



Climate change and state interference: the case of privacy

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Abstract

Climate change is one of the most important issues we are currently facing. There are many ways in which states can fight climate change. Some of them involve interfering with citizens' personal lives. The question of whether such interference is justified is under-explored in philosophy. This paper focuses on a specific aspect of people's personal lives, namely their informational privacy. It discusses the question of whether, given certain empirical assumptions, it is proportional of the state to risk its citizens' privacy or to risk infringing its citizens' right to privacy to fight climate change. The main claim this paper argues for is that if fighting climate change and protecting our privacy conflict, we have good reason to fight climate change rather than protect our privacy.

Keywords Climate change · State interference · Privacy · Right to privacy · Surveillance · Climate justice · Climate ethics

1 Introduction

Climate ethics is a growing, diverse, and important field of philosophical research. It seems, however, that there is a striking lacuna in current philosophical discussions about the climate crisis: philosophers have not sufficiently discussed whether and to what extent the state may justifiably interfere with its citizens' personal lives to fight climate change. The key goal of this paper is to start this debate. I will try to achieve this by conducting a case study. I will focus on a particular aspect of people's personal lives, namely their informational privacy, and I will discuss the question of whether it would be proportional of the state to risk interfering with it to fight climate

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change. The paper relies on a broad notion of interference, according to which a state measure interferes if it infringes on the citizens' moral rights.

Some may wonder how risking informational privacy can be effective in fighting the climate crisis. After all, having privacy does not emit greenhouse gases. However, consider the 2023 report of the Intergovernmental Panel on Climate Change (IPCC). It contends that "socio-cultural and behavioral changes" are among the most important ways to fight the climate crisis (Calvin et al., 2023, sec. C.3.1). These involve changes in very personal matters such as our diets, housing, and mobility (see Calvin et al., 2023, p. 27). The report makes specific suggestions. People should shift to a sustainable diet, reduce food waste, and walk or cycle instead of using cars. This paper is not concerned with our *individual obligation* to do these things. Rather it is concerned with the justifiability of the state's implementing measures that make it more likely that we all do these things, regardless of whether we are morally obliged to do them. It is not hard to see how the state's gaining knowledge about us can help it fight the climate crisis in this way. Let me illustrate.

First, data about individual behavior helps states set up a climate-friendly infrastructure. In 2016, the UN set up the "Data for Climate Action" challenge, which was a call for Big Data research projects. It encouraged researchers to, among other things, analyze how "privacy-protected digital data—such as mobile data or bank card transactions—can provide valuable insights into human behavior patterns and climate risk" ("Data for Climate Action – UN Global Pulse," n.d.). The Grand Prize-winning project uses data about traffic jams and individual mobility in Mexico City to suggest places for charging stations for electric vehicles and to evaluate different electrification policies ("Meet the Winners," n.d.; see also McKie, 2021). Another winning project combines credit card transaction data with air pollution data in Spain to find out how air pollution and spending behavior relate ("Meet the Winners," n.d.). These research projects illustrate how helpful it may be for states to learn who drives their cars where and when, or who buys what and when they buy it, in order to facilitate a shift to a climate-friendly infrastructure.

Second, there already are laws that help fight the climate crisis. Think of speed limits for vehicles or rules for behavior in wildfire areas. Setting up surveillance systems would discourage people further from breaking these laws, thereby making them more effective. Consider wildfire areas. Studies suggest that 84% of all wildfires in the USA between 1992 and 2012 were caused by humans (see Balch et al., 2017). Wildfires are problematic because they emit greenhouse gases and destroy plants that would otherwise be carbon sinks (see Clarke et al., 2022). Officials have implemented rules to reduce the danger of wildfires, such as a ban on smoking in most parts of parks in California, and are considering implementing regulations on what vegetation can be planted next to a house (e.g., Sommer, 2023; California, n.d.). Surveilling areas that are especially prone to human-caused wildfires may help to enforce these rules and to discourage people from climate-damaging behavior. Imagine a system of drones surveilling wildfire areas, similar to the drones that some countries used during the Covid-19 pandemic to remind people of social distancing rules and track non-compliant citizens (UNICEF, 2020).

In what follows I will focus on two privacy-risking measures to fight climate change: first, surveilling every car in a state's territory to set up a climate-friendly

infrastructure and to discourage people from driving too fast and, second, surveilling certain areas to prevent wildfires. To avoid misunderstandings, the idea is not that the state would publish information about, say, who smokes in a forest or violates traffic rules. The idea is that the existence of the surveillance systems would itself discourage climate-damaging behavior, help enforce existing laws, and that the state would use the gained data in a clearly defined and independently controlled way to build a climate-friendly infrastructure. Moreover, I will assume that the surveilled persons have not violated any moral obligations or laws, have not forfeited their rights, and are not liable subjects of surveillance. As it is easier to justify the surveillance of people who are liable to it, I accept a comparably heavy burden of justification (for a discussion of liability in the context of surveillance see Rønn and Lippert-Rasmussen 2020, Sect. 3; see also Hanin, 2022).

