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Climate Change Conversations Amongst Young Adults: On Conversational Safety and the Search for Consensus in Polarizing Interactions

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ABSTRACT

While much research has focused on the effectiveness of various climate change frames (i.e. cognitive), much less is known about how people co-construct the meaning of climate change in conversations (i.e. interactive). We conducted an interactional framing analysis on focus-group discussions about climate measures to examine how young adults interactively construct the meaning of climate issues, identities and relationships, and the conversational process. Our findings suggest that challenging discussions oftentimes lead to polarizing interactions, yet they also result in attempts to build conversational safety and consensus. These dynamics are defined by (a) the construction of shared truths and experiences; (b) joint fact-finding through constructive contestation; and (c) harmonizing through the active display of positive intent. We conclude that the interplay in the conversations impacts how young adults think about climate change, which provides fertile ground for future research.

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Introduction

Despite overwhelming scientific consensus that the Earth's climate-, ecological-, and geological systems are negatively affected by human activities (IPCC, 2023), there persists much public debate: not only about the existence and extremity of climate change (Birch, 2020), but also increasingly about the effectiveness of diverse mitigating solutions (Karakas & Mitra, 2020). Across the globe, these discussions are often highly conflictual, with sceptics being labeled "contrarians" and "deniers", and believers called "alarmists" or even members of "deep state" (Brüggemann et al., 2020). To harmonize these public spaces and generate social consensus on sustainable actions, scholars have designed a variety of communication interventions to reframe climate change issues (e.g. Bertolotti et al., 2021). Yet, although there is next to no controversy about the need to identify and adopt the most "effective" communication strategies, research has largely overlooked how people themselves interactively construct the meaning of frames in conversations.

In fact, most work has focused on static frames as singular and cognitive elements (Guenther et al., 2023). This "cognitive approach" (Dewulf et al., 2009) to interventions has shown, in different populations, and in diverse contexts, how communication strategies can positively affect climate change beliefs (Gustafson et al., 2020), policy preferences (Reynolds et al., 2020), behavioral

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intentions (He et al., 2023), discussions (Geiger et al., 2017), individual behaviors (Li & Su, 2018), and collective actions (Swim et al., 2019). Despite their evident success in promoting pro-environmental attitudes and actions, however, they still (implicitly) tend to "conceive of people (..) as information processors or lay scientists" rather than as "conversationalists or lay rhetoricians" (Dewulf & Bouwen, 2012, p. 3). This distinction is of particular importance to communication practices, as it suggests that climate frames, to be effective and sustainable, should not only be tailored to the individual characteristics of the audience, but also to the discursive and interactional context in which they are enacted (Ettinger & Painter, 2023).

The current research aims to go beyond individual representations of frames by investigating the "perspective-based co-construction of meaning" (Dewulf & Bouwen, 2012, p. 3) in conversations about climate measures. We apply Interactional Framing Theory (IFT) (Dewulf et al., 2009), which aims to analyze how people make sense of complex situations, and negotiate perspectives, in and through their discussions with others (Ford & Ford, 1995; Drake & Donohue, 1996). IFT has been used in environmental communication literature (Vink et al., 2013; van Vuuren-Verkerk et al., 2021), yet, to date, limited research is available that focuses on how climate conversations develop (van Eck et al., 2020; Ettinger & Painter, 2023).

Additionally, the majority of climate communication research focuses on older adults, and there is little knowledge of how young adults (i.e. 17–24 years) could be "engage[d] with an issue that will shape and define their generation" (Corner et al., 2015; p. 523: Sawyer et al., 2018). Research on this target group is vital, especially since young adults display a rather complicated mix of climate responses. That is, compared to the general population, they display lower levels of climate skepticism (Ross, Raus, & Mobley, 2019), and higher levels of climate care and "constructive" hope (Ojala, 2012). Yet, they also increasingly report feelings of psychological distance (Gubler et al., 2019), disengagement (Hibberd & Nguyen, 2013) anxiety (Schwartz et al., 2023), and despair (Nairn, 2019). Hence, we aim to investigate how young adults deal with framings of others in conversations about climate measures which may challenge their existing views.

Framing and climate change communication

Framing theory is widely used in climate change communication literature (Guenther et al., 2023). However, the large majority of this work employs a cognitive frame-paradigm, which is distinctively different from framing in the interactional approach (Dewulf et al., 2009). The first stream of research understands frames as cognitions, or static mental modes, that guide conversations. Contrastingly, the interactional approach defines frames as transient communication structures through which meaning is co-constructed in interactions (Dewulf & Bouwen, 2012). A revealing metaphor used to differentiate between the two is that the cognitive paradigm focuses on the *frames* "between the ears", whilst the interactional paradigm focuses on how *framing* is enacted "between the noses" of conversational partners (Dewulf et al., 2009, 162).

