# The Bloomers:
# Reflections of "Grown-ups" on Intergenerational Climate Justice

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**Abstract**: In climate movements driven by youth participation there is a call for greater commitment by "grown-ups" to climate action, but political and academic discussions emphasize the mobilization by youth rather than how "grown-ups" apprehend this call. This paper examines this gap by first exploring how "grown-ups" are defined within intergenerational climate justice and then describing their reflections on their role. "Grown-ups" are defined as *those with personal experience of the world before the threat of climate change became apparent* and operationalized to include persons born in 1974 or earlier. This group is referred to in this study as "Bloomers." Thematic analysis from interviews with twenty-two Bloomers in the United States, Sweden, and Japan reveals four themes in their reflections: *generational naivety, reflexive responsibility, wisdom carriers, and willful optimism*. It is argued that these themes are aspects of the psychological process of climate activist consciousness formation. It is suggested that this argument be tested in future research on how feelings of guilt and shame affect climate engagement among Bloomers.

**Keywords**: intergenerational justice, climate action, Greta Thunberg, historicity, strategic generation, the Great Acceleration, guilt and shame, self-efficacy, posterity, elders

> The future of all the coming generations rests on your shoulders.
> Those of us who are still children can't change what you do now
> once we're old enough to do something about it.
>
> Greta Thunberg, Stockholm, 8 September 2018

The above call for action from the famous youth climate activist Greta Thunberg points to a central tenet within youth climate movements: a divide between children and everyone else – "grown-ups," as Greta refers to them.[1] This perception of a divide, mostly expressed only among the youth, rests on the assumption of a temporality informed by the technical framework of carbon budgets: that humanity urgently must limit emissions to avoid the catastrophic consequences predicted in a warming Earth (IPCC 2021). The climate youth movements perceive that they had little part in contributing to these consequences, which they fear will determine the living conditions for the rest of their lives (see, for example, most of Greta's public speeches). In addition, they believe that they have little capability to avoid this future because it is in the hands and on the "shoulders" of the "grown-ups." Greta's quote aptly conveys the sentiment of the core claim of intergenerational justice; that climate change fundamentally is an issue of social injustice, specifically from a generational perspective (Skillington 2019). The collective frustration and anxiety emerging from this anticipated loss of *historicity* – the capacity of social actors to affect change in their societies (Touraine 1998) – among the youth movements has elicited fascination and examination by climate researchers in recent years (i.e., Wu et al., 2020; Bright and Eames 2021). However, to my knowledge, not much research has focused on where the youth movements ask, namely the "grown-ups," and how they are reflecting on this call by youth to take increased responsibility to act on the climate crisis.

I argue that researching this overlooked topic would provide important scholarly and organizational insights. First, it adds to the sociological and psychological scholarship of generational theory and climate change. We are currently living through the idiosyncratic historical setting of the Great Acceleration – the exponential growth rates across various human metrics that began in the mid-twentieth century that have accelerated change in Earth's geological and ecological systems. In this period, "the entire life experience of almost everyone now living has taken place" (McNeill and Engelke 2014, 4–5). I argue that people living during this extraordinary time and presiding over parts of its direction are one of the most influential generations in history because of the predicted impact of climate change. This group is understood as the "grown-ups" in this study. Revealing this group's retrospective self-reflection of this period, and thoughts on the intergenerational discourse of the climate youth movements, offers an insight into its psychological underpinning.

Second, this research topic contributes to the discussion of how to increase civic engagement in environmental politics. If an engaged citizenry is needed to combat climate change (according to Bill McKibben, Naomi Klein, and other environmentalists), engaging all parts of the population is important. A recent paper argues that the mobilization of climate action is tinged with the temporality of movements (Hanusch and Meisch 2022). Equating "grown-ups" as the historical generation of the Great Acceleration and putting them in an intergenerational discourse with a temporality informed by the carbon budget framework offers the potential for forming a strategic

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[1] I refer to Greta Thunberg as Greta, since that is how she is commonly known and referred to in media and by the interviewees in this paper.

generation and a shared generational consciousness for political change (Turner 2002). The aim is straightforward: to act before the carbon budget "runs out." The climate youth movements arguably constitute a strategic generation. A "grown-ups" counterpart has not yet formed to the same degree. However, we can see a seed of this collective generational consciousness forming as climate movements emphasize this generational perspective. An example is *Third Act,* which engages people over sixty years old in climate activism with such slogans as "Our Time is Now" and "Let's Come Together as a Generation" on its website. Climate activist "grown-ups" should be considered the potential founders of a strategic generation. Examining their reflections on climate change and intergenerational justice can help identify themes that "grown-ups" could identify with and mobilize around.

This explorative paper lays a foundation for mobilizing "grown-ups" by examining how they reflect on their historical role and intergenerational justice. First, I develop a theoretical definition of "grown-ups" within an intergenerational discourse. Second, I discuss issues of sampling and methodology.  Third, I present findings from interviews with twenty-two climate activist "grown-ups" in three countries. Fourth, a thematic analysis offers insight into the psychological makeup of the "grown-ups" who face intergenerational tensions and their mobilizational aptitude for resolving them.

## Conceptualizing the "Grown-Ups"

### Defining Grown-ups

The definition of "grown-ups" is coterminous with the meaning of "youth" in an intergenerational justice discourse. An age-based definition is insufficient since the "representatives" of the contemporary youth movements, such as Greta, eventually become "grown-ups." Instead, the definition must capture the historical condition which gave rise to the diverged perception of responsibility. This perception is at the core of the divide; it is a historical point distinguishing what came before from what came after. For some sociologists who have examined this area of research, the dawning awareness of the Anthropocene fits this bill. Dipesh Chakrabarty, for example, argues that climate change is essentially a "problem of mismatched temporalities" in his differentiation between *global temporality* – the human-centric framing of history and *planetary temporality* – Earth's geological history (Chakrabarty 2021, 49). Therefore, climate change should be considered a phenomenological challenge as institutions are not well-designed to deal with the planetary time scale (Chakrabarty 2021, 203). Our sense of human continuity is challenged by Anthropocene awareness. Chakrabarty uses Karl Jasper's "epochal consciousness" to emphasize the need for a communality going beyond humanity and its limited global temporality in order to function as an ethical advisory informing our *horizons of actions* (Chakrabarty 2021, 48, 196-197).