In the next section, I will present the main question of this paper in more detail. Section 3 is the heart of the paper. Here, I will discuss arguments to the conclusion that risking our privacy to fight the climate crisis is *not* justified, and I will show that they are problematic. I will argue that if fighting the climate crisis and protecting our privacy conflict, we have good reason to fight the climate crisis instead of protecting privacy. Section 4 concludes the paper.

Let me briefly clarify three points. First, this paper is only concerned with informational privacy, and not with decisional or locational privacy (see Rössler and DeCew 2023, Sect. 3). Second, when I say “our privacy” and “our states”, I mean the privacy of those who live in relatively wealthy, democratic, and secure states that have, historically, contributed most to causing the climate crises. Thus, the views argued for in this paper does not apply to citizens of authoritarian states that are currently contributing to the climate crisis. Third, the following will be a discussion of conflicts between different values and rights. Again, I assume that the persons whose privacy rights are risked have not forfeited their rights. It is important to keep in mind that when two values or rights conflict and we realize that the first is more important than the second, it does not follow that the second is not important. If we conclude that, in case of conflict, it is justified for our states to risk our privacy to fight climate change, then our states should, among other things, respect our privacy as much as possible and compensate those who are harmed because of privacy infringements. Thus, nothing of what I will say implies that a totalitarian surveillance state is justified to fight climate change (I will come back to this in Sect. 3.5 and 3.6).¹

¹ One may think of the conflict at issue in terms of lesser-evil justifications: “if one must choose between 1) a scenario in which some smaller harm is inflicted upon non-labile individuals in order to avoid a greater degree of harm for the non-labile individuals and 2) a scenario in which the minor harm for the non-labile individuals is not inflicted and the greater harm occurs, then the first scenario should be preferred” (Rønn and Lippert-Rasmussen 2020, p. 189; they refer to Uniacke, 2011, p. 266). A potential problem for this characterization is that one may infringe a person’s right to privacy without harming her. Then, the lesser-evil justification, as it is presented here, would not apply. As I want to stay neutral towards the relation between privacy and harm, I will characterize the issue, more generally, as a conflict between rights and values (for general discussions of conflicts of rights see, e.g., Kiesewetter, 2023; Brink, 2023). I’m grateful to an anonymous referee for pressing me on this point.

2 How privacy and fighting climate change conflict

The goal of this section is to present the main question of the paper and its importance in more detail. Let me begin with some core assumptions.

The climate crisis is already causing a lot of unjustified harm and will, most likely, cause much more severe unjustified harm in the future. Some states, such as the USA, or groups of states, such as the European Union or G7, are contributing to this harm and could slow down global warming or even stop it by forming alliances with more states and taking coordinated measures. Both would result in much less unjustified harm. Therefore, these states or groups of states are obligated to find allies and take coordinated political measures to fight the climate crisis.

Even though each of the claims I have just made can be debated, I will take them for granted (for overviews, see, e.g., Moellendorf, 2015; Roser and Seidel 2017; Caney, 2021; Schulan, Tank, and Baatz [online first](#)). To avoid misunderstandings, let me stress again that the paper does not assume that *individuals* have an obligation to fight climate change. Even some of those who doubt that we personally ought to change our behavior to fight climate change believe that our states ought to implement measures to fight it (e.g., Sinnott-Armstrong, 2005).

The general question of this paper is whether our states may justifiably interfere with citizens' personal lives to fight the climate crises. This question is rarely discussed in philosophy, which is surprising because similar questions have a long history. A core debate in public health ethics, for example, is about whether and to what degree states are allowed to interfere with their citizens' personal lives when it comes to, say, quarantining, mandatory vaccination, taxes on or advertisement against smoking (see Faden, Bernstein, and Shebaya 2022, Sect. 3.2). There are similar philosophical discussions about paternalism—for example, the compulsory wearing of seatbelts—or the production and consumption of pornography (see Dworkin, 2020; West, 2022). One idea in these debates is that the citizens' liberty or autonomy and their corresponding moral rights provide strong moral reasons against, say, mandatory vaccination or wearing of seatbelts. A successful reply to this challenge needs more than pointing out the efficacy of a state intervention in avoiding harm or that general principles of justice, such as egalitarian principles, support the intervention. These considerations would only show that there are good moral reasons to implement the measure. However, the reasons to respect the citizens' liberty or autonomy and their corresponding rights may still be weightier. It is not even sufficient to show that other people have a right that the state implement the measure. This is because it may still be the case that citizens also have a right *against* state interference. Then, there would be a conflict of rights and it would be an open question how to resolve it. Thus, a careful weighing of the considerations against state interference and of the considerations in favor of it is necessary to find out whether the measure is justified.

Now consider the discussion in climate justice about how to distribute the burdens of fighting the climate crisis. Emissions egalitarianism says, in one formulation, that “every person should have the same right as everyone else to emit greenhouse gases” (Torpman, 2019, p. 750; see also Singer, 2010; Broome, 2012, Chap. 4). Assume that this view is correct. Then, those who emit a lot have the moral obligation to reduce their emissions drastically. But emissions egalitarianism does not directly imply that

the state is justified to interfere with its citizens' personal lives. We have many moral obligations that our states cannot justifiably enforce. Think of the obligations to be friendly to our neighbors, faithful to our partners, or keep promises to our friends. It is one thing to say that we have these obligations and something very different to say that the state is justified to enforce them. Thus, even if we accept emissions egalitarianism, it does not—without further argument—follow that the state may justifiably interfere with our personal lives to enforce an equal distribution of emissions rights.