Importantly, research situated in these paradigms make distinct ontological assumptions, apply different theories, and employ divergent methodologies (Dewulf et al., 2009). In the climate communication discipline, researchers operating in the cognitive paradigm often assume a positivist reality in which audiences receive climate frames and process these cognitively. Previous research in this paradigm investigated frame production, frame content, audience frames, and framing effects (Guenther et al., 2023). For example, quantitative studies examined how climate change frames present in the media are received and processed by segments of society (e.g. Bertolotti et al., 2021).

Contrastingly, researchers employing the interactional paradigm assume that meaning about the reality of climate change is co-constructed and fluent (Dewulf et al., 2009). In the climate communication literature, this IFT model has been largely understudied, although there are exceptions. In an in-depth and qualitative examination of online climate conversations (i.e. blog comments), van Eck et al. (2020) investigated how people tend to deal with situations in which their frames differed: it

showed how such discussions generally start with co-construction of the meaning of climate change, but often shift to meaning-creation about others' identity, ultimately leading to starker, adverse, and unresolved framing differences. Further, van Vuuren-Verkerk et al. (2021) studied discursive choices during debates between politicians and farmers over environmental conflicts. While cognitive frame research is certainly of value to the study of climate change issue engagement (Ettinger & Painter, 2023), it overlooks that the recipients of the frames are part of a dynamic world, in which (a) multiple frames compete for their attention; and (b) recipients have the agency to reply to the messages. This limitation may also explain why the information-deficit model of science communication has largely failed to help people *translate* climate change beliefs into actions (Vieira et al., 2023). And indeed, researchers and practitioners increasingly advocate for actually talking about climate change (Corner & Clarke, 2016; Kelly et al., 2020) and moving away from one way communication models to interactional approaches (van Eck et al., 2020).

In a recent paper, for example, Ettinger and Painter (2023, p. 3) posit: "Research on climate conversations is only beginning. We still need to answer many questions: How do climate conversations differ across various settings, communication channels (..), for different purposes, and among people with distinct relationships (..) and climate attitudes?"

The current research aims to answer this call, by adopting an interactional approach to study climate change conversations amongst young adults. In principle, IFT focuses on (1) *what* gets framed in conversations (i.e. "framing category strategy") and (2) *which* strategies are used to deal with these interactional choices (i.e. "framing interaction strategy"). The theory has, however, been mostly applied to situations in which conflictual dynamics emerge (van Eck et al., 2020): on this account, we will explore to what extent IFT could be useful for analysing climate conversations as a whole – hence, not limiting our theoretical focus to interactions with framing-differences. *See* Table 1 for an overview of the theoretical starting point of our analysis, which is based on Dewulf and Bouwen's (2012) initial conceptualization of IFT to analyze framing differences and van Eck et al.'s (2020) theoretical refinement. In sum, we aim to answer the following two research questions:

1. What kind of (a) *framing category* and (b) *framing interaction* strategies do young adults employ?
2. How are framing strategies deployed and how do these choices shape the course of the conversation?

Table 1. Theoretical constructs and their definitions.

Theoretical construct	Definition
Framing	Dynamic enactment of frames in ongoing interactions, in which the meaning of climate measures is co-constructed
Framing difference	The enactment of two frames that are incompatible with one another
Double interact	The reaction of user A on the reaction of user B to the initial action of user A
Framing category strategy	The user's choice to deploy:
1. Issue	The meanings attached to agenda items, events, or problems in the relevant domain or context
2. Identity & Relationship	The meanings about oneself, their interlocutor, or their relationship
3. Process	The interpretations that disputants assign to their interaction process
Framing interaction strategy	The user's choice to deploy:
1. Incorporation	Incorporating a downgraded reformulation of a challenging element into your own issue framing
2. Accommodation	Accommodating your own issue framing to the challenging issue element
3. Disconnection	Disconnecting the challenging element from the ongoing conversation as irrelevant, unimportant, or the like
4. Polarization	Polarizing the difference by reaffirming your own issue framing or an upgraded version of your own issue framing
5. Reconnection	Reconnecting frames by taking both elements seriously and taking away the incompatibility between them

Note. Our definition of interactional polarization should not be confused with more common macro-level conceptualizations of "polarization" situated in the cognitive paradigm of research (e.g. ideological and affective polarization).