A central concept for developing this definition is that of horizons of action. The late German sociologist Ulrich Beck engaged with this definition by developing the concept of "risk society." Beck notes that environmental risks have become the main product of modernization, with anthropogenic climate change being its ultimate manifestation. He argues that climate change is an agent of *metamorphosis*, which can be distinguished from "normal" change as a "much more radical transformation in which the old certainties of modern society are falling away and something quite new is emerging" (Beck 2016, 3). He further points out that climate change has "altered our way of being in the world – the way we live in the world, think about the world, and seek to act upon the world through social action and politics" (Beck 2016, 4). He refers to this

moment in history as a "Copernican Turn 2.0," with the new horizons of action based on anticipating climate catastrophe, the notion of the perceived risk of the future, and the limitations of nation-states to effectively deal with that risk. It has created a "cosmopolitan frame of reference," generating new norms amidst globalized risks (Beck 2016, 39). Beck uses the analogy of a caterpillar to explain the reaction of detractors to this new cosmopolitan frame.

> We all know that the caterpillar will be metamorphosed into a butterfly. But does the caterpillar know that? That is the question we must put to the preachers of catastrophe. They are like caterpillars, cocooned in the worldview of their caterpillar existence, oblivious to their impending metamorphosis. They are incapable of distinguishing between decay and becoming something different. They see the destruction of the world and their values, whereas it is not the world that is perishing but their image of the world. (Beck 2016, 16)

To Beck, the question of generational difference is important as he asks himself what it means to grow up in a divided world. He argues that a notion of generations within metamorphosis must be developed from "within a historical sociology of time" (Beck 2016, 187–188) and that research should transcend "methodological nationalism" to take a cosmopolitan cross-border approach – something he terms "generational constellations" (Beck 2016, 194). Generations born into this time of metamorphosis are defined by their relation *before* or *after* this reference point of global risk. Beck has terms for both sides of this reference point: "On the world stage of the fight between generations the roles are clearly distributed: the elderly are the *Neanderthals* and the young, global generation are members of *Homo cosmopoliticus*" (Beck 2016, 189).

Tracey Skillington, the author of *Climate Change and Intergenerational Justice*, has developed Beck's theories. For her, the youth coalitions campaigning for climate justice "represent the interest of a generation who may be described as the first with a truly socially situated perspective on the Anthropocene" (Skillington 2019, 31–32). She clarifies that although older and younger generations now occupy the same historical present, the latter experiences that time qualitatively differently because of the insecurity of the future portended by climate crisis. She emphasizes that "the contemporary eleven-year-old's experiences of climate change over the course of her lifetime will, in all likelihood, be entirely different from those of a sixty-year-old today, the majority of whose life is in a past largely undisturbed by knowledge of the Anthropocene and who benefitted from many years of carbon pollution" (Skillington 2019, 124). Skillington, referring to Beck's work, describes *Homo Cosmopoliticus* as, "those with no memory of a world without the threat of climate change" (Skillington 2019, 7). This means that *Neanderthals* then could be described as *those with personal experience of the world before the threat of climate change was made apparent*. My definition that "grown-ups" should be understood within an intergenerational discourse follows Skillington's argument.

### *Operationalizing the Category of Grown-Ups*

Defining "grown-ups" as those with personal experience of the world before the threat of climate change suggests that a salient point for operationalizing a historical timeline is the first global recognition of climate change as a threat requiring action to address. Such recognition occurred in 1992 at the United Nations Conference in Rio de Janeiro that established the United Nations Framework Convention on Climate Change to prevent "dangerous anthropogenic interference with Earth's climate system"

(UNFCCC 1992).

Thus, this conference, often called the "Earth Summit," can be a reference point for understanding the generational divide, including the frustration of the youth movements, which have seen thirty years pass with insufficient progress. However, as the line dividing "grown-ups" and youth, the year 1992 does not accurately distinguish *those with personal experience of the world before the threat of climate change*. This is due to the time lag in disseminating knowledge and awareness to education and the population. Therefore, I posit a transition period based on the voting age because voting is often touted as the most effective action in mitigating the climate crisis. I use the typical legal voting age of eighteen (OECD 2019) to create a dividing line between "grown-ups" and youth, calculated through a simple subtraction: 1992-18=1974. Those born from 1975 are "youth," and those born up to 1974 are "grown-ups," the target of this research.
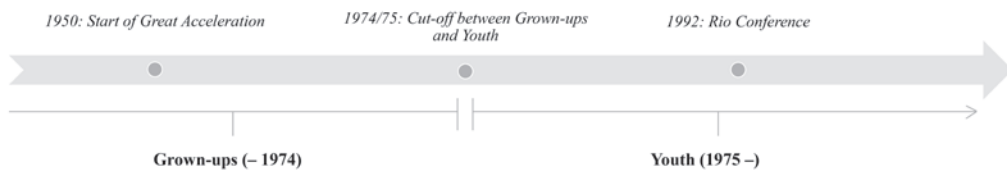


Fig.1 : Timeline of the generational divide

### Terming the Grown-Ups

To raise awareness of the potential for a strategic generation, I am developing a new term describing this group in the intergenerational context. "Grown-ups" or "older generations" are too generic to invoke understanding in a general conversation, and Beck's derogatory term "Neanderthals" is unlikely to instill a sense of belonging.

The term I suggest is inspired by the practice of generational labeling. *Baby Boomers* (1946-1964) is the generation most contemporary with the Great Acceleration (1950-). Although some labels are strongly connotated to that of specific countries, the label of Baby Boomers has evolved into somewhat of a common reference frame globally. In social media in recent years, the viral meme "OK Boomer" conveys youth ridicule of what they think are outdated views of older generations; this gives the term a negative connotation (Vox 2019). To counter this negative narrative, I am inspired by Beck's analogy of the caterpillar metamorphosing into a butterfly as an image of change—a promise to be fulfilled. The term *Late Bloomer* fills a similar purpose. The Merriam-Webster dictionary defines it as "someone who becomes successful, attractive, etc., at a later time in life than other people." In the context of intergenerational justice, Late Bloomer can be used to describe someone committing to climate action and is in a later stage in life – not necessarily that their actions started late in life. Blooming also has an environmental connotation of the blooming flower. Adding an "l" to "boomers" creates the term *Bloomers*, which has a more positive connotation. I use the term to refer to anyone born up to 1974, regardless of their commitment to climate action. The term signifies the potential of this group to become a strategic generation for intergenerational climate action. Henceforth, I use the terms *Bloomers* or *Bloomer Generation* instead of "grown-ups" when referring to the group born up to 1974.
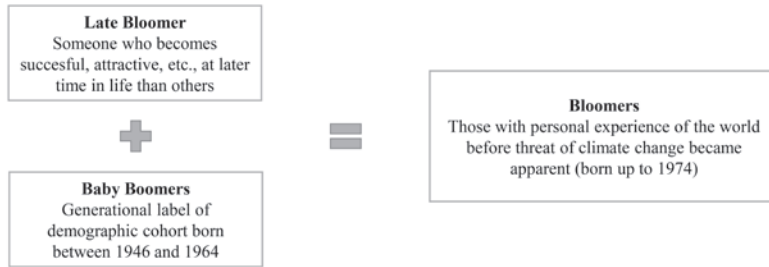
Fig.2 : Definition of the term Bloomers

## The Bloomer Sample

### Key Concepts

This section examines the reflections of the Bloomers, as defined above, in intergenerational discourse through interview methodology. The aim is to gain a preliminary understanding of their psychological underpinnings. This, in turn, may offer insight into how the growing mobilization of generational consciousness for climate action can be solidified. My examination of Bloomers' reflections expressed in the interviews of their historical role in intergenerational justice discourse draws on several psychological concepts, namely, *legacy*, *generativity*, *guilt,* and *shame*.