An alternative to egalitarianism is emissions sufficientarianism (e.g., Caney, 2009; Roser and Seidel 2017). One version says that every country has the right to poverty-eradicating sustainable development. Such a development is energy and, currently, greenhouse gas intensive. Therefore, every country has a right to emit greenhouse gases until poverty is eradicated. Moreover, all countries together have the obligation to drastically reduce greenhouse gas emissions. Thus, the corresponding burdens “must fall disproportionately on those states that have already achieved a high level of development and that have the resources to eradicate poverty within their borders” (Moellendorf, 2022, p. 86). Assume that this view is correct. It does not directly follow that a poverty-free state is justified to interfere with its citizens' personal lives to reduce greenhouse gas emissions. It may follow that such a state has very good moral reasons, based in other countries' rights to sustainable development, to interfere in these ways. But the citizens of the former state may still have rights against state interference. It would be an open question how to resolve the conflict.

The point of this discussion is to make the claim plausible that climate ethics has largely overlooked the question of whether our states may justifiably interfere with our personal lives to fight climate change. What seems missing is a careful weighing of the reasons for interference that conflict with reasons provided by the value of the citizens' liberty and the citizens' rights against state interference.

I will not address the general question directly—partly because it seems unfeasible to answer it adequately in one paper. Instead, I will ask whether the state may justifiably risk infringing our right to privacy. There are two reasons for focusing on privacy. The first is pragmatic: it seems more realistic that, given how many people freely give up information about themselves, such measures can be implemented in our societies than measures that interfere in, say, people's eating habits. The second is theoretical: many philosophers have serious doubts about the idea that states may interfere with their citizens' privacy to prevent crime and fight terrorism (e.g., Lever, 2013, Macnish, 2017, Chap. 5; Véliz, 2024, Chap. 9), or for public health measures (e.g., DeCew, 1997, Chap. 8; Moore, 2010, Chap. 8). However, they have not discussed seemingly similar measures to fight the climate crisis. It is an interesting theoretical question whether the arguments in favor of privacy also work in the latter case.

It is common to hold that the following criteria need to be met for its being justified that our states risk infringing our right to privacy with a specific measure (see, e.g., Macnish, 2015; Rønn and Lippert-Rasmussen 2020; Véliz, 2021). First, the measure must be *proportional*. Proportionality requires that the considerations against the measure are not weightier than the considerations that speak in favor of it. To test this, imagine that we can only choose between adopting a specific measure or no measure at all. If the reasons against adopting it are weightier than for adopting it, then the measure is disproportionate. This would be so if the measure were ineffec-

tive, for example. But even if the measure were effective, there may still be stronger reasons against adopting it. An effective way to stop climate change would be to kill all humans. Surely, there are stronger reasons against this measure, which is why it would be disproportionate. Second, the measure needs to be *necessary* in the sense that there are no morally better, similarly efficient measures to achieve the same end. If there is a way to fight the climate crisis without risking people's privacy and this way is at least equally effective and not more morally problematic in other respects, then risking privacy to fight the climate crisis would be unnecessary.

The main topic of this paper is the proportionality of risking privacy to fight the climate crisis. I will only very briefly come back to the necessity condition in the final section. It would take too long to compare the pros and cons of different measures in adequate detail.

Let us assume that surveilling every single car and setting up a surveillance system in wildfire areas would help the state set up a climate-friendly infrastructure, discourage climate-damaging behavior, and enforce efficient existing climate protection laws. These measures seem to threaten people's privacy. The key question of the paper then is: are the reasons against risking privacy in these ways weightier than the reasons for fighting the climate crisis in these ways, assuming that there are no morally preferable, similarly effective alternatives? To answer this, we need to know a bit more about privacy.

For the aims of this paper, it is sufficient to work with the following.

Minimal picture of privacy. If an agent *S* sets up the environment in such a way that it becomes more likely that *S* will learn about some person *P*'s personal matters, then (1) *S* increases the risk of diminishing *P*'s privacy and *S* increases the risk of infringing *P*'s right to privacy or (2) *S* in fact diminishes *P*'s privacy and infringes *P*'s right to privacy.

Let me elaborate. First, this paper assumes that states are agents that set up environments and can learn something about their citizens. Second, there is a debate about what kinds of information are protected by the right to privacy (e.g., Véliz, 2024, p. 76; Menges [online first](#), sec. IV). For the aims of this paper, it is not necessary to rely on a detailed answer. I will assume an intuitive understanding, according to which personal matters involve information about our political or religious beliefs or activities, family or romantic lives, sexual preferences, health status, and so on. Note that information of these kinds also have a special legal status in some countries (compare *Regulation (EU) 2016/679*; *GDPR 2016*, art. 9). Third, according to some accounts of the nature of privacy, setting up the environment in such a way that one makes it more likely that one will learn about someone's personal matters may already be a way to diminish this person's privacy. Imagine, for example, that I manipulate your mobile phone in such a way that I can read all your messages, but I have not yet read them (cases of this kind go back to Thomson, 1975, n. 1). Thus, you cannot effectively decide whether I read your messages. If one believes that privacy is a matter of controlling personal information in a way that allows one to decide who learns what about us, then I have already diminished your privacy (see, e.g., Rachels, 1975; Rössler, 2004, Chap. 5; Marmor, 2015; for an overview, see Menges, 2022). How-