Methodology

Research design

The current research employed an interactional framing analysis, which comes from a social constructionist tradition, and which builds on conversation analysis and discursive psychology (Dewulf & Bouwen, 2012).[1] These methods share their focus on turn-by-turn sequences in conversations and assume that the meaning of participants' utterances is determined by how others make sense of it (Sacks et al., 1974). Interactional framing theory shares this focus too, but is less concerned with the role of language, and more interested in the framing strategies that people deploy. Further, while conversation analysists and discursive psychologists mostly explore everyday conversations, some also gather their data through settings in which participants interact with one another in an organized setting (Kitzinger, 1994). Following this sub-stream of "interactive" researchers, we collected our data through focus groups, a method designed to capture group interactions (Prosser et al., 2024). Last, we selected flying and meat consumption as climate measures up for discussion, as these are seen to be both impactful and highly debated mitigation actions (Whitmarsh et al., 2021), as well as actions that relate to the lifeworld of young adults (in contrast to e.g. energy consumption) (Lack, 2022).

Data collection

To ensure that the focus group participants represented a mixture of opinions on climate measures, we performed a pre-survey on a Dutch student population ($N = 198$). Respondents were informed about the purpose of the pre-survey, and they were asked about their climate attitudes, including their views towards a range of statements about flying and meat consumption. Subsequently, we invited the respondents with extremely different opinions, and in cases where they did not respond, we selected respondents with less extreme opinions (*see* the Supplement for an explanation of this process). In total, 23 young adults participated (age 17–24; 18 females and 5 males; bachelor students [i.e. education]; slightly left leaning[2]) in a total of seven focus groups. In each of these groups, participants were present holding different views – this to ensure that they would encounter conversational moments in which their views did not align.

Prior to the focus groups, a topic list with questions was compiled, which included introductory questions, questions about climate change in general, flying, meat consumption, and closing questions. At the start of a session, all participants signed an informed-consent form, and the facilitator introduced the ground rules. For example, one rule was that there are no right or wrong answers, and another rule was that the participants were supposed to discuss the questions with each other, and less so with the facilitator. Finally, each focus group lasted approximately one hour, and the participants received either a gift-card or study points.

Data analysis

The analyses were conducted in three steps. First, the focus-group discussions were verbatim transcribed, and each was considered a single corpus containing the "interaction-sequences" of the conversation. The sequences were demarcated by identifying separate thematic sections, which were defined by a string of comments related to a single subject (e.g. climate change worry). When participants were seen to discuss a different subject (e.g. meat-taxes), the explicit thematic transition was "traced back and the beginning of a differen[t] sequence marked off" (Dewulf & Bouwen, 2012, p. 8).

In the second step, the corpi were coded by the first author. Each utterance was understood as a conversational turn. This approach was both deductive and inductive. The deductive coding element involved analysing how the (a) framing categories and (b) framing interactions of Dewulf

and Bouwen (2012) applied to the corpi. The inductive coding element involved identifying new strategies that did not fit this framework. These were examined in terms of their conversational context, discursive meaning, and interactional consequences, and then interpreted in terms of potentially new interactional strategies.

To ensure the trustworthiness and soundness of this method (Wood & Kroger, 2000), intermediate rounds with the co-authors were organized to discuss the methodological choices, inductively identified framing strategies, and ambiguous sequences. Throughout the analysis, emerging patterns were documented in analytic memos to facilitate the last step of the analysis in which the coded data was interpreted (Birks et al., 2008). Further, the analysis was an iterative process in which the corpi were (re-)analysed to de- and refine the interaction strategies until data saturation was reached.

In the last step, the final IFT model was re-applied to the data, and the analysis was checked to verify whether all codes were reliably and consistently used across the corpi. A final meeting with the co-authors was, then, organized to discuss conversational trends, map repetitions of discursive processes, and identify representative extracts.