Legacy is a recurring theme in discussions on climate change and responsibility. James Hansen, the NASA scientist who testified before the US Senate in 1988 on the dangers of global warming, has emphasized the importance of legacy thinking in Storms of my Grandchildren (2009) to spur the will for climate action. Research shows that legacy thinking is important to cultivate among people in order to bring about a more sustainable world (Frumkin et al., 2012). In particular, the feeling of care for one's progeny seems to be a strong psychological factor for action (Vandenbergh and Raimi 2015). The psychoanalyst Erik Erikson, who developed the theory of psychosocial development stages in life, points to generativity – the willingness to guide the next generations – as central to a person's penultimate life stage (Erikson 1982). Generativity among people predicts preservation attitudes and ecological behavior (Milfont and Sibley 2011).

However, good intentions for future generations are not necessarily the strongest factor in inducing climate action. "What would I tell my granddaughter about what I did, or did not do, in response to a threat of climate change that will shadow her life?" a researcher asks while pondering his responsibility towards his granddaughter (Moody 2017, 22). Because on the other side of the coin are strong factors that we would recognize as feelings of *guilt* and *shame*. These are feelings that Greta Thunberg tapped into in her speeches. For example, in 2019, at the UN General Assembly in New York, she said, "This is all wrong. I shouldn't be standing here. I should be back in school on the other side of the ocean. Yet you all come to us young people for hope? How dare you! You have taken away my dreams and my childhood with your empty words" (Thunberg 2019, 96). The effectiveness of blaming and shaming for climate engagement is not straightforward but plays an important role in climate communication (Kleres and Wettergren 2017).

Sarah E. Fredericks, who teaches environmental ethics at the University of Chicago Divinity School, examined these factors in her book *Environmental Guilt and Shame*

(Fredericks 2021). She distinguishes between *guilt*, as an action-oriented emotion and *shame*, as self-judgment. She considers shame more painful since it is more related to the perception of self, which is not as easily adjusted as one's actions (Fredericks 2021, 47). She also distinguishes between *individual* and *collective* guilt and shame. The key difference is that people in a collective can have those feelings regardless of whether they directly acted, benefitted from the act, or were alive when it began (Fredericks 2021, 53). She relates that recognition to the question of responsibility for climate change. She argues that even a random collective of individuals can be held responsible if they are not mobilizing themselves into a collective that can act on a specific issue that the reasonable individual would deem necessary to be acted on by the random collective as a whole (Fredericks 2021, 74). That means that a clear structure of decision-making is not necessary to assign responsibility. Instead, the "unintentional acts of unacknowledged collectives, such as the greenhouse gas emissions from the diffuse collective of industrialized people, that function as a goal-oriented collectives also indicate a form of moral responsibility" (Fredericks 2021, 82). While individuals in such an unacknowledged collective would not claim to belong to it, their implicit partaking in such goal-oriented activity would induce feelings of environmental guilt and shame. Fredericks' main argument is that these feelings are latent in anyone who recognizes the realities of climate change, regardless of whether they are seen as directly responsible and acting on it. However, the drawback is that those feelings, especially shame, can hinder a person from further action. Fredericks suggests that various "environmental rituals" to reduce environmental degradation and acknowledging the shame's collective nature may help individuals comprehensively deal with those feelings. But that requires communication with those most harmed by climate change (Fredericks 2021, 173-174). A possible example of such communication is between older and younger generations; thus, the need for environmental rituals to overcome shame circles back to legacy thinking and generativity.

### *Scope*

Bloomer interviewees were selected based on two criteria. One criterion is the "global north." Beck called for going beyond "methodological nationalism" by a cross-border approach of "generational constellations" to examine cosmopolitan issues such as climate change. Regarding this study, which engages notions of justice and responsibility, Beck's call prompts a reflection on the narrative of the Global North-South divide and the main responsibility for the increased level of GHGs in the atmosphere causing climate crisis. The carbon energy regime was almost exclusively confined to Europe, North America, and to some extent, Japan (McNeill and Engelke 2014, 10).[2]

To highlight the global aspect of climate change and climate action, I selected one country from each of these three regions that comprise the Global North. From North America, I selected the United States, the country with the highest historical emissions of GHGs and the driver of consumer culture in the economic revivals of Europe and Japan after World War Two (McNeill and Engelke 2014, 143). In Asia, Japan has been the only nation actively participating in the carbon energy regime since the mid-nineteenth century and has among the highest historical emissions. From Europe, Sweden was chosen as having high historical emissions characteristic of Europe, especially on a per

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[2] During most of the Bloomers' lifetime, Japan was the only country in Asia included in the Global North. Recently, it has been joined by South Korea and Singapore. Oceania, containing Australia and New Zealand is usually seen as an Asian country within the Global North context.

capita basis. Additionally, it is the country of Greta Thunberg, whose Fridays for Future movement put the intergenerational climate justice discussion at the forefront of global climate politics.

All three countries have a long history of environmental movements. Sweden was the first country to establish an environmental protection agency in 1967 and hosted the first UN conference focusing on the environment, in Stockholm, in 1972. The United States is the home of the modern environmental movement. Rachel Carson's book *Silent Spring*, which examined the environmental effects of pesticides, helped spark ecological awareness of humanity's impact on the larger environment. In Japan, the environmental movement focused on urban pollution problems in the 1970s and nuclear-related mobilization after Fukushima in 2011. Japan also hosted the 1997 Kyoto Protocol. In sum, these three countries all have high historical emissions and long histories of environmental movements, offering good perspectives to examine intergenerational aspects.