ever, if one believes that privacy is, by its nature, a matter of who accesses personal information about us, then this is not so (see, e.g., Gavison, 1980; Allen, 1988; Macnish, 2018). If I have not yet read your messages, then I have not yet accessed them, such that I have threatened, but not yet diminished, your privacy. The Minimal Picture is neutral regarding the question of which view is right. Those who tend towards an access account may work with claim (1) of the Minimal Picture. Those who tend towards control accounts may accept claim (2). To keep things simple, I will mostly put my arguments in terms of *risking* diminishing privacy.

Fourth, some privacy scholars focus on the nature or concept of privacy and ask in which situations privacy is diminished (e.g., Macnish, 2018; Lundgren, 2020). Others focus on the right to privacy and ask in which situations it is infringed (e.g., Thomson, 1975; Marmor, 2015; Menges [online first](#); Munch [forthcoming](#)). In what follows, I will put it both ways: certain measures to fight climate change risk diminishing privacy and risk infringing the right to privacy. Importantly, however, I will assume that some right infringements are justified, for example when a starving person steals a rich person's apple to survive.

Recall that this paper focuses on two measures to fight the climate crisis, namely surveilling each car in a state's territory and surveilling wildfire areas to set up climate-friendly infrastructure, to discourage people from climate-damaging behavior, and to enforce existing climate protection laws. Some may wonder why these measures make it more likely that the state will learn about personal matters in the narrow sense at issue. If the state learns that I picnic with friends in a wildfire area, or that I park my car in front of a supermarket, it does not therefore learn about, say, my political or religious views. If the state does not increase the likelihood that someone will learn about personal matters, then one might say that it does not increase the risk that my privacy will be diminished.

As a reply, let me first stress that these measures may directly involve learning about personal matters. Imagine that people meet in nature to pray or practice political action. Surveilling this is a direct risk to their privacy. But even recording information about impersonal matters raises the risk of diminishing people's privacy. There are many examples of how one can infer information about personal matters by combining seemingly impersonal data: combinations of words on social media can be used to infer suicidal tendencies (see Rumbold and Wilson 2019, pp. 3–5); knowing how and when someone rated six movies on Netflix makes it surprisingly easy to find out who that person is by comparing the Netflix data with other rating platforms; the latter information also allows reasonable guesses to be made about the person's political views and sexual orientation (see Narayanan and Shmatikov 2008; Ohm, 2010, pp. 1720–21); combining metadata of one's mobile phone with publicly available information makes it possible to infer that a person has serious heart problems or is a client of a Planned Parenthood clinic (Mayer et al., 2016). Now, if the state records data about where your car goes, and where and with whom you have a picnic in a forest, it seems likely that information about even more personal matters can be inferred (I leave it to the reader to imagine examples). Then, the state sets up an environment in which it becomes more and more likely that the state will learn about our personal matters.

To sum up, the risk of diminishing our privacy and of infringing our right to privacy increases whenever some agent manipulates the environment in such a way that it becomes more likely that the agent will learn personal information about us. Under certain conditions, our states have an obligation to fight the climate crisis. Some effective ways to do this involve manipulating the environment in such a way that it becomes more likely that states will learn personal information about us. Thus, some effective ways to fulfill the state's obligation increase the risk to our privacy. This raises the question of what is more important in case of conflict: protecting our privacy or fighting the climate crisis? In the remainder of the paper, I will discuss arguments to the conclusion that it would be disproportional to fight the climate crisis. I will argue that they fail. Recall, however, that I will not discuss the question of whether risking privacy is necessary for fighting the climate crisis. Thus, even if everything I say is true, it does not follow that the measures are overall justified. This would depend on what alternatives there are to fight the climate crisis.

3 How to solve the conflict

3.1 The none-of-my-state's-business argument

Intuitively, there is a special relationship between *our* states and *us*, their citizens. This idea can be used to formulate a first argument to the conclusion that, in case of conflict, the state should protect our privacy rather than fight the climate crisis by surveilling cars and wildfire areas to set up climate-friendly infrastructure, discourage climate-damaging behavior, and enforce climate protection laws.

The argument starts from the idea that a state's primary obligation is to respect and protect its citizens' basic rights and to meet its citizens' fundamental needs. It goes on to say that if there is a conflict between a state's fulfilling its primary obligation on the one hand and protecting non-citizens' basic rights and meeting non-citizens' fundamental needs on the other, it would be unjustified for the state to neglect its primary obligation. This is because the state's directed obligations towards its citizens are more important than the state's more general obligation to help humans, wherever they might be. Finally, the argument says that part of the state's primary obligation is to protect its citizens' (right to) privacy, but not to fight climate change for the sake of non-citizens. The conclusion is that, in case of conflict, the state should protect our privacy rather than fight climate change.