Results

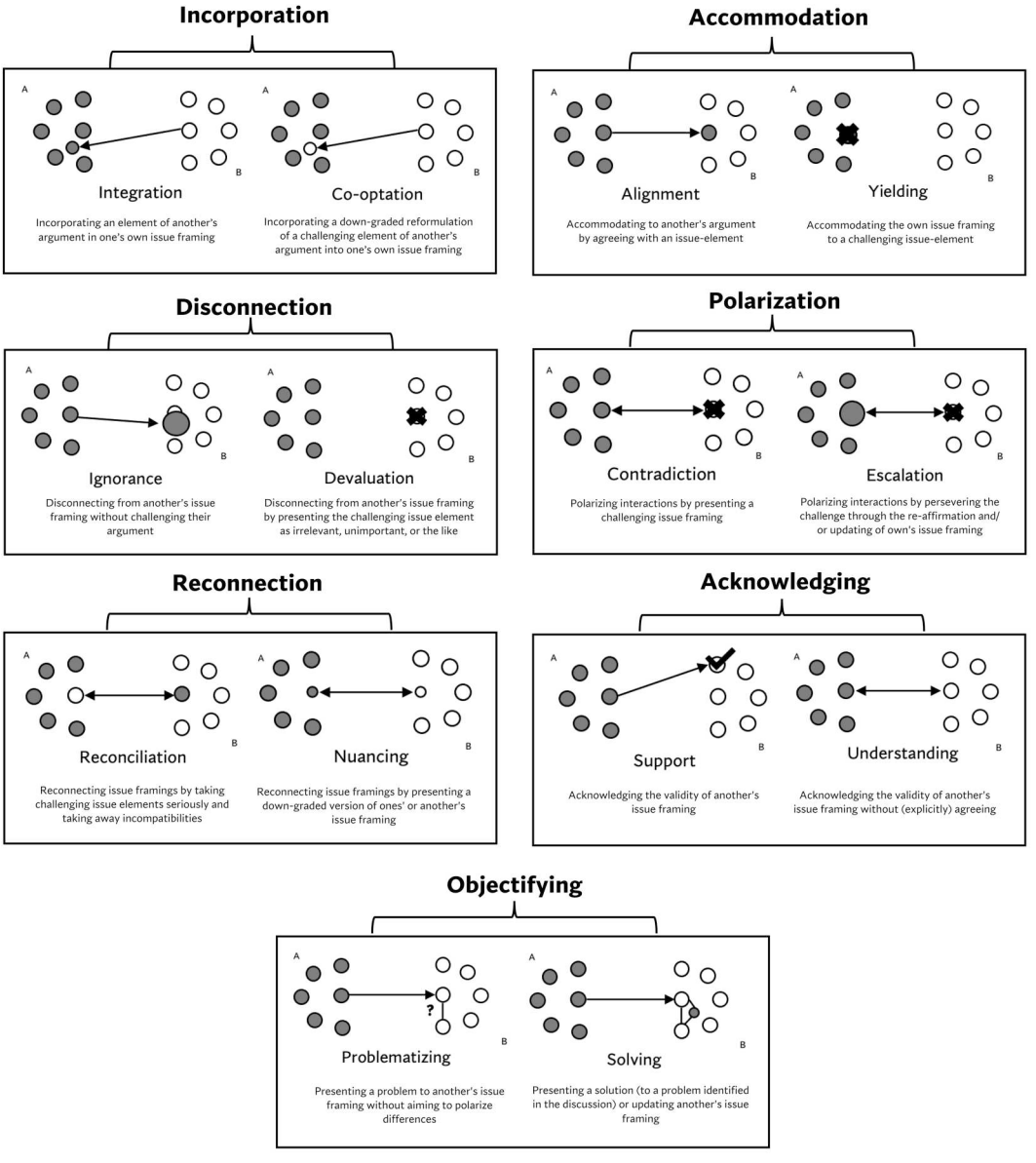
Framing categories and interactions (RQ1)

The following section presents an overview of the (a) *framing category* and (b) *framing interaction* strategies employed by the young adults in the focus groups. Virtually all comments were, at the very least, characterized by the use of issue framing (*see* Table S1 in the Supplement). Indeed, participants' comments were largely defined by their attempts to construct the meaning of climate change measures: that is, most if not all comments were aimed at expressing their viewpoints, and their interpretations of potential policies, with some arguing for more interventionist pro-climate measures, and others insisting on the value of individual freedom in social issues concerning meat-eating and flying.

In parallel, participants also used other framing category strategies, albeit to a substantially smaller degree. Identity- and relationship framings were employed to construct participants' own identity (e.g. "I am a vegetarian"), the other (e.g. "you vote for the Green Party"), or both (e.g. "we are consumers"), and they were frequently introduced in two contexts: first, to present the self, acknowledge the other, or forge a "we" when making a point; and second, to inform others about the flexibility of the self to temper framing-differences. Finally, participants employed process framings to an even lesser extent, and when used, these strategies were primarily aimed at taking away ambiguities: that is, they were introduced to construe and/or clarify the nature of ongoing interactions (e.g. "that is what I meant" or "as you said").