The second criterion is "climate activist." A deeper reflection of one's responsibility for intergenerational climate justice requires one to believe climate change is a serious issue. Active climate activists in the Bloomer generation are likely to be the first signs of a collective generational consciousness of the issue; they are potential leaders of an emerging strategic generation for intergenerational justice. Since I have emphasized mobilizational potential, I broadly define climate activism as a member of an organization or network that seeks to influence policies or activities on issues related to climate change.

### *Method*

A qualitative research approach was used, with data collected through semi-structured interviews followed by a thematic analysis of interview transcripts. Twenty-two semi-structured interviews were conducted on Zoom video calls, with interviewees from three countries, including eight in the United States and seven each from Sweden and Japan. The interviews with US participants were in English, and those from Sweden were conducted in Swedish. In Japan, six interviews were conducted in Japanese and one in English. Interviewees were recruited from organizations and networks with older citizens participating in climate issues. In the case of Japan, however, such organizations were difficult to identify, so Bloomer generation participants were selected from public organizations working on climate action. All interviewees were affiliated with one of the five following organizations: Elders Climate Action (United States); Gretas Gamlingar (Sweden); and Sokuon-net, Fridays for Future, and Miyako Ecology Center (Japan). Some interviewees were engaged with other organizations, too (as learned through interviews).

| Country | Organization/Network | Description | Number of people interviewed |
|---|---|---|---|
| United States | Elders Climate Action | Non-partisan network founded in 2014 to mobilize elders in United States to address climate change for well-being of future generations | 8 |
| Sweden | Gretas Gamlingar (Greta's Old Folks) | Non-partisan network, founded in 2018 after Greta's rise to prominence in Sweden, of elders standing with youth in Fridays for Future | 7 |
| Japan | Miyako Ecology | Environmental issue group, founded in 2002 in Kyoto, for environmental protection and such learning activities as combating global warming | 4 |
| | Fridays for Future | Predominantly youth-run group, formed after Greta's school protests in 2018, with local affiliations all over the world. | 2 |
| | Sokuon-net | Non-profit organization founded as citizens' initiative in 1996 in Tokyo before COP3 in Kyoto that focuses on carbon-reduction efforts and awareness-raising in Edogawa area | 1 |

Fig.3 : Overview of the Bloomer sample

A survey was conducted before the interview to collect demographic data and obtain the signed consent of the interviewees. Their birth years spanned the decades between the 1940s and 1970s, with an average age of seventy at the time of interviews and 68 percent female and 32 percent male. Although the interview population as a whole was ethnically diverse because of the cross-border approach, it was homogenous within national contexts, with most interviewees belonging to the ethnic majority. Most defined themselves as retired grandparents, middle class, highly educated, and leaning politically to the left. The homogenous background is likely the consequence of my definition of climate activism as membership in a group or network.

Each interview lasted about sixty minutes. The general structure of an interview began with an interviewee introducing themselves and their "life story." Beginning in this way, let interviewees situate themselves within a historical context. Then, the interview focused on their upbringing, perceptions of their relationship to the natural environment, and thoughts about their future. This provided insight into their reflections on the pre-Anthropocene awareness of the topics. The interview then moved to climate change awareness and activism to understand the circumstances and timing of these developments. The final topic of the interview was intergenerational justice. I started by reading Greta Thunberg's quote in this paper's epigraph, then asked interviewees for their reactions and probed their responses.[3]

All interviews were transcribed into English. I used the reflexive thematic analysis approach developed by Braun and Clarke. The approach examines people's perceptions and experiences when relating to the understanding and representation of groups to identify patterns of meaning from a dataset (Braun and Clarke 2006). Those patterns are identified by the researcher first familiarizing themself with the data and then coding it to generate initial themes before reviewing them to determine the final definitions

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[3] The quote was: "The future of all the coming generations rests on your shoulders. Those of us who are still children can't change what you do now once we're old enough to do something about it" (Thunberg 2019, 4).

and terms. I used the inductive, semantic, and realist orientation of reflexive thematic analysis; the data contents direct the coding and theme development rather than pre-set themes and concepts.

## Interview Findings

Four themes emerged from the thematic analysis on the reflections of the climate activist Bloomers: *generational naivety*, *reflexive responsibility*, *wisdom carriers*, and *willful optimism*. Explanations of the themes are presented below with representative quotations from the interviews. The quotes have been edited to remove most filler words, false starts, repetitions, etc.

### Generational Naivety

A theme that strongly emerged from the interview data was a sentiment of ignorance or naivety about the development of the climate crisis: interviewees did not know how bad things were or would become. Kerstin (SE) frames this mainly as reflecting the optimism of the times in the post-war period; "We were a generation that was full of belief in the future and optimism. Everything was going to work out. It was possible to have an impact on politics. […] It was mostly hope for the future. But when I look at it now: how could we be so optimistic? So naïve."[4]

In retellings of their lives, many interviewees touched upon being caught up in the postwar era of rapid modernization in the Global North with strong economic growth, peace, and stable conditions. The environmental deterioration was glimpsed but not entirely apparent; "background noise," as Robert (US) called it. Patricia (US) explained that the nuclear issue was the major threat at that time for activists; even if many were concerned about environmental issues, it "was not going to kill you within the next five minutes."

Additionally, many acknowledged a general lack of knowledge – ignorance – of environmental issues.

> Looking back, this was the age of mass production and consumption. Elementary school kids today learn about the environment; they write essays about SDGs and read books on these topics, and I feel that they have a high level of awareness. For my generation, though, we grew up without having thought about these things. The purpose of products [for our generation] was to consume them, and we bought what we wanted. We are a generation that has lived without thinking about what happens to products after we have bought them or finished using them. (Michiko JP)

> I was a happy optimist and thought everything would go well. I was quite unaware of how bad the state of the world was or how we had already started to destroy the Earth. I remember that I had a teacher in ninth grade who referred to a book about climate destruction […] and how we were laughing about it – although obviously, part of it stuck with me. But yes, I was pretty unaware of what was going on. (Klara SE)

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[4] All names are pseudonyms with country codes attached (United States = US; Sweden = SE; Japan = JP).

> I think in the last twenty years, there is no doubt about what has been happening on Earth, but before then, in the 1970 and 1980s, it was about ignorance, not devilment. It was not like: "Now we are going to exhaust all Earth's resources." It was mostly about that one did not know. (Kerstin SE)

> I think it also was that one was unaware that the world was going down the drain. Or that I did not want to recognize that fact. As a retiree, I can look back and see that much was heading in the wrong direction while I was occupied with everything else. I might have seen it the whole time but did not have the means and strength to make any major effort about it other than raising my children to care about the environment. (Emma SE)

In these examples, interviewees vary between actual ignorance, as in not having the knowledge of what was occurring, and willful ignorance, as Emma expresses, with the daily challenges of one's life taking priority. Whichever, the reflections highlight that many did not know of the gravity of climate change, whether due to the failure of education or media to raise awareness.

