

... so I think, I am deeply convinced that the responsibility is greatest where there also is the most opportunity; that means someone well-educated has more responsibility than who is uneducated, someone rich has more responsibility than someone poor because everybody who is well-off and educated has the means to inform themselves...

Chairperson socio-ecological think-tank

Nevertheless, this same participant did not ascribe to a call for more information about climate change:

Honestly, I think what we lack the least is more knowledge!

Like this expert, several of the interviewees believed that people were currently well aware, for example about the impact of flying on the climate and that this awareness had increased in recent years. However, expert 1 at the federal environmental agency found that while attitudes towards climate action were overall very positive, yet when compared with actual market data, there appeared a relatively large gap between both aspects (i.e., between value and true action).

Another point related to knowledge and information was repeatedly mentioned, namely the problem of people being confronted with contradictory messages. One expert (academic sociology and sustainability) remarked that people often felt demoralised when the information they faced was too heterogeneous. Another participant put it like this:

... but it is also extremely difficult to be completely informed. If today I decide from now on I will only buy organic, then tomorrow I read in the paper that organic meat has much greater emissions than conventionally produced meat, at least with beef this is the case. And I immediately feel hard done by because I actually want to be doing the right thing...

Head of environmental NGO

4.5 Statements pointing towards denial

From this it follows, firstly, that even though knowledge and information are essential for combatting climate change, they are not sufficient. Secondly, this indicates that more information can even be counterproductive, as it often overwhelms and demoralises people:

I mean, that's the thing with knowing⁶. The more detailed my knowledge is, the more I know what I don't know. [...] to the same extent that you know more, your resistance increases. And I think this can indeed be observed that the more complex it gets and the less people understand [therefore], the more tendency there is for them to withdraw themselves into these different reverberation chambers⁷ in order to search for simpler explanations that allow them to remain capable of acting...

Academic (sociology and sustainability)

Or as another participant put it:

... I think everybody knows that they have to work on themselves [...]. But many also go by this motto of the ostrich and say, Oh well, I still want to go on holiday [by plane], never mind...

Head of environmental NGO

This type of ignorant behaviour, people putting their head in the sand or looking the other way, was often mentioned in the interviews. Overall, when it came to the responsibility for climate action and people acting on what they know, from the interviews it emerged that there was widespread **denial** present in German society. Mentioning of this phenomenon of denial occurred in different contexts:

I think as an adult, it is your responsibility to inform yourself. Ignorance does not protect you from being held accountable, I think. You cannot just put your head in the sand and say: as long as I don't know about this, I can take planes and eat meat as much as I please. Of course, it is inconvenient once you know. [...] the (nineteen-)twenties and thirties must have been awesome, when smoking wasn't unhealthy yet. Of course, you make life difficult for yourself... But you also want to escape your own sense of powerlessness⁸ somehow and you want to understand the bigger picture...

Teacher secondary education

6 Jamison, 2001, p. 23: "Paradoxically, the more expert knowledge we have, and the more use we make of it, the more calamitous the ensuing problems seem to be".

7 YouTube universa, echo chambers, cultural cocoons; cf. Lütjen, 2016 here.

8 *Unmündigkeit* in German original statement.

Another participant said the following in relation to this:

... it is not only that we say we want to do more, but we don't manage to, it is also that we don't actually want to do more, because we believe that we have already done a lot [...] people are simply no experts in ecological balancing...

Expert 2 at federal environmental agency

In order to escape uncomfortable feelings of fear and hopelessness, people tended to flee themselves into resignation as one expert described:

... also in the face of the sheer magnitude [...] that says we all have to act immediately, otherwise the world ends, and so on... I mean, this is not a discourse that is particularly motivating anyways, it is more one that maybe causes you to adopt an attitude along the lines of, I cannot do anything anyways, so I'm going to enjoy what I can [...], so an attitude of I just don't care...

Division head CC private foundation

It was further stressed that in order for people to contribute meaningfully to climate action and be efficacious, it was necessary that people felt like something could still be done to mitigate climate change. However, statements like this one painted a somewhat hopeless picture:

I think that from our capacities [...], I think we are not even able to adequately face a problem of this magnitude. This will only happen when the level of suffering is large enough but then it will be too late....

Academic (sustainability innovation)

One of the experts said that he also often observed a rejection of responsibility with centre right politicians and high-income corporate actors who still took planes for work and leisure without thinking about it. Secondly, he attributed this to comfort and habit and said that it was hard to leave patterns of practice behind that one had followed for long times. Here, laws were needed to force more uncomfortable practices. Thirdly, he gave the following explanation:

... also because it [jet-setting] is what is chic at the end of the day. It is chic to show off, it is chic on Instagram [...]. It is part of [modern] lifestyle. So what, then I fly from time to time. But that this is the biggest climate killer and that this messes up your complete balance of emissions of the whole year, I don't think people know

this. And they don't take responsibility... [...] they also want to show their children the world.