Moreover, the participants drew on a multiplicity of interactional framing strategies. In line with the traditional IFT model, these can be displayed as a typology of 21 strategies, consisting of *thematic* interaction strategies (i.e. framings related to the interpretation of issues) and *process*-oriented framing strategies, which are primarily aimed at influencing the flow of the conversation.

We identified seven categories (and 14 subcategories) of thematic framing interactions (*see* Figure 1). The IFT's traditional strategies of incorporation, accommodation, and disconnection were separated into framings that were either used in non-conflictual (i.e. no framing differences) or conflictual (i.e. framing differences) interactions: respectively, (1) integration and co-optation, (2) alignment and yielding, and (3) ignorance and devaluation. In addition, we distinguished between two temporally distinct polarizing framings (4), with contradiction representing the initial presentation of difference, and escalation the deepening of these differences, as well as two qualitatively distinct reconnection framings (5) (i.e. reconciliation and nuancing). Last, we identified two new interaction strategies: acknowledgement (6),



Note. The figure illustrates 7 thematic framing interaction strategies and 14 sub-categories. Each subcategory displays A's *double interact,* which is a reaction to B's (i.e. interact) reaction to A's initial issue framing (i.e. act). The spheres represent "issue-elements in ones' overall discourse"; the arrows the "direction of A's comment"; a cross "opposition to (or re-traction of) an issue-element"; a tick mark "agreement"; and a question mark "interrogation".

Figure 1. Thematic framing interaction strategies.

which is employed to verbalize appreciation for the position of others (i.e. support or understanding), and objectifying (7), which is used to handle differences in opinion without polarizing (i.e. problematizing and solving).

In addition, we identified seven *process* framing interaction strategies (*see* Table 2). Beyond, for example, asking questions and answering them, participants attempted to provide clear handles for the conversation to continue. That is, they dedicated time and effort to summarize what had been said before, and they tried to explain current events and developments to each other. Importantly,

Table 2. Process framing interaction strategies.

Framing Interaction Strategy	Definition
Questioning	Asking a question to unearth another's opinion or understand one's issue framing
Summarizing	Providing an overview of a specific action or interaction sequence without adding an interpretation
Explaining	Providing a thematic/process clarification without issue framing
Bridging	Taking elements of another's issue framing seriously whilst steering away the conversation into another direction.
Answering	Providing a response to a question
Processing	Providing an answer by saying that one need more time
Non-contributory	Providing an answer by saying one has no answer

Note. These strategies can be combined with thematic interaction strategies (yet this is not required).

these strategies were defined by attempts to provide, at least in their views, representations of the nature of their conversation.

By and large, the framing interaction strategies of integration and alignment, which are aimed at nurturing a shared meaning, were most commonly used by the participants (over 1/3 of the time: *see* Tables S2 and S3 for the distribution). Constructive strategies (i.e. solving, problematizing, explaining, and summarizing), which were primarily used to tackle or reduce the informational complexities of climate change, were also regularly utilized (around 1/10 of the time). Finally, both polarizing and reconciliatory interaction strategies were employed in comparable frequencies (less than 1/10 of the time), which suggests that although the participants actively challenged each other's views, they also attempted to harmonize by searching for consensus (or empathy).

The interactional process (RQ2)

In this section, we explore how framing strategies are deployed and how these choices shape the course of the conversations. Results suggest that the interactions do reveal existing conflictual viewpoints, yet they also generally result in consensus-seeking dynamics to create *conversational safety*. Participants sought this safety by using (a) shared meaning-making, (b) harmonizing, and (c) joint fact-finding under uncertainty, which will be discussed below.

Building shared meaning

Across all focus groups, we observed that participants, when discussing challenging yet not overly contentious climate issues, deploy framing strategies to create a shared and coherent story of reality. More specifically, to avoid causing confrontations, they employ the interaction strategies of integration and alignment, and to create an ingroup feeling, they utilize what one may call "we-feeling" inducing identity- and relationship framings.

Extract 1 illustrates how consensus-seeking and identity building framing-dynamics can help build bridges between issue-elements.[3] Here, P101 describes a painful feeling of climate worry, which combined with an awareness that others, much bigger players, continue to pollute the earth, has caused apathy.[4] The consequences of this paradoxical emotion remain largely implicit, yet after an aligning response by P102, P101 follows up with an illustration of their feeling, represented by paralysis ("what more can I do?") and associated indifference ("accepting [that's] how the world works"). P102, then integrates the feeling by fleshing out an example, drinking from a "soggy paper straw", whilst Kylie Jenner "takes the plane 100 times a year". At this point, both P103 and P102 integrate the motivational issue into their own framings, by expressing feelings of, respectively, being "powerless" and "small". Finally, these emotions culminate in a reformulation of apathy, which, interjected by diverse aligning remarks by all three, is integrated into the feelings of "annoyance" (P101) and "difficulty" (P103) over the contradictory state in which they all find themselves: although "we [should] all keep doing our best", there "won't be any change" if everyone thinks they are too "small" to act.