However, I label the theme "naivety" rather than ignorance due to active disinformation by certain actors, often tied to the fossil fuel industry. Today, interviewees are aware of disinformation that was hidden from them, in a sentiment expressed by one interviewee as follows:

> One thing I see in youth climate activists is that they see their situation very well. […] If I could go back and change history, obviously, we would do more about fossil fuels. […] Part of it had to do with what people knew and understood at the time, which was changed by many things. There are big corporate players like Exxon, who knew much more than they would say and put out a lot of disinformation. I do not mean to excuse people for not doing more, but you do what you think you need to do. If you think you need to put scrubbers on coal plants, you campaign to put scrubbers on coal plants instead of getting rid of coal. […] So, it is not that no one did anything or no one cared. We did not understand enough because, in retrospect, we clearly did not do enough. But I do not think it is like: "Well, let's just pollute the atmosphere like crazy and let Greta's generation die from it." I do not think that anybody is really saying that, but I think it is fair to say that we did not think it through. (Patricia US)

Although today there is increasing understanding of the withholding of information by the fossil fuel industry, interviewees still experience guilt and shame at their naivety. Most interviewees touched on this underlying feeling in the interviews.

> I think about it often, although I feel ashamed about it, but if we only knew from the beginning that we could not dig up old solar energy stored from days past, then we would not have these opportunities; or if, instead, somehow it would have been made impossible to do it [digging up fossil fuels]. We would not have become so many [people on this planet]; we would not have been able to destroy so much. (Emma SE)

Feelings of guilt and shame are a subtheme that also emerges in all the other themes.

In naming this theme, the premodifier "generational" is added to "naivety" to

underscore that this naivety identified is connected to the Bloomer generation and their experiences. (Such usage is similar to "generational trauma").

### *Reflexive Responsibility*

Although the interviewees had various reactions to the degree of their responsibility for climate change, a common theme still emerged, which I named *reflexive responsibility*. The term is borrowed from Börjeson and Boström to describe consumers' responsibility in the global textile supply chain. They defined it as "a self-critical scrutiny of current modes of taking responsibility, including their achievements and unintended negative effects," with a temporal dimension of both forward- and backward-looking reflection (Börjeson and Boström 2018). Discussing intergenerational justice with the interviewees inevitably induced feelings of guilt and shame about their past and future. Many interviewees had identified their lives as coinciding with the Great Acceleration.

> One graph we developed– about $CO_2$ emissions – is this very steep rising curve. When you look at the point where it starts rising, you see: "Oh, oh. It was right around the 1950s when we in the '40s generation became active." So, this awareness that we have a certain responsibility for $CO_2$ emissions and so on…it begs on me, which is why we elders have a certain responsibility. (Anders SE)

This theme emerged strongly in the reactions to Greta Thunberg's quote. Basically, all replies acknowledged their responsibility. They often followed this with an apology that expressed further commitment to action.

> I truly feel that I am sorry. Of course, I am thankful to Ms. Thunberg for expressing these words. The future of not only Ms. Thunberg but all young people who have to keep living for many years is – to be frank – decided by today's adults. Those who will not be impacted are the ones creating policies and deciding the laws and the ones who are voting these people into office – us, the citizens. So, I do feel a personal responsibility and agree wholeheartedly with what Ms. Thunberg has expressed. So, what can I do? I think that is to diligently continue the activities [of climate mitigation] that we have been doing. (Keiko JP)

Keiko's response aligns closely with Fredericks' terminology of environmental guilt, but she tries to rectify it with continual action. For Emma (SE), the reaction is even stronger:

> I get this pain in my stomach hearing this. It almost makes me cry. It is so awful that it has to be like this. I think almost every day that I am doing something wrong or should do things differently. I should not have gotten a house or a car. I should only eat potatoes, not drive anywhere, live as simply as possible, and not buy anything or eat meat. All the things that one should do, I am trying. But it is not enough. (Emma SE)

Here instead, an environmental shame seems to have taken root in Emma – the more painful reaction, according to Fredericks – due to self-internalization. Regardless of her continued actions, she feels inadequate to meet this call for responsibility.

In contrast, Mary (US) recognizes the premise of Greta's plea and acts on her responsibility to the best of her capabilities but thinks that blaming has its limitations,

especially when most of the responsibility lies on certain actors:

> Although I admire Greta – I admire her very much – and she doesn't turn me off, I could see her tone turning some people off…We need everybody; we need the entire human race pulling together to try to fix this problem… all you can ask of people is to do the best they can. That's all I'm asking of myself. I'm trying to do my best and don't want to give up. But do I think future generations will blame my generation? Yes. I think they'll blame it indiscriminately, which is kind of human nature as well. But am I going to worry about that? No. I've got other things to worry about. I've decided to focus my hate on people who bear some responsibility and are intelligent enough to have known better. (Mary US)

While the interviewees' reactions to the question of responsibility differ in some respects, there is a common pattern of reflexibility. Again, we also notice how feelings of guilt and shame are an important subtheme.

### *Wisdom Carriers*
The central idea that underpins this theme is that the activist Bloomers see their role as mostly one of supporting the youth with insight based on their knowledge and experience. This terming of the theme was inspired by the answer of Robert (US) when asked what appealed to him in the climate network he joined:

> They [Elders Climate Action] made a lot of sense. They basically said: "Hey, look, we're supposed to be the wisdom carriers." We talked a lot about the old Native American traditions, the ultimate wisdom carriers, and that we need to act our role as wisdom carriers. Younger folks are all involved in their lives in starting up their careers; we [elders] are the ones that have the time, we have the resources, and we have the knowledge and the experience to actually get something going here. That made all kinds of sense to me because I thought that's absolutely right. There's a little bit of guilt here, because we were the problem in the 1950s and 1960s, in terms of starting this juggernaut of pollution. (Robert US)

Again, we see feelings of guilt and shame. Robert further details the role that elders should play later in his interview when giving his reaction to Greta's quote:

> On the one hand, I totally agree. On the other hand, it has to be both of us [youth and elders] – not just us [elders]. It's your future, and it's not that we're not concerned – we are highly concerned about it – but it is your future, and I feel, at least from my perspective, that it's not our role to tell you what to do. It is our role to support you and provide you with as much help as we can and with guidance – but you need to take the lead. (Robert US)

