because there is always a risk that some political actors will ignore the conditions of reasonableness. If republican democracy did not provide suitable institutions, it would base conditions of reasonableness on an optimistic belief that humans in republican nation-states always behave in a way that fits the theory. Moreover, it is simply more realistic not to assume that humans always comply with conditions of reasonableness when it comes to politics.

Pettit argues for two mechanisms to ensure political actors’ reasonableness: screening and sanctioning. Screening mechanisms shall eliminate ignorance with regard to the conditions of reasonableness. Appropriate political institutions ensure that only those citizens who are inclined to comply with these conditions obtain positions of political power. However, Pettit believes those in power are not incorruptible. To avoid corruptibility, sanctioning mechanisms should ensure that political actors’ compliance with the conditions of reasonableness is reinforced through political institutions. As such sanctioning cannot preclude all corruption, political institutions should also install penalties to keep knives in line.

Installing these mechanisms allows republican democracies to counteract the risk of a tragedy of the commons in general: Screening and sanctioning are mechanisms which can influence the behaviour of political actors and prevent them from acting in a solely self-interested and strategic manner. Appropriate institutions ensure that political actors are motivated to justify their political beliefs on reasonable grounds. This guarantees that political actors will not try to enforce laws and decisions which could lead to corrosion of the common good of republican democracies: citizens’ civic liberty or their right to self-determination. However, these mechanisms only work if citizens make them work by respective political action. In consequence, republican democracies can only avert the occurrence of a tragedy of the commons if its citizens are prepared to fulfil their political duties of control or influence through these mechanisms. A civil culture is needed in support of these duties, in Hampton’s words a governing convention conveying identification not only with political decision procedures but also with citizens’ political duties concerning mechanisms of screening and sanctioning.

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34 Ibid., 188f.
35 Ibid., 190ff.
36 Ibid., 221.
37 Ibid., 222ff.
38 Ibid., 229f.
39 Pettit’s arguments for the relevance of such civil culture in republican democracies can be found in chapter 8 of his Republicanism (1997).
B. Lack of Control in the Case of Climate Change

As presented thus far, a republican defence of democracy is an anthropocentric enterprise. This becomes especially clear when we examine screening and sanctioning mechanisms. These can only influence and control political actors’ behaviour if citizens are ready to fulfil their duty to actually participate in making them work. However, Pettit believes that republicanism is not in conflict with environmental concerns, which in our case would be climate change. Environmental damage leads to arbitrary domination by those who inflict damage on others.  

Therefore, Pettit is inclined to think that republican democracies will care about the environment, or more especially about the consequences of climate change, because the main goal of democratic decision-making is to avoid arbitrary domination. Moreover, it could be argued that the conditions of reasonableness ask political actors in republican democracies to follow undoubted scientific methods and beliefs. Hence, reasonable political actors should justify their opinions taking into account scientific findings, in our case findings provided, for example by IPCC reports. In consequence, conditions of reasonableness would ensure that republican democracies take potential environmental damage seriously. This makes it plausible that republican democracies can avoid the tragedy of the commons which Gardiner fears on an international level. As will be argued in the forthcoming, it is only a republican hope that screening and sanctioning mechanisms necessarily work in a way to abandon a tragedy of the commons with regard to climate change. This is for three reasons.

First, although institutions to voice political beliefs and gather relevant information concerning climate change can ensure that citizens reasonably contribute to political decisions and contest them, those who can take action in democracies to bring the relevant policy considerations to the political arena are existing citizens living in a specific nation-state. As the catastrophic consequences of climate change will not mainly affect those living today and – from a western perspective – most likely first burden humans living abroad, there is no guarantee that their concerns will be voiced with necessary force to influence political decision-making. Hence, it is possible that citizens will not enforce political beliefs which would lead to an international agreement to mitigate GHG emissions. For the same reasons there is no guarantee that citizens will contest a political decision not to subscribe to an international agreement to mitigate GHG emissions.