Extract 1. Rising feelings of apathy.

Comments	**Framing strategies:** Interaction (*categories*)
P101: I do worry about it, but it's sometimes painful to realize that I can put in a lot of effort to really do something about it, but then there are big companies (..) that continue to pollute. Then I think, I'll do something about it, but what's the point, really?	Answering (*issue & identity*)
P102: Yeah, I do agree with that.	Alignment (issue)
P101: (…) at some point, you're like, I've done my part, what more can I do? It's just a matter of accepting that that is the way it is.	Integration (issue & identity)
P102: Yeah, especially when you hear, for example, that Kylie Jenner takes the plane 100 times a year while it takes 20 minutes by car. Then I think, I should drink from a paper straw that eventually gets so soggy that you can't drink anymore, and she can just take a plane whenever she wants. So, I find that very contradictory. That's just how the world works sometimes, I think.	Integration (issue)
P103: At those moments, you also feel a bit powerless. Alone, what could I even try to do? When other people do something so polluting …	Integration (issue & identity)
P102: Then you feel small even though you think you're doing pretty well.	Integration (issue & identity)
P103: Yeah.	Alignment (issue)
P101: It's certainly annoying if everyone starts thinking that way. Then there won't be any change.	Problematizing (issue & identity)
P102: Yeah, that's why.	Alignment (issue)
P101: Of course, it's the idea that we all keep doing our best.	Integration (issue & relationship)
P102: Which is difficult is when you see those kinds of things.	Integration (issue)
P101: Exactly.	Alignment (issue)

This extract, hence, shows how participants use integration and alignment framing strategies to co-construct shared emotional and motivational experiences concerning climate change. In parallel, however, these interactions also demonstrate how shared stories are strengthened by the use of framing categories which nurture an ingroup feeling: that is, they employ identity- (i.e. self and others as normal persons vs. the big polluters) and relationship framings (i.e. everyone is in the same boat) to forge interpersonal connections. And indeed, across all focus groups, such framing strategies were used to create shared social identities, including the younger generation (vs. older generations), students or higher educated (vs. lesser educated), "us" with lower incomes (vs. the wealthy), those within the climate change media bubble (vs. those outside of it), and consumers (vs. producers).

In a similar way, Extract 2 exemplifies how shifts in identity framing, combined with integrating/aligning strategies, can build bridges between people. Throughout the interaction-sequence, participants integrated the arguments of their peers to make the case for a knowledge gap, which they argue, makes them unable to act effectively on their worries. Yet, the created consensus is particularly strong precisely because they root individual self-views in a shared problem. Indeed, P502 constructs an identity of self as one who is unaware of "many things", which is then integrated by P503 into a more holistic identity that "we as citizens, may (..) not know enough". P501 continues and follows P503's strategy and argues that a solution may lay in motivating people to delve into details, as they *themselves* also find it difficult to find that drive. These shifts between the individual and the collective can be explained as an attempt to discuss individual behaviors through a generalized identity-statement, thereby avoiding singling one out in a negative way, or as a genuine alignment with the P502's perspective: in either case, the shifting identity-approach creates conversational safety for P502's by validating their experiences and presenting their struggles as a shared truth.

Extract 2. A knowledge gap?

Comments	**Framing strategies:** Interaction (*categories*)
P502: But I also feel like I often don't know enough about what exactly is the most polluting. You know the basics, but I feel like I'm not aware of so many things. (..)	Problematizing (*issue & identity*)
P503: (…) There's not really a very concrete plan or an original idea like, this is how we might tackle or solve it. And indeed, we as citizens may also not know enough.	Integration (*issue & identity*)
P502: But I have the same. At least, I could better educate myself or watch documentaries, but I don't take the time for it. I notice that there's so much, then you really have to delve into it.	Integration (*issue & identity*)
P503: And you get influenced very quickly. If you watch a documentary, that becomes your world.	Problematizing (*issue*)
P502: That's why I think you really have to delve into it, and I don't do that.	Integration (*issue*)
(..)	
P502: (..) There's a new problem every week. If you had to take all of that together, then you wouldn't be able to figure it out yourself if you do not know where to start.	Nuancing (*issue*)
P501: I think that's where it goes wrong for many people. They know the big picture, but they don't have the motivation to delve into it. And maybe I have that too. I think there could be a lot of change made there.	Integrating (*issue*)
P502: I think everyone knows the basics of separating waste, eating less meat, taking the car less often, those kinds of things. But I, for example, don't know all the details. I just keep hearing so many new things. First, I think: I shouldn't drink oat milk anymore, then I think: there's a huge nitrogen problem now, what should I do with that? There's something new every time that I think: I do worry about it, but I don't know what to do.	Integration (*issue & identity*)
P501: Yeah, you don't know what to do with it. I feel the same way.	Alignment (*issue*)