This sentiment resonates among the interviewees. Based on their experiences, the interviewees also think that youth perceive a similar role, although they sense some intergenerational tensions. "To tell you the truth, I feel the division between younger people and elders because they [youth] want to have their organization run by themselves. For our group of adults, it seems they didn't want anything from us initially" (Katsumi JP). Kerstin had a similar feeling, and she shared how she accepted

this supporting role very literally in a discussion with some activists from the youth movement:

> I asked them: "What do you think we should do now? Can we do something together?" "No, this demonstration is for the youth." "Okay, can we still participate?" "Okay, you can participate if you're staying in the background." "Okay," I said then. "What can we do for you then?" I asked. "You can bake some cookies." We laughed a bit about it first. They see us as people who are good at baking cookies! "Then let's bake some cookies!" I said. So, we made a lot of cookies, and we participated. We thought we needed to work with them to get their trust because it seemed like they had bad experiences with grown-ups. But there are all different types [of grown-ups], and some might be ignorant, and perhaps those are the ones that the youth know of. So, we discussed that we need to win their trust long term and not start accusing them of having a lot of prejudice against elders. Because then we won't be able to cooperate! So, we baked cookies – vegan ones – and all types of cookies. (Kerstin SE)

Kerstin's comments are the starkest example of this feeling among the interviewees. The activist Bloomers clearly perceive a differentiated responsibility between them and the youth. They seem to accept this role of a *wisdom carrier*, reflecting their awareness that because of their connection with historical responsibility, the youth are seemingly willing to accept their experience, knowledge, and, sometimes, just practical support.

### *Willful Optimism*
When asked how they viewed the future, almost every interviewee responded that despite all the predicted hardship, they determined that they had to believe and hope. The stubborn character of their expression of hope made me term this theme *willful optimism*. A few examples are:

> I think that even if we try hard right now, the ice in the Arctic is already melting, and we can't fix things to be the way they were before. But, if we give up, it will only get worse. I would like to say, don't lose hope and don't give up. I think there is still a lot that we can do. I think many bad things will happen, like sea level rises and changes in the food supply, but please don't run away. We can only keep trying our best to do what we can do. Don't give up, and let's keep working on this together. (Michiko JP)

> I don't know if, objectively, one could be hopeful. I don't think so. But I guess you still got to be hopeful. (Sarah US)

> I'm of the opinion that we have to meet these goals, even if it's little by little. I think it will be difficult, but we have to. (Hiroshi JP)

> They [youth] will look at our generation as one that lived in an unsustainable way. That is our responsibility and guilt […]. In the best-case scenario, they will have a more nuanced understanding that some people were trying…but it also depends on how this all ends. We don't know yet. But one tries to be optimistic. (Kerstin SE)

> It looks pretty grim, but I am trying to be positive – it's the only way, I think. It's as if you get a cancer diagnosis; you have to tell yourself that you have to get through it – although this is much more difficult. Humanity just has to solve this. (Maria SE)

> I think there needs to be a balance, and people want to be hopeful. They need that hope and [need to] know that your efforts are going to make a difference. (Linda US)

The central concept here is *self-efficacy*, a concept developed by Canadian-American psychologist Albert Bandura; he defines it as "how well one can execute courses of action required to deal with prospective situations" (Bandura 1977). It is often used in discussions of how to motivate people to take climate action. Actors need to believe that their actions matter – that they have a perceived sense of efficacy, meaning the ability to produce an intended result (Heald 2017). This belief applies to all types of activists who seek to accomplish change.

As in the other themes, feelings of guilt and shame appear here as well, although less explicitly than in the others.
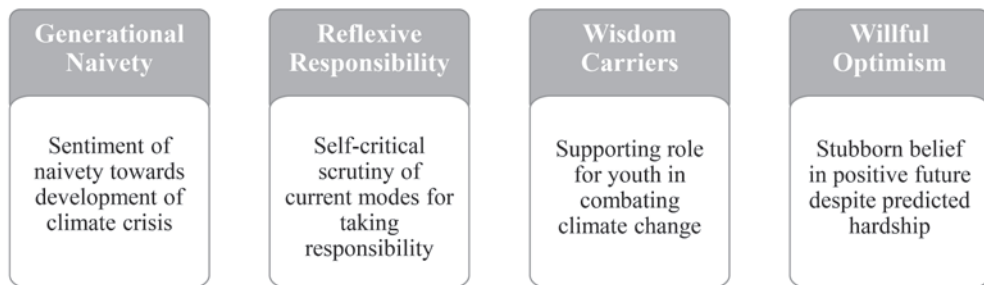
| Generational Naivety | Reflexive Responsibility | Wisdom Carriers | Willful Optimism |
|---|---|---|---|
| Sentiment of naivety towards development of climate crisis | Self-critical scrutiny of current modes for taking responsibility | Supporting role for youth in combating climate change | Stubborn belief in positive future despite predicted hardship |

Fig.4 : Themes of Bloomers' reflections on intergenerational climate justice

## Discussion

### Psychological Process of Climate Activist Consciousness Formation

How did the Bloomer generation think about themselves and their role within the context of intergenerational climate justice? The four themes that emerged from the interviews were: *generational naivety*, *reflexive responsibility*, *wisdom carriers*, and *willful optimism*. All these themes have a strong psychological aspect, which is not surprising since this part of the research is essentially a phenomenological approach of prompted self-reflection on a morally thorny issue. Other than the purely descriptive value of uncovering reflections regarding a hitherto unexplored topic, what do these themes say about the larger discussion regarding the prospect of solidarity and mobilization among the Bloomers? This question is the underlying rationale of this research.

The interviews encouraged several Bloomer climate activists to recount their "life story," which enabled the construction of a chronological profile of their activism – its start, what preceded it, and what succeeded it –through a lens of an intergenerational

discourse. This approach, coupled with my inductive orientation of reflexive thematic analysis, gave the emergent themes a chronological character. Although not an explicit aim at the start of the research, I interpret these emergent themes as parts of a psychological process of climate activist consciousness formation when members of the Bloomer generation face the complicated and guilt-ridden intergenerational climate change discourse. As outlined earlier by Fredericks, feelings of guilt and shame are latent in those who recognize the realities of climate change; if the feelings become overpowering, they might hinder climate action. She proposed environmental rituals as a solution: actions that work on reducing environmental degradation while acknowledging the collective nature of shame (Fredericks 2021, 173). I invoke Frederick's conceptual framework to strengthen my interpretation of the emergent themes in my findings as a psychological process.

The first theme, *generational naivety*, elucidates the unequal relationship of power and information during Bloomers' lifetime, in which certain actors actively upheld the fossil fuel regime and withheld information about its devastating consequences. Although the full extent of information was kept from the Bloomers, they feel a lingering sense of naivety; in hindsight, they feel that they should have seen through these actions. This feeling, in turn, gives rise to guilt and shame.