One problem with the argument is that it assumes that the sole or main reason to fight the climate crisis is because doing so would benefit and protect the rights of people who are not citizens of our states. But this is not true. Between 2010 and 2022, annual deaths related to heat in the USA went up 95% (Milman, 2023). In Europe in 2022, more than 60,000 people died of heat-related causes (Niranjan, 2023b). And heat of this kind is exactly what one can expect from a warming world. Surely, the fundamental needs of US and EU citizens were not being met during these heatwaves. These people, plausibly, have a basic right that their states protect them against this kind of harm. Then, there is a conflict between, on the one hand, citizens' right to be protected against heatwaves and similar climate harms and, on the other, citizens'

right to have their privacy protected. The conflict is not only between citizens' rights and non-citizens' possible benefits.

A second problem with the argument in favor of privacy is that it overlooks the fact that our states have another important directed obligation, namely, not to contribute to causing unjustified harm. Humans all over the world have a fundamental right that our states not contribute to harming them. It seems very plausible that the USA and the EU, together with potential allies, can take mitigation measures to reduce the worldwide harm that is being caused by their own greenhouse gas emissions. Thereby, they would partly fulfill their obligation and respect people's right that our states not contribute to harming them. Some ways to do this involve states' risking their citizens' right to privacy. To evaluate the proportionality of the privacy-risking measures, we need to imagine that our states only have two options: first, increase the risk of infringing our right to privacy by surveilling cars and wildfire areas to set up climate-friendly infrastructure and enforce climate protection laws or, second, continue contributing to the harm of those who are being impacted by climate change. Then, the conflict is between two important rights and corresponding directed obligations: the right of people all over the world that our states not contribute to harming them and citizens' right to privacy. It is far from obvious that the latter is more important. Whether it is will be discussed in detail in the following sub-sections.

To sum up, one argument for the claim that our states should, in case of conflict, protect our (right to) privacy rather than fight the climate crisis relies on the idea that our states' most important job is to protect our rights and needs. Privacy, the argument continues, is among them, but protecting people from climate change is not. I have discussed two serious problems for the argument.

3.2 The relationship argument

One of the most important reasons for protecting privacy is that it allows us to shape interpersonal relationships (see, e.g., Fried, 1968; Rachels, 1975; Gerstein, 1978; Moore, 2010, Chap. 2; Marmor, 2015). A common way to differentiate between a close friend and a mere colleague is that we are much more open towards close friends. We let them know about thoughts, worries, and desires that we would not share with mere colleagues. An important way to shape a relationship consists in the parties' changing how much they let each other know about themselves. For example, we can make it the case that a colleague becomes a friend by sharing more information about personal matters with each other. Privacy protects our ability to shape relationships in such a way. Insofar shaping friendships and other relationships is important for our quality of life, privacy protects an important aspect of our quality of life.

Let us assume that this line of thinking is on the right track. Now, one could argue that the reasons that count in favor of protecting privacy, which are grounded in its role in protecting our ability to shape relationships, are weightier than the reasons that speak in favor of fighting the climate crisis in privacy-risking ways. To put the same idea in terms of rights, one could say that our right to privacy—justified by privacy's role in enabling us to shape relationships—is more important than the rights of people all over the world that our states not contribute to harming them. The con-

clusion would be that we should protect privacy rather than fight the climate crisis in these ways.

There are good reasons to doubt that protecting our privacy against car and wild-fire-area surveillance is *that* important. The climate crisis directly threatens the health and lives of many people by destroying farmland, villages, or cities through, for example, floods, storms, and heatwaves. These people have rights against our states that they stop contributing to these threats. If states must choose between protecting our right to privacy by not surveilling cars and wildfire areas and protecting people's right that they not contribute to this kind of harm, it seems plausible that our states should opt for the second option.

A potential problem for the line of thinking I have just presented is that it compares very different rights and values, namely health and life on the one hand and personal relationships on the other. Some may object that these things cannot be compared or that there is no common measure for them (for how values can be incommensurable see Hsieh and Andersson 2021).

Let us grant, for the sake of the argument, that the relevant rights and values cannot be compared. Then, it is crucial to see that fighting the climate crisis protects the same value that privacy protects, namely the ability to shape relationships. One way to see this is to focus on climate-induced migration (see, e.g., Capisani, 2020, 2023). Relationships are often shaped by using one's environment in certain ways. It is typically part of a relationship to, say, go to the same coffee shop, for children to go to the same school, for romantic partners to go to the same places, and for couples to live in the same house, apartment, or neighborhood. If one must move because the area one lives in is becoming more and more unlivable, one will lose this way of shaping relationships. Similarly, migration often involves that people who once lived close together such that it was easy for them to maintain a close relationship will not live close together anymore.

The point is that climate change threatens the very same value that privacy aims to protect, namely the ability to shape personal relationships. There is also reason to think that climate change directly threatens the privacy of many climate refugees. This is because migration sometimes involves living in camps (UNHCR, 2021). These camps are often overcrowded such that it is hard for people who live there to protect their privacy (UNHCR, 2023).