A similar, and second, problem emerges with regard to screening and sanctioning mechanisms. Because citizens’ political action is necessary to keep these mechanisms working, it depends on their political initiative which justifications are rejected as unreasonable. As long as citizens are ready to accept justifications for political decisions which question the anthropocentrically induced consequences of climate change as reasonable, it is possible that not subscribing to international agreements concerning mitigation of GHG emissions can be justified on reasonable grounds. Thus, within the normative conception of republican democracy, it is the citizens who control which justifications count as reasonable in accordance with conditions of reasonableness.

40 Ibid., 137f.
These first two cases show why the normative framework of republican democracy provides no guarantees for avoiding the risk of a tragedy of the commons in the case of climate change. It is possible that citizens do not voice climate change concerns forcefully enough to influence political decisions in the way needed to reach an international agreement on mitigating GHG emissions. Similarly, at least in principle it is possible that citizens accept political decisions as reasonably justified which are more or less explicitly in disagreement with scientific findings concerning climate change. This can lead to a tragedy of the commons as soon as it is more rational for political actors to propose political programmes and decisions which are in accordance with citizens’ voicing their interests and beliefs about reasonable justification but conflict with the need for an international agreement to mitigate GHG emissions. Such behaviour is rational for political actors, because following citizens’ opinions increases the chances of remaining in or obtaining positions of power. Moreover, if no mechanisms of control work to abandon such behaviour then it is also rational for other political actors to behave the same way. What results is the decision structure of a tragedy of the commons.

A third difficulty comes with the fact that two approaches to counteracting climate change are at hand: mitigation or adaptation. On the one hand, it is possible to argue that climate change can only be counteracted by mitigating GHG emissions. On the other hand, however, it is also possible to argue that future technical development will allow humans to adapt to the drastic consequences of climate change. And thirdly, it could be argued that both strategies are necessary. Again, which of these strategies is accepted as justifiable on reasonable grounds depends on citizens’ beliefs and political action. Therefore, if all these strategies are accepted as reasonable and citizens tend to support policies proposing adaptation rather than mitigation, it is rational for political actors to propose political programmes defending adaptation as a reasonable strategy to counteract climate change. Given these conditions, a tragedy of the commons can occur in republican decision procedures with regard to the acceptance and implementation of an international agreement for mitigating GHG emissions.

The occurrence of all these risks of a tragedy of the commons depends on which justifications for political decisions and beliefs the citizens of a nation-state are ready to accept as reasonable. Furthermore, these risks depend on citizens’ action and readiness to actively maintain mechanisms of screening and sanctioning. Hence, if political action by the citizens in a republican democracy supports mitigating policies and respective reasonable justification, then these risks of a tragedy of the commons can be ruled out. But the occurrence of such political action would need an appropriate civil culture to wit an appropriate governing convention supporting mechanisms of screening and sanctioning in a way that supports international agreements to mitigate GHG emissions, because such a culture determines how citizens will interpret their political duties of control and influence. Moreover, which justifications citizens are ready to accept as reasonable depends on political culture as well.
Therefore, for screening and sanctioning mechanisms to work in the way needed to ensure acceptance of international agreements on mitigating GHG emissions the necessary civil culture has to be established within a society first.\textsuperscript{42} If it has not been established yet, change in a civil culture can only occur in a historical process, a process which might take as long as a binding governing convention necessary for a democracy’s stability to develop. Thus, necessary influence on political decision-making will need time as well. Since before reaching such a state of affairs there is a risk of republican democracies being stuck in a tragedy of the commons, such a historical development can take an even longer time than it would without tragedy. One might of course argue that global discourse on climate change, especially in the context of the conferences of UNFCCC, could facilitate and fasten development of the necessary civil culture. But it only could, there is no clear-cut positive and fastening influence of global discourse on civil culture. It all depends on how citizens perceive this discourse and translate it into concrete political action.

In consequence, although one might argue that a republican defence of democracy provides resources to overcome the risk of a tragedy of the commons, it is potentially inefficient to make these resources work as effective mechanisms of control to support an international agreement on mitigating GHG emissions. In this sense, republican democracy is not deficient with regard to problems such as climate change, but it is potentially inefficient. Such potential inefficiency is a problem, because according to IPCC findings counteracting the drastic consequences of climate change needs appropriate political decisions now.