The second theme, *reflexive responsibility*, is the response to one's perceived naivety. It consists of a self-critical scrutinizing of past and potential future actions and their rectification by recognizing responsibility in those scenarios.

The third theme, *wisdom carriers*, is the practical embodiment of that recognition. It consists of engaging in climate action and taking a role of supporting the youth, who are facing the most harm of climate change from an intergenerational perspective. This intentional choosing of a supporting role due to recognizing the differentiated responsibilities of youth and Bloomers is, I argue, an example of an environmental ritual described by Fredericks, which helps Bloomers overcome feelings of guilt and shame to induce their continued climate action.

Unlike the first three themes, which can be seen as sequential stages of the psychological process, the fourth theme—*willful optimism*—encompasses the entire process. It is a lens that Bloomers (and arguably any climate activist) need to approach the Anthropocene world with; a mental fortitude to engage with climate issues. Belief and hope in a better future for posterity is an underlying component nudging Bloomers onto a trajectory of climate activism when facing the intergenerational injustice narrated by youth. For analytic purposes, the process is described with clearly distinguished stages; however, these stages may not be discerned by the individuals.

I refer to the hypothesis of a psychological process of consciousness formation of climate activism among the Bloomer generation as *Bloomers' Bloom*. The repeated metaphor of a blooming flower indicates that this could be a step toward their maturing generational consciousness to constitute a strategic generation. While these themes represent general reflections from members of the Bloomer generation, they may also be points of identification for Bloomers to mobilize around. This finding may be a contribution that growing Bloomer climate movements could use to bring more members to their cause.
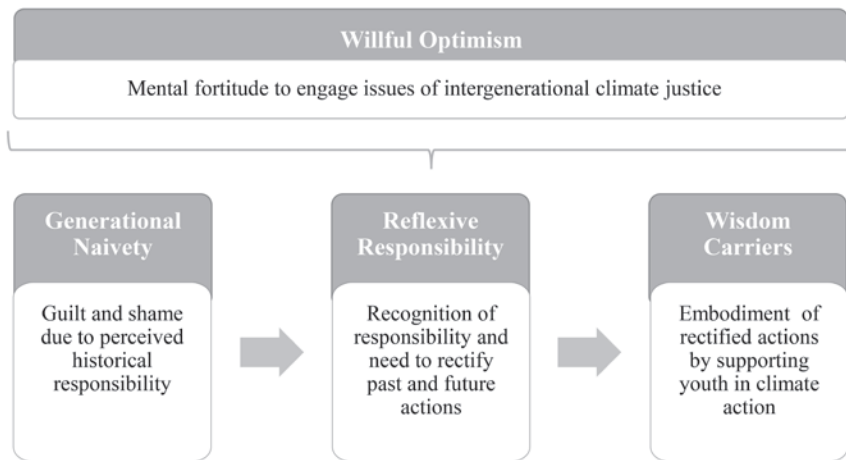
Fig.5 : Bloomers' Bloom: psychologiacal process of forming climate activist consciousness

From a scholarly perspective, the next step regarding *Bloomers' Bloom* –indeed, the entire theoretical framework I have developed – should be tested in deductive research approaches for encouraging engagement in climate issues among the non-activist Bloomer population. Such a demand for engagement is, after all, the essence of the plea by the climate youth activists. The research could extend the findings and discussion from this paper to further examine the role of feelings of guilt and shame in forming climate activism.

For example, one possible research avenue could be if, and to what degree, feelings of guilt and shame impact the willingness of individuals to engage in intergenerational discourse and discuss intergenerational justice issues. The research should be designed carefully because the answers could vary in strength based on how posterity is represented in the research design. I also consider guilt and shame as one side of a coin, with legacy thinking and generativity on the other side. For example, in the research for this paper, I used Greta as the token for intergenerational justice when interviewing the Bloomers, thereby representing posterity in one of its most demanding and outspoken forms. Having a research design that approaches posterity in a setting where Bloomers would engage in intergenerational conversations directly with youth – perhaps even with their own offspring – could be a more realistic test of these types of questions.

### Additional Observations

The data collected for this second part of the paper – hour-long interviews with twenty-two individuals – is large and could generate more refined insights with a greater investment of time and resources for analysis. Nevertheless, it is worth noting further observations generated by this paper's analysis, as they shed further light on the factors that influenced the interviewed Bloomers to become climate activists.

Examining their life story narratives highlights several influential factors. One explicitly mentioned by one interviewee and implicitly referred to by others was *biographical availability*; this means an absence of personal constraints for participation (McAdam 1986). Most interviewees described themselves as having been retired for some time and with good living conditions. Therefore, they had enough time and resources to participate in climate activism.

Exposure to environmental change was another factor suggested by some interviewees. Due to their age, the Bloomers have a reference point of the appearance of the natural environment, the earliest part of their experienced past – their childhood, a point in time that coincides with the beginning of the Great Acceleration. In other words, environmental degradation has been a rapidly ongoing feature during their lives. This experience, whether through personal exposure or media reporting, inclined them towards trying to understand the reasons for degradation.

In addition to these two commonsensical factors predisposing Bloomers towards climate activism, a third factor in almost all of their narratives is *care for posterity*. This was often expressed in terms of their children or grandchildren. That is not an unexpected observation, as legacy and generativity were already raised earlier in reviewing key concepts. But perhaps the most interesting aspect of this observation concerns the potential impact that the imagery of the child could have on climate engagement. An example can be seen in the response of Lena (SE) when asked about her initial engagement in climate activism:

> It was actually after Greta had started protesting. I cannot say that it was because she spoke about adults – I don't remember it like that – but I think that, in a way, she contributed with a focus on the issue, and that got me thinking. Above all, I started thinking about children. That was the triggering factor for me – it was a very physical feeling. I was sitting on the Gotland Ferry on the way home to Gotland. You know these areas where children can watch a movie, play, and so on? We sat just next to one of those, and then I peeked over at the children and thought: "It's insane. When these children grow up, what sort of future will they have then; in twenty years, when they are going to pick a partner, job, and have their own children?" Then I was really hit with it – that this is completely absurd. We need to prevent climate change. (Lena SE)

Lena's retelling of this incident suggests that her reaction was not stimulated by her children but rather by reflecting on the future as she saw other children playing. Thus, it seems to be that such a reaction can be stimulated by even abstracted or generalized visualization of children. Other interviewees recounted similar reactions in encounters with their hypothetical great-great-grandchildren in an induced meditation and another in a dream. This finding should also be considered together with the imagery of Greta. As Maria (SE) said when talking about the power of the youth, "Partly I am talking about the vigor of the youth, but also the power surrounding Greta. When you look at those videos [of Greta protesting], it's almost like a fairy tale, how she has been able to mobilize everyone."