Head of environmental NGO

Or as it was said in another interview:

... societal framework conditions render travelling by plane extremely attractive... and not only financially but plane travel takes me to destinations that are deeply fascinating... nothing against campaigns that promote the beauty of regional destinations, but a Grand Canyon is just something else when compared to the Wutachschlucht in the Black Forest. That's simply how it is.

Expert 2 at federal environmental agency

Several of the experts, like these two, elucidated to people truly acting according to what held the most social value instead of what factual information would impel them to do.

So you would think that somebody who grew up as part of the 68 generation would, on some level be, sensitised [for environmental matters]. But when you are in a certain professional environment, where it [flying] is commonplace, then you can ask whether someone is the type of person to go into this occupational field... But I think, the professional field is something that needs to be looked at more closely. So, the context of practices in which certain types of behaviour are formative [...]. So how to approach this? Only few will change this behaviour when kerosene becomes more expensive... How can a shift in consciousness or a change in the framework conditions of this practice be achieved? Only really through stigmatisation. But how do you stigmatise flights?

Academic (sociology and sustainability)

One expert (academic sustainable consumption) also emphasised these often non-cognitive aspects that emerged out of the way people habitually behave and interact. In this respect, the influence of the social surroundings was repeatedly (academic sociology and sustainability, expert 1 at federal environmental agency) deemed to matter more than the provision of more detailed information. One participant (academic sociology and sustainability) said that she thought that people who acted with no concern for the climate did so because that was their way of acting without thinking about it that much. When these people were then confronted with the topic of climate change, they often defensively argued that their individual behaviour did not make an actual difference. Furthermore, there were several pressures in every-

day life for most people like being time poor, which made prioritising climate action even harder.

In relation to this lingering collective denial there was also some marginal mentioning of outright climate change rejection in the interviews:

Apart from maybe the AfD, they say: climate change is not caused by humans. They are not saying that it is not happening. But it is not caused by humans. They are walking around quite destructively...

Member of Bundestag (CDU)

Or in another interview:

What I see is more some kind of regression. Regression in the sense that climate change is seriously doubted. And there one has to say that the lobbyists and, well, how do I call them? PR-people, they were very successful.

Academic (sustainability innovation)

However, denial was mostly spoken of in its more unintentional, subconscious, ostrich-type form described above.

Therefore, one academic concluded that if climate action was not part of one's particular culture, then it was even less likely that one would act accordingly:

... so I think, it is more a matter of your direct surroundings that influences you. So, your work environment, your living environment, your friendship circle...

Academic (sociology and sustainability)

This also links to the following statement:

Here in Munich, you very much see this other picture, where it is all about your lifestyle and you enjoying yourself and people revel in this. [...] and then you post this on Instagram and everyone likes it and wants to relieve it. But you also have the other picture, like in my personal environment, where people do act responsibly. And of course, these are the people that you choose to be with because you always look for like-minded people...

Teacher secondary education

One of the experts noted that from an outside perspective, in each case, there was actually more room for manoeuvre than what it seemed from the inside, including

for the consumer, as it were also entirely possible to just not go on holiday. According to her, for different reasons, some room for agency was always closed off. These reasons included matters of perception, of competence and, most importantly, of socialisation:

... otherwise, it is very much due to socialisation. With the repair movement, it is nearly always people [...] that have had some sort of positive social experience. So Dad, Mom, someone had [always] repaired...

Academic (sustainable consumption)

This was indirectly also indicated by one of the conservative politicians:

It is also a matter of how you grew up...

Member of Bavarian State Ministry (Freie Wähler)

Another point raised was related to the diversity of motives actors held, as there simply did not exist *one* citizenry that would react to a universal call to action with respect to the climate:

... interests are just too heterogeneous. On the one hand one wants the cobblestones because it's sustainable and rain can drain easily, on the other hand it's pretty loud and one would rather have tarmac. [...] I think it is these contradictions that make it [regulations] take so long and lead to compromises...

Academic (sociology and sustainability)

In line with this, one politician (Freie Wähler) elaborated on this by asking what is seen as 'hip' in society. Progress would be achieved if an energy neutral house is seen as 'hip', as opposed to some fancy interior. Another expert (Head of NGO) pointed into the same direction in saying that today [caring for the] *climate was just not [perceived as] sexy*.

Experts asking these kinds of questions points to the hitherto underappreciated relevance social valuation exerts in decision-making. Taking this into consideration was however somewhat incompatible with a perception that worked exclusively according to numbers and measurements as one academic (sociology and sustainability) pointed out. Those experts living according to such a more quantitative worldview also displayed a deep trust in technology and innovation, particularly with respect to alternative technologies in the automotive sector (Head of NGO, chairperson of socio-ecological think-tank):

We count on innovation, on economic advantages, on incentives.