As a result, both extracts show how, when confronted with issues that are either (a) non-controversial, or (b) (deemed) too peripheral for direct conflict, participants employ integrating/ aligning, as well as shifts in identity- and relationship framing, to co-construct conversational safety. In the subsequent section, we will present how they deal with more conflictual issues, and what kinds of strategies they employ to address these challenges.

"Solving" the divides

The conversations have been shown to be largely populated by *non-conflictual* framing interaction strategies, which in turn were primarily aimed at building bridges between issue elements and amongst people. Yet, these findings do not suggest that there were no framing differences, but rather that the participants avoided pursuing the differences when they arose to maintain the conversational safety. In fact, even though there were explicit forms of contestation through contradiction, escalation, and devaluation, the emergence of these conflictual framings regularly led to a double down on attempts to converge, either (1) by showing positive intent (e.g. appreciation of the value of others' opinion), or (2) through the use of flexible self-identity framing strategies.

Extract 3 illustrates how *re-connecting* strategies can function as a pathway to show appreciation, which in turn can help mitigate interactional conflict. A first signal of disagreement emerges when P704 contradicts P702, who argues that, in the interest of peoples' freedom of "choice", the university should continue to "offer" meat as an option. P702, then, attempts to move the argument to a reconciliatory space by arguing that people can have the *choice* to "bring it" [i.e. the meat] themselves. This, in turn, elicits a more nuanced statement by P704, "[maybe] just a small offering", to which P702, continuing the reconciliatory strategy, replies that collective "big steps" can be taken by universities whilst, concurrently, allowing individuals to make their own choices at the "supermarket". Finally, after an integrating remark by P703, both P701 and P704 actively accommodate their opinions to the challenges by P703 (i.e. yielding), and they recognize that the explanations have helped them understand that the meat-free policies would not erode their autonomy, nor would it take away their right to "eat what they really want".

Extract 3. Freedom of choice?

Comments	**Framing strategies:** Interaction (*categories*)
P702: I think it just shouldn't be offered. Especially if you make it more common among students now, for example, to have a wrap with halloumi instead of one with minced meat. That students might try halloumi as a really good meat substitute (..)	Answer (*issue*)
P704: I agree with that, but also partly not because you have to make your own choice. I do think it should be offered.	Contradiction (*issue*)
P702: Yeah?	Question (*issue*)
P704: You still have the choice of whether you want meat. But I do agree with you, that if it's not offered, and the meat substitutes are available, people will probably pick them up more quickly (..)	Explanation (*issue*)
P702: But if you really want meat, you can always bring it yourself.	Reconciliation (*issue*)
P704: Or just a small offering.	Nuancing (*issue*)
P702: At least, that is how I am. Thinking we all have to contribute a bit, and hopefully, everyone will realize that. You can still buy it at the supermarket if you really want it: then, you can take a salami sandwich. That's how I think, we need to take bigger steps, and create solidarity in that. For example, all universities need to stop offering it, but that is just my opinion.	Reconciliation (*issue & identity*)
P703: Yeah, I agree with you. Everyone can eat vegetarian, but not everyone can eat meat. (..) you can still, the Albert Hejin is just down the street if you really want meat, it's not far (..)	Integration (*issue*)
P704: You are right about that.	Yielding (*issue*)
(..)	
P701: I also notice that about myself. When you say, there just shouldn't be any meat, I think, well, I should be able to make that choice myself. But if you explain it.	Integration (*issue & identity*)
P704: Yeah, I had that too.	Alignment (*issue*)

This interaction demonstrates how strategies of reconciliation and nuancing can convey positive intent: in fact, in the context of framing differences, conveying non-judgement of the opinions of conversation partners (i.e. here, the need for a freedom of choice by P704) can help create a feeling of conversational safety, which in turn may help soften peoples' attitudes to new perspectives. Yet, as can be seen in Extract 4, the use of such framing strategies does not necessarily mean that people end up agreeing with each other.