Let us assume that what I have just said about the climate crisis' potential to undermine our ability to shape relationships is false. Then, there is still space to doubt that the kind of surveillance we are discussing would undermine our ability to shape relationships. Think about how much Google, Meta, Amazon, the NSA, or GCHQ may *already* know about us. Would their knowledge undermine our ability to shape, say, close romantic relationships? Personally, I am not sure what to say. But some privacy scholars suggest that "most intimate and professional relationships are not, in fact, undermined by mass surveillance" (Stahl, 2016, p. 35; see also Marmor, 2021, Sect. 5). Most people do not seem to have problems shaping relationships because of what these companies or institutions may or do know about them. Now imagine that the USA or the EU know which car goes where when and who goes into wildfire areas and many other things that can be inferred from this. If the line of thinking pre-

sented here is on the right track, then there is no reason to conclude that this would undermine our ability to shape personal relationships.

To sum up, an important reason to protect the right to privacy is that privacy enables us to shape personal relationships. Some may say that because of this, we should not allow the state to risk infringing our right to privacy to fight the climate crisis. I have argued that this line of thinking is not persuasive and that the value of our ability to shape relationships is not a good reason to opt for privacy rather than fighting the climate crisis if the two conflict.

3.3 The unjust-harm argument

One reason why the right to privacy is important is that it protects us against unjust harm and discrimination (see, e.g., Munch, 2020, 2021, pp. 3786–87). We live in less than fully tolerant societies. People are discriminated against because of their race, sexual preferences, gender identities, health, age, disabilities, religious beliefs, class memberships, and other characteristics. The right to privacy protects people against some of these unjust harms. If our potential employer does not know that we are pregnant or have certain sexual preferences, then the employer cannot infringe our rights and unjustly harm us because of these factors. Now, one may try to argue that the reasons to protect us against these injustices by protecting our privacy are weightier than the reasons to fight the climate crisis by surveilling our cars and wildfire areas.

The problem with this argument is that the climate crisis involves injustices and right infringements of the same or very similar kinds. That is, fighting the climate crisis helps protect the same values and rights that are protected by the right to privacy. Let me elaborate.

Not fighting the climate crisis discriminates against people based on when they were born (e.g., Caney, 2021, Sect. 3.2). If we do not radically fight global warming, the climate conditions that facilitate a good life will deteriorate more and more, threatening the well-being of many people who will be born in the future (see Calvin et al., 2023, sec. B.2). A person's date of birth is not a morally relevant factor. Just as people have a right against us that we not discriminate against them based on their race or sexual preferences, they also seem to have a right against us that we not discriminate against them just because of when they were or will be born. Thus, not fighting the climate crisis would infringe future people's right to not be discriminated against. In this way, protecting future people from the climate crisis will protect the same rights and values that are protected by our privacy: that people not become victims of unjust discrimination.

There are complicated questions regarding the moral status of future people that I cannot discuss here (such as the nonidentity problem; see Roberts, 2022). Thus, let us grant that not fighting the climate crisis does *not* unjustly discriminate against future people. There is still good reason, however, to hold that it unjustly harms or discriminates against actual people (see Tank, 2022).

The climate crisis hits many of the former colonized countries much harder than many of the former colonizing countries. African countries, for example, only contribute 2–3% of greenhouse gas emissions, but are *already* disproportionately hit by

climate change (see WMO, 2022; Calvin et al., 2023, sec. A.2). This is, plausibly, unjust: these countries suffer from harm that is mainly caused by other countries, our countries among them. Moreover, many of our countries causally contributed—through colonization and corruption—to the difficulties some of the former colonies are experiencing in adapting to the climate crisis. Plausibly, these countries have a right against our states that they fight the climate crisis. Not doing so would contribute to unjust harm. Thus, fighting the climate crisis is a way for our states to fulfill their directed obligations towards these countries to not contribute to unjustly harming them.

To sum up, the defense of privacy we are considering here says that if protecting the right to privacy conflicts with fighting the climate crisis, it would be disproportional to fight the climate crisis at the expense of protecting privacy because the right to privacy protects us from unjust harm and discrimination. I grant that privacy does protect people in this way, but fighting the climate crisis does the same. Therefore, this argument in favor of privacy fails.

3.4 Domestic security and the uniqueness problem

Since the terrorist attacks of September 11, 2001, and the responses of the USA and many other countries, there is an ongoing philosophical and public debate about how far a democratic state may risk or diminish people's privacy to protect them from terrorist attacks. This debate is useful for the aims of this paper because some scholars have developed powerful arguments to the conclusion that, in case of conflict, one should rather protect privacy. These arguments can now be adapted to the challenge of the climate crisis. I will do this in this and the following sub-section.

Let me begin with an argument that challenges the *effectiveness* of the measures that involve threatening privacy (see Rønn and Lippert-Rasmussen 2020, pp. 196–97; Véliz, 2021, Sect. 5). The starting point is the observation that terrorist attacks are unique. While some terrorists hijacked airplanes in different parts of the USA, others drove a truck into a group of people in Nice, and others again exploded bombs in commuter trains in Madrid. Because of how rare these attacks are and because they are carried out in such different ways and in different places, it is very hard, if not impossible, to make predictions based on the data that one gathers by analyzing the behavior of millions of people. Therefore, the challenge says, it does not help to analyze the data of so many people and to, thereby, risk their privacy to prevent terrorist attacks. Instead, the state should surveille individuals who may pose a threat. Based on evidence about who may be a terrorist, one should focus on them. This is what is sometimes called “defensive surveillance” —the surveillance of those who unjustly cause a threat—which is, plausibly, more easily justifiable than surveilling the indiscriminate masses (see Rønn and Lippert-Rasmussen 2020, p. 187).