Member of Bundestag (CDU)

Here, flying was described as *ground-breaking technological accomplishment* (head of environmental NGO). This might help explain why it is so difficult for privileged people to distance themselves from flying as they live in a world where technology and innovation are so all-encompassingly glorified. Again, this indicates just how mighty and influential social valuation is.

Perhaps somewhat unsurprisingly, the secondary education teacher also leaned more on the side of factual information:

Of course, you have to reach students emotionally somehow, but not only emotionally. That should not be paramount. The focus should definitely be on the facts and on the scientists. And through this scientific understanding of the facts, ideally the motivation for action should follow.

Overall, there was strong contestation on this question of knowledge provision (versus social valuation) with some other experts fiercely rejecting the focus on information and knowing. One expert who had worked extensively on environmental awareness stated:

... knowledge, for example from climate science, is actually only helpful to a very limited extent. I think it is actually the type of knowledge that emerges from concrete local spaces where there are real interactions between people [that must feature more] [...] and I think that knowledge must not be 'given' to the public, it must actually emerge from the public [...] because everybody is the expert for his or her own everyday life.

Expert 1 at federal environmental agency

One expert (division head CC private foundation) was similarly convinced that the slow progress with climate action was not due to a lack of knowledge and information about climate change. He emphasised that in order to act, people had to *feel* some sort of personal concern. Convinced that much more could currently be achieved through the exploration of alternative angles, he demanded that within the climate community, there needed to be more examination of the true motives people held to become active:

We see this everywhere in the world, where climate action is actually taking place, in the rarest of cases this is at the end of the day primarily due to reasons related to the climate. For example, health is a strong trigger, there are several other trig-

gers that can be used to achieve the right things for climate action, without always employing only the climate narrative. [...] innovation is another one, nutrition and diet, foreign and security policy, [...] climate change is a cross-sectional issue [...] and therefore we need to look deeper into this and think about which milieus, which societal groups can potentially be reached through which type of rationale.

Division head CC private foundation

For these reasons, most of the experts were generally not in favour of introducing further public information campaigns about climate action:

It is simply not enough to try, to say somewhat naively, we now want to make sufficiency policy popular, that is just not going to work. Or the Deutsche Umwelthilfe's current campaign *Don't buy nothing (KaufNix!)* – I don't know what they were thinking. They are just shooting in the dark...

Expert 2 at federal environmental agency

One expert came to the following conclusion:

I do indeed believe that more knowledge is needed. And inevitably so. But this only leads to more dedicated climate action in an indirect way.

Academic (sociology and sustainability)

Overall, in the interviews there was a growing consensus that for people to act climate responsibly, one needed to go beyond factual information. Another expert voiced the following:

... how you can act also has a lot to do with having made experiences and I am not a fan of providing recipes [for people to act in certain ways]...

Academic (sustainable consumption)

There was growing recognition that experience-based knowledge and emotional messages needed to be given more attention. At the same time, some experts were frustrated with people still not acting in light of increasing extreme weather events and manifestations of climate change even in front of their own doors:

... currently we are in a phase, we have always complained in relation to environmental protection that people are not experiencing environmental change [...],

but at the moment people experience this the whole time. There is no lack of understanding in this regard...

Expert 2 at federal environmental agency

Here, another participant stated:

... science has been generating data for 110 years [for this location] that we can use and that is robust. There is no way that one can say, I don't see it, it doesn't exist. People who go through life like this are in fact preventing any chance for a future worth living⁹. Of course, we are all feeling this already in the form of heavy rain, melting glaciers, increasing snowfall...

Member of Bavarian State Ministry (Freie Wähler)

4.6 Conclusion

This chapter has shown that initially, most experts interviewed voiced that climate action needed to be an inclusive project involving the whole of society. Yet political figures were particularly responsible since they actually held the most influence over societal outcomes. There was thus already an implicit assumption that responsibility had to be contemplated in accordance with efficacy in many of these discourses. Acting responsibly as an individual with respect to climate change was therefore repeatedly described in political terms. The experts were generally weary of corporations, probably due to the recent *Dieseltgate* scandal in Germany's automotive industry. Further, it emerged from the interviews that there is widespread denial present in German society. Knowledge concepts varied, with some interviewees basing their judgements on others' alleged information deficits whilst others conceived of people acting according to what held the most social value. Non-cognitive aspects that regularly emerged out of the way people habitually behaved and interacted were also mentioned here.

Although different (financial) circumstances, the profound influence of respective socialisation and, in one case, people employing diverging conceptions of, for example, responsibility were mentioned, overall the fundamental societal differences in the reception of climate messages were not recognised by these experts. In general, the public was here treated as a quite unified entity.

9 ... *vergehen sich an der Zukunft* in German original statement.