Extract 4. A thankful understanding.

Comments	**Framing strategies:** Interaction (*categories*)
P201: I also agree with that. I think if you completely prohibit it, that wouldn't work (..). And I also think that they should increase the taxes on meat, and indeed, like you said …	Integration (*issue*)
P202: Maybe some sort of tax on it.	Alignment (*issue*)
P201: Yeah, something like that. Because I do have the impression that in recent years, it's more, but still, vegetarian options sometimes remain even more expensive (..). But I do think that as a citizen, you should be free to do what you want and stand for what you believe in. You can't just ban all of the Netherlands from eating meat (..)	Integration (*issue*)
P203: I do not think they should make meat more expensive. I think they should make those options cheaper instead. So, everything you just said, but without the tax on meat, personally.	Contradiction (*issue*)
P201: Yeah, I understand.	Understanding (issue)
Facilitator: You understand it, but you do not agree with it?	Question (*issue*)
P201: Yeah, that. I do understand that people enjoy meat, or that it is just ingrained in your system. So, I am not so, how do you say it, so radically vegetarian that I try to convince everyone. But I do have a different opinion myself. But I do understand that you think that way.	Answer & Understanding (*issue & identity*)
P203: Thank you.	Answer (*process*)

Extract 4 exemplifies how understanding interaction framings, as a second set of positive intent strategies, can help create conversational safety without pushing for the convergence of beliefs.

Whereas P201 and P202 contend that the "taxes on meat" should be increased, P203 contradicts these statements, and argues that meat should not be made "more expensive". P201 follows up by saying that that they "understand" that they [i.e. 2P03] "think that way". Yet, this framing strategy may not have been aimed at bridging the attitudinal divides: in fact, P201 reiterates that they "have a different opinion". Rather, they may have aimed to convey that they actually listen to and value the other's perspectives, which as a result is matched by a grateful P203 (i.e. "thank you"). Indeed, rather than functioning as a bridge between framing differences, understanding may be employed to diffuse interpersonal tensions and provide safety, which could be the first step towards creating the interactional condition for harmonization.

Note, however, beyond the use of reconnection and understanding to solve conversational divides, that participants in these extracts also employed self-identity strategies to open up the conversation. These framings, including "that's how I am" (P702), "personally" (P203), and "myself" (P701/P201), make conversational dynamics less rigid and more flexible, and they were used throughout the focus groups to soften conflictual interactions. This tendency points, again, to conflict avoidant interactional styles, and these are further exemplified by (a) qualified disagreements, such as "I agree with that, but … " (P704) and "everything you just said, but without … " (P203); (b) the revealing interjection by the moderator in Extract 4 (i.e. "you understand it, but do not agree?"); and finally, (c) absolute changes in topic to stop the continuation of confrontations altogether (*see* Extract S1).

Joint fact finding under uncertainty

To avoid confrontations, whilst at the same time creating a safe and knowledge-rich conversational space in which they could engage with ambiguities and challenge each other on issues, participants oftentimes employed objectifying framing strategies (i.e. problematizing without polarizing, and providing solutions), as well as techniques which help guide others in their thought-process (e.g. explanation).

Extract 5 illustrates how these interactional tactics are used to address factual and/or emotional ambiguities by providing constructive resistance to each other's viewpoints. P405 starts the sequence by probing the "guilty" conscience after a life of climate inaction, and P404 responds by problematizing individual action, describing the feeling of being small, especially when thinking about the inaction of "others". P405, then, agrees that one "cannot solve it alone", yet also provides an initial solution: the idea that one can set an example, which in turn can trickle down through "social circles". After aligning (P401) and integrating (P403) remarks, P402 continues by deepening and explaining this solution, providing "numbers" about the "difference" that "individual" actions can make. These arguments finally result in nuancing and supportive statements by P404, demonstrating how constructive framing-strategies can promote shared facts and even encourage individual action (i.e. here, instill hope: "why not give it a chance?").

Rather than attempting to defeat conversational partners, information-centered framing-strategies are primarily aimed at navigating the challenges of contentious issues through functional, constructive, and safe debate. That is, framings are oftentimes actively used to respond to the difficulties presented by others, and they are employed to jointly address factual differences. Especially when combined with non-confrontational and inclusive identity framings (e.g. "I won't be able to solve it alone" by P405), these techniques can nurture respectful deliberations, which in turn may help resolve conflicