

Greta Thunberg: “How dare you?”

A Commentary

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The phrase "**How dare you?**" has moved many people and also outraged many people, in politics in particular, who have long been committed to more climate protection: From the UN Framework Convention on Climate Change and the Kyoto Protocol to the Paris Agreement or the Renewable Energy Sources Act in Germany. In my view, the sentence was well prepared as a calculated provocation. It “missed the point”, but studiously and deliberately. In any case, it reflects - if you take it literally - a deep misunderstanding about the legal possibilities of the representatives of the States gathered in New York. They are not allowed to decide almost anything of relevance on the basis of their mandates. Quite apart from the fact that any courageous decisions by these actors still have to be ratified (e.g. by parliamentary majorities) before they become legally binding. If politicians did more, they would indeed dare a lot. They would then be deposed and perhaps even imprisoned, including Mrs Merkel. In this case one could justifiably ask "How dare you?". In fact, the politicians do not dare much. They operate within the framework of their legal possibilities and political mandates. And that is a good thing.

Greta Thunberg spoke in New York to politicians and administrators who are just as familiar with the climate problems as she is. To date, there are no affordable solutions of technical nature to resolve the problems. These are not yet available, at best visible on the horizon. Nature-based solutions are another building block of a solution. They can perhaps solve a fifth of the problem and are also supported by Greta Thunberg (see the interesting video "Protect, Restore, Fund", by Greta Thunberg and George Monbiot). Here, we are talking about consistent rainforest protection, massive reforestation, humus formation in agriculture, etc., and thus also about removing CO₂ from the atmosphere (biological sequestration/ negative emissions).

Greta Thunberg also once spoke out in favor of extending the operating lives of safe nuclear power plants. This is also a wise proposal, but it has not reappeared. Cutting consumption in favor of more sufficiency also helps only to a limited extent. The problem is the money saved.

What happens with it next? If you use the money freed up by giving up consumption to improve the living conditions of plants, animals and people in poorer countries in such a way that natural resources are protected and the climate situation sees net improvement simultaneously, you have done everything right. This applies, for example, to the nature-based solutions mentioned above. But the people who consume fewer resources by renouncing their lifestyle usually want to keep the money saved for themselves and their relatives, for example. Then the positive effect of sufficiency is lost again.

Without additional new technical solutions, preventing the climate catastrophe currently requires above all a significant reduction in the standard of living for most people - whether with or without the use of nature-based solutions. Even in such a scenario, certain groups will continue to make profits. The real problem is the danger that considerable losses may have to be distributed, with the initial conditions of the actors being completely unequal and with a high degree of uncertainty as to whether the goals can be achieved at all through the path chosen. It is largely a question of burden sharing between States while the legitimate aspirations of poor countries with still rapidly growing populations for catch-up development are of central importance. In addition, there is the question of burden sharing among the citizens of each individual State, including among young and old.

The politicians in New York had no consensus on all these questions. And there is no such consensus among the people as a whole - worldwide. There is also no consensus within the European States, e.g. on domestic distribution issues. The heads of government gathered in New York had good will, but operated within the limits of constitutions / laws (often in democracies) and within the framework of international treaties (e.g. WTO), which cannot be unilaterally changed.

The struggle over **Brexit** clearly shows how difficult it is to find majorities for solutions with large distribution effects in situations with several options and how much hatred can be generated or arises when distribution questions occur. It should be emphasized that the Brexit questions, which are discussed within a **single country** (Britain) with **enforceable governance** and a **high level of prosperity**, are simple in relation to what would have to be agreed and enforced globally in the relation of climate change.

So what does "How dare you" mean? Ultimately, politicians dare nothing. They act within the framework of their mandates (these permit little) and otherwise let happen what happens "ob-servantly" and rather "helplessly", maybe except for the president of the United States. Few States, such as the USA and China, have great influence, but also their own plans and ideas. CO₂ emissions are rising not because of the inadequacies of the politicians involved, but for

systemic reasons, because the vast majority of people live as they do and want to live as they do - and tend to do so even better/more intensively. There are also more and more people and more and more people want more and more prosperity. This requires energy for various uses. Low-cost solutions are missing. As a result, it will necessary to limit oneself if no new technical solutions are found but the climate catastrophe is to be avoided anyway. This is difficult if, for example, several children are supposed to receive an education and the family has to pay off a house in addition.

The politicians Greta Thunberg relies on are integrated into structures that would immediately depose them, perhaps even imprison them for violating the law, if they dared to do much of what Greta Thunberg might imagine. That also applies to our Chancellor. And in elections, the respective populations would probably immediately vote for people who would not do most of what Greta Thunberg imagines. And perhaps she herself would not want to live in the world that would arise if the measures she imagines were to materialize.

What is to be done in this situation, in which climate protection consistent with current technology would essentially lead to other lifestyles and in the end to impoverishment? We need **technical solutions**, as we did 300 years ago at the time of Carl von Carlowitz, when the problem was not fossil fuels, but the clearing and burning of woodland and wood, respectively. Apart from nature-based solutions, we should concentrate on technical solutions but we do not. These include, above all, applications that would make it possible to generate a large proportion of the primary energy currently used from renewable sources and then store and transport it as needed. These applications have to be produced to a large extent in the sun-drenched deserts of the Earth in order to be competitive, in terms of the costs of the entire production process including the required infrastructure, with today's energy supply from fossil sources. Batteries play only a limited role here. High-energy gases (especially hydrogen) and liquids, such as methanol, are likely to be much more important in order to obtain functional solutions in transport and storage that batteries cannot provide. In panic, we are currently not pursuing such solutions but are focusing on strategies that will make the situation even more difficult. In particular, this is due to the fact that primarily national solutions are being discussed which mainly focus on saving and reducing CO₂ and which are many times more expensive per ton of CO₂ saved than, for example, the implementation of nature-based solutions in non-industrialized countries. The strategies currently pursued also do not help in relation to world population growth and catch-up development. The funds invested nationally and inefficiently will lack elsewhere in the future, e.g. in shaping digitization, maintaining a high level of education, stabilizing the middle class, providing for an ageing society, maintaining a strong (including digital) infrastructure, and the challenges caused by refugees

who have to leave their homes because of war, civil war and economic and/or climatic reasons. As a result, the mess in national politics will increase. On the horizon, the loss of agency is looming.

In times of threat, you have to keep a smart head. Greta Thunberg could, with the support of scientists, call on the "leaders" of the world to create more space for innovations that will do much for the climate with little effort and without any loss of prosperity and, in particular, that will allow for the prosperity expectations of the growing populations in Africa, on the Indian subcontinent and elsewhere to be satisfied without further burdening the resource base and the climate system. Perhaps with another video of hers of the kind that already exists for nature-based solutions. Such a path, if it can be found, will preserve peace and perhaps enable international consensus on the way to global climate protection.

Despite all the debate, one thing should not be forgotten: A clever distribution of growing prosperity is often possible in heterogeneous political structures. That does not hold true for the management and distribution of significant losses, not even asymmetric ones. The latter usually only works through war and civil war. If we do not find suitable technical solutions, this may well happen.