Regardless of how plausible this line of thinking is regarding terrorism, it does not work when adapted to the climate crisis. This is because the incidents that are causing the climate crisis are not unique, rare, or individual. If there were only few people who used airplanes, consumed animal products, and drove cars, the climate crisis would, plausibly, not be as bad as it is. The very problem of this crisis is that almost every one of us contributes to it in one way or another almost all the time. It is not an

option to surveille the few individuals who pose a threat because the threat is posed by all of us together, even if we assume that we do not, as individuals, have an obligation to act differently—recall that this paper stays neutral towards our individual climate obligations. As we are all involved in causing the climate crisis, surveilling, say, all our cars is, plausibly, helpful in fighting the climate crisis even if it is not helpful in the fight against terrorism.

3.5 The dangerous-state argument

States that know a lot about their citizens have a lot of power (see, e.g., Roberts, 2015; Stahl, 2016; Véliz, 2020, pp. 50–57). Powerful states are notoriously dangerous for their citizens. Giving agents power is often misunderstood as an invitation to misuse it. Powerful states may even become totalitarian regimes. Now, compare the danger posed by a very powerful state, including its police, secret services, and other state agencies, with the danger posed by a group of terrorists. Some may conclude that the first is more dangerous such that we have weightier reasons to protect ourselves from too-powerful states than from rare terrorist attacks (see for discussion Moore, 2011, p. 141; Königs, 2022, Sect. 3).

Let us adapt this line of thinking to the climate crisis. The idea is that privacy protects citizens from powerful states. The danger of such a state is more serious, the argument continues, than the danger posed by the climate crisis, which one would fight by using data about surveilling cars and wildfire areas. Therefore, the argument concludes, in case of conflict, one should protect privacy rather than fight the climate crisis.

There is good reason to believe that the climate crisis will make some states even more dangerous than our states would be if they had a lot of knowledge about us—their citizens. To see this, consider states that have been severely impacted by droughts, storms, or floods and did not have the means to adapt in advance. Think of the flood in Derma, Libya in September 2023 that was caused by the kind of extreme weather that is to be expected in a warming world (see Niranjana, 2023a). Responding to disasters like this may exceed a state's resources even if it is not already in a civil war (see Jaramillo et al., 2023). It is then unable to protect its citizens' basic rights and to meet its basic needs. It cannot provide food, water, shelter, medicine, or protect domestic security. Such a state may even fail.

The danger posed by a weak state hit by a climate catastrophe is very different in kind from the danger posed by a powerful state that knows a lot about its citizens. The weak state cannot help but allow its citizens to suffer. The powerful state may dominate or harm its citizens. This distinction is irrelevant, however, when it comes to the topic at issue here, namely the rights that the citizens of the weak state have against our powerful states. Plausibly, the citizens of a weak state have rights against our states that they not contribute to a situation in which their state cannot protect their basic rights and meet their fundamental needs. A step that may contribute to fulfilling our states' corresponding directed obligation consists in surveilling cars and wildfire areas. If we imagine—as we do in the whole paper—that there is no other way for powerful states to fulfill their duties, then it seems very plausible that the citizens of the weak state have a right against our states that they adopt these measures.

If our states don't act accordingly, then they directly infringe rights these people have against them.

Now compare the following: first, the danger for citizens of a weak state hit by a climate catastrophe and the corresponding strength of these people's right that our states not contribute to the danger; second, the danger of a powerful state that knows a lot about its citizens and the strength of the citizens' corresponding right that the state not learn a lot about them, in particular about where their cars go and what they do in wildfire areas. It is far from obvious that the latter danger is more serious and that the latter right is more important than the former danger and right. Much depends on how the powerful state operates. But it is not unreasonable that the people of weak states have a right against our states that they not contribute to making their states catastrophically weak that is at least as important as our right to privacy, which protects us from dangerously powerful states.

Thus, both fighting the climate crisis and privacy protect people from dangerous states. The first protects people from dangerously weak, the second from dangerously powerful states. But there is an important difference. There is room for a powerful state that knows a lot about its citizens and that is not problematically dangerous. Some societies have experience in realizing such states. They introduce checks and balances, require independent judges to supervise data analysis, implement general rules that state agents must follow, make sure that officials can be held publicly accountable, protect a free press that can uncover abuses of power, and so on (see Moore, 2011, pp. 152–58). These are means to mitigate the dangers of powerful states. However, there is not much room for a weak state that is similarly harmless. Try to think of a state that has been hit by a climate-induced disaster and has not been able to meet its citizens' basic needs in response without this situation being dangerous for the citizens. As a philosopher, I can imagine a fantastic situation where this is realized. In reality, however, it is hard to envision such a case. In real-life cases in which a weak state is hit by a climate-induced disaster, its citizens are seriously endangered.