\textbf{III. Conclusion: Screening and Civilizing to Stop Climate Change?}

A republican defence of democracy can provide resources to overcome the risk of a tragedy of the commons in many political circumstances. This is also true for the challenges of climate change. However, as republicanism is an anthropocentric and especially a citizen-centred normative political theory, whether such risk can be overcome depends on political action by a democracy’s citizens. It is up to them which justifications for political decisions they accept as reasonable and to voice political claims to mitigate the consequences of climate change. How citizens influence and control political actors depends on their beliefs about what is reasonable and not necessarily on what science values as the best means to adequately deal with the challenges of climate change. Therefore, in a republican democracy the development or existence of a civil culture is needed which supports the political duties necessary to make mechanisms of control work to overcome the risk of a tragedy of the commons with regard to climate change. If such a culture is inexistit, its formation takes time. This is the reason why even though republican democracies are not deficient they are potentially inefficient with regard to challenges such as climate change.

Considering the institutions republicans propose to regulate political decision-making, there are two possibilities at hand which might allow to counteract this inefficiency. The problem with these possibilities is that they collide with the republican arguments to normatively defend democracy. With regard to institutions to voice political beliefs, it could be

\textsuperscript{42} This claim finds strong support in empirical research about the necessary contextual conditions for a tragedy of the commons not to occur. It is not only the decision structure and the actors involved in a situation which make this more probable. It also depends on the context of interaction to wit in our case the civil culture of a republican democracy whether a tragedy of the commons can be abandoned (Robert Axelrod, Robert O. Keohane, Achieving Cooperation Under Anarchy: Strategies and Institutions, World Politics, 38 (1985), 226–254, 238ff.).
claimed that interest groups standing in for climate concerns should have a right to more influence. Such a proposal would give certain citizens a stronger impact on political decision-making, which puts into question republicans’ claim that in civil society no citizen should be arbitrarily dominated by others. Concerning the conditions of reasonableness, it could be argued that certain scientific experts should have a stronger influence on political decision-making. They could ensure that decisions are in line with scientific findings. Such a proposal struggles with the same difficulty as the first because it would provide some citizens with more power in political decision-making processes than others. Moreover, those would be climate change experts, who are justified in taking this role by the scientific community but are not democratically authorized to do so.\textsuperscript{43} Hence again, from within the normative framework of republican democracy one is drawn back to the development of a civil culture necessary to make screening and sanctioning mechanisms work in the way needed for an international agreement on mitigating GHG emissions. Admittedly, enforcing such development to make institutions of political decision-making more efficient is in conflict with citizens’ right to not be arbitrarily dominated as well. Those in a position to enforce such cultural change would dominate those being forced to follow such a new civil culture.

These proposals have one problem in common. To be realized as legitimised republican institutions, they have to be justified by means of political decision procedures. As with regard to climate change, such procedures could lead to a tragedy of the commons because the development of a civil culture supporting the effective operation of screening and sanctioning mechanisms to avoid a tragedy is needed first. Hence, although the normative ideal of republican democracy provides resources to overcome the risk of such tragedy, it is inefficient all along the line. It is potentially inefficient both in guaranteeing adequate decisions concerning international agreements for mitigating GHG emissions and with regard to the discussed possible redesign of its institutions to overcome its inefficiency. On a global level, where negotiations on international agreements to mitigate GHG emissions are concerned, respecting the relevance of democratic legitimization in republican democracies makes it very plausible that not all nation-states (democracies) will subscribe. This shows why Gardiner is right in claiming that the intragenerational dimension of climate change should be treated as if it were a tragedy of the commons even though under optimal circumstances it could become a simple coordination problem. It should be treated this way because there is a risk that in republican democracies necessary political decisions are not reached in due time.

\textsuperscript{43} Similar to an earlier remark (see Fn 28) this does not mean that scientific experts are not entitled to play any special role in political decision making. In contrast, with regard to lots of policy decisions it is important to consult scientific experts. But they should only have a voice of advice and no special rights concerning the political decision itself.