Part of the power she refers to presumably comes from the content generated by Greta's image; however, the other part possibly comes from the image of a child pleading for their future in front of world leaders. The image of the child is a good symbol for intergenerational climate justice, as issues of responsibility and innocence can be powerfully connected to it. This issue is another interesting area to explore, as research is sparse. Research organizations, such as Climate Visuals, show that human pictures and stories are the most effective types of climate communication (Chapman et al., 2016). The effect of child imagery on the Bloomer generation could offer more insights in this regard, and perhaps for the research of guilt and shame, depending on the research focus.

### *Cross-cultural Differences*

A few words should be mentioned concerning cross-cultural differences among the interviews. The interview methodology was in the spirit of Beck's "generational constellations" and did not aim to explore these cross-cultural differences. However, I acknowledge that there still is a practical reality that must be taken into account; namely, most movements begin with a domestic focus. Some of these nuances came through in the interviews. A salient one is that the Trump presidency appeared as a point of mobilization for climate activism among the American interviewees. For example, as James (US) expressed, "Then, I guess you would say that Trump came into being. That changed a lot. Because when he got into office, he immediately wanted to get out of the Paris Agreement. And I knew that that was a bad thing."

However, although the Trump presidency was more poignant in the American context, it was also a global event because of the United States' prominent role in world politics. The sociologist Bruno Latour has argued that the Trump presidency had an incredible impact on climate activism: "What the militancy of millions of ecologists, the warning of thousands of scientists, the actions of hundreds of industrialists, even the efforts of Pope Francis, have not managed to do, Trump succeeded in doing: everyone now knows that the climate question is at the heart of all geopolitical issues and that it is directly tied to the questions of injustice and inequality" (Latour 2018, 3). Without Trump, would there be any Greta and the Fridays for Future and the ensuing Bloomer activism?

The point is that there are limitations of a singular national or cultural focus when examining contemporary intergenerational issues because of the globalized nature of our world. Rather, an argument can be made that it is necessary to examine the intersection of other dimensions that cut through national and cultural contexts to bring out underlying sociological insights. In this regard, it is necessary to utilize insights from gender studies. Among the Japanese interviewees, all the women drew a connection between giving birth and their later climate awareness through their concern for food security for their children. Such responses express the patriarchal society of Japan, where these concerns are more likely to be the responsibility of women, especially among the Bloomer generation. Thus, gender differences are another pertinent factor for further testing in research.

### *Towards an Intergenerational Alliance of Climate Action*

Another critical area of both research and practical significance is, I believe, how to strengthen the climate activist alliance between generations. I argue that more insights are needed in the messaging to Bloomers regarding how intergenerational issues are conveyed to them and their long-term effect on their psychological well-being.

As an area of research, climate communication examines the most effective ways of delivering messages to convince people to take climate action. However, it often lacks a detailed analysis of the impact of the messages on the receiver beyond the initial action and reaction. There needs to be greater research on the long-term psychological effects of Bloomers as recipients of the existential messaging on intergenerational injustice by the youth. The urgency for this reflects Frederick's insight that self-awareness conveyed amidst the recognition of the climate crisis invariably leads to feelings of guilt and shame. People will likely have different degrees of success in dealing with those feelings. After the "shock of Anthropocene" hits Bloomers, it is important to convey more clearly the very complicated circumstances of responsibility underlying the current climate situation – and, most importantly, all the possible outlets of exculpation. Otherwise, Bloomers might be left in a state of eco-anxiety, which is, as we know, very common

among the youth themselves (again see Wu et al., 2020; Bright and Eames 2021). There is a great possibility that to escape their eco-anxiety, Bloomers end up rejecting the important message of responsibility because no one could possibly live with the type of pressure that Greta alludes to – "the future of all the coming generations rests on your shoulders" – without crumbling to pieces. This is especially true of a generation likely to bear most of the brunt of blame by future generations if things go as bad as they seem.

Therefore, I would argue for balanced messaging to the Bloomer generation that also considers the "aftercare" for its recipients. For a successful intergenerational climate alliance, it is crucial to balance the stick of blame and shame that Greta leans strongly on with the carrot of understanding, appreciation, and respect. That would open the opportunity for a formation of a strategic generation to be formed around a slightly different idea: that Bloomers are not the culprits of the worst threat to ever face humanity, but instead, possible heroes – redeemed saviors stepping in at the last second to help avert catastrophe. That, I believe, is the generational consciousness needed to bring about the societal and political change that youth movements are calling for.

**Conclusion**

This research attempted to establish a theoretical foundation to examine the reflections of "grown-ups" on intergenerational climate justice. This is an area of inquiry that is overlooked, in part, due to the difficulty of defining who are "grown-ups" within an intergenerational climate justice discourse. By first clarifying that the tension in the intergenerational discussion stems from an anticipated loss of historicity by the youth rather than a lack of action by "grown-ups," this paper theoretically defined and operationalized a new term – *Bloomers*. Thus, this explorative exercise is the major contribution of this paper, namely, to establish a theoretical framework for future research regarding intergenerational climate justice.

The thematic reflections of Bloomers illuminated from the interviews in this paper's descriptive second part offer insight into the psychological underpinnings they face when encountering the discourse of intergenerational climate justice. The themes were: *generational naivety,* a sentiment of naivety about the development of the climate crisis; *reflexive responsibility,* self-critical scrutiny of current modes of taking responsibility; *wisdom carriers,* a supporting role to the youth in combating climate change; and *willful optimism,* a stubborn belief in a positive future despite predicted hardship. A subtheme running throughout the four themes is the feelings of guilt and shame; this is a powerful factor that arguably induces climate action among the Bloomer generation. I interpret the four themes as parts of a psychological process of climate activist consciousness formation among the Bloomer generation. I express this interpretation as the hypothesis of "bloomers' bloom" to be tested in subsequent research on the impact of feelings of guilt and shame on the extent of climate engagement among non-activist Bloomers.

Finally, I argue that this paper– with its interview content of Bloomers' self-reflections – can serve as an archive for the future. Understanding how some individuals from arguably one of the most extraordinary periods of our planet have perceived their role and experience of living through this time, with an eye towards the larger historical picture of intergenerational climate justice, is a valuable insight for coming generations making sense of their own time and world. More conversations like these – whether for research or otherwise – are needed.

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