To sum up, when protecting privacy and fighting climate change conflict, the fact that privacy protects people from dangerous states does not justify choosing privacy at the expense of fighting the climate crisis. This is because there is good reason to think that the climate crisis will make some states even more dangerous than our states would become by risking our privacy. And the citizens of the former states have an important right against our states that they not contribute to this.

3.6 An objection

One may object that the line of thinking presented in this paper relies on the idea that the dangers of climate change only justify that our states learn about very specific information, namely about where our cars go and what we do in wildfire areas. The objection continues that this idea is unfounded: the arguments discussed so far prove too much. If they are on the right track, the objection says, then our states may learn much more about us if this helps fight climate change. They may learn how much food we waste, where and why we fly, perhaps they may even monitor our smartphones or homes for social planning, or use information about our consump-

tion choices to promote compliance with a climate friendly lifestyle. Then, we come much closer to a dangerous, authoritarian state. However, the objection continues, dangerous, authoritarian states are not even justified by the value of fighting climate change or by the rights of people against our states that they not contribute to harming them. Thus, the objection concludes, we should instead protect privacy from the very beginning and not allow our states to learn where our cars go and what we do in wildfire areas (thanks to a referee for pressing me on this issue).

A first reply says that the objection relies on a problematic assumption: if our states are justified in learning about one thing, say, where our cars go, if this helps fight climate change, then they are also justified in learning about this thing and something else, for example, about where we fly, if this further helps fight climate change. This assumption is not plausible. Consider an analogy from self-defense. If someone innocently threatens to harm your children, by, say breaking their little fingers, then you are surely justified in harming this person if this is the only way to protect your children. You may be justified, for example, in breaking this person's little finger or perhaps even a leg if this is necessary to protect your children. Now imagine that the only way to protect your children is to break the innocent threat's little finger and to slowly torture this person to death. This would, plausibly, not be justified. It is hard to say where the threshold is that distinguishes between the harm that would be justified and the harm that would be unjustified to protect your children. But there is one.

The same is true for privacy infringements and climate change. It is hard to say how much the state may interfere with our privacy if that helps fight climate change. But there is a threshold. One cannot directly infer from arguments to the conclusion that our states may learn information A and B if that helps fight climate change that they may, in addition, learn C and D if this further helps fight climate change.

A second reply concedes that the arguments discussed here suggest that the state may adopt more measures than only surveilling cars and wildfire areas. Consider the analysis of credit card transactions for setting up a climate-friendly business infrastructure (recall the Big Data project in Spain, "Meet the Winners," n.d.). The arguments presented here suggest a general way to find out whether the state may do this in addition to the measures discussed so far. First, we need to know how relevant the data gained by the three measures and the derivable information are for forming relationships, unjustly discriminating against us, and for setting up an authoritarian state. This forms the basis for evaluating how strong our privacy rights are regarding these kinds of information. Second, we need to find out how helpful the relevant data are for fighting the climate crisis. And third, we need to consider how strong the rights against our states are that they adopt measures to fight the climate crisis. Based on this, we can evaluate whether it would be proportional if our states risk infringing our privacy rights regarding information about where our cars go, what we do in wildfire areas, and what we buy with our credit cards. For each additional measure we need to repeat this procedure.

One may worry that this procedure leads to the result that drastic privacy-risking measures are proportional. There are two very different ways to deal with this worry. One is to say that there must be something wrong about the procedure. The other is to say that climate change is a huge moral problem that may call for drastic solutions. I tend towards the latter response.

4 Conclusion

Are our states justified in interfering with our personal lives to fight the climate crisis? In this paper, I have approached this question by conducting a case study that focuses on our informational privacy. I have discussed arguments to the conclusion that it would be disproportional if our states risk our (right to) privacy to fight the climate crisis when the two conflict. I have argued that these arguments fail. Moreover, I have presented some reason to think that, in case of conflict, it would be proportional for our states to fight the climate crisis rather than protect our privacy.

What follows from this? The first and most important point is that if we value our privacy—and we should value it—then we should radically fight the climate crisis *right now*. Perhaps, there is still time for our states to fulfill their climate obligations without risking our privacy.

Second, recall that I have not compared mitigation measures that risk our privacy with mitigation measures that don't. That is, I have not discussed the *necessity* of the privacy-risking measures. Perhaps there are similarly or even more effective measures that neither risk privacy nor are more morally problematic in other respects. If there are, then we should go for them rather than for the privacy-risking ones.

However, and this is the third point, one goal of this paper is to start a more general discussion about the extent to which the state may interfere with our personal lives to fight the climate crisis. Plausibly, a couple of decades ago, our states could have started an economic and social transformation that would have let to a climate-friendly way of living without drastically interfering with our personal lives. Radical state interference would have been unnecessary, and therefore, unjustified. I'm not sure how things are today. I guess that privacy-risking measures are not yet necessary even if they are less intrusive than, say, implementing laws about how much one may fly, eat meat, or drive cars. Given how much time we have wasted, however, I would be—positively—surprised to learn that our states will be sufficiently effective in fulfilling their climate obligations without interfering with our personal lives. Thus, I guess that, today, state interference is not only proportional, but also necessary. Whether this is so should be discussed by philosophers. It is high time to do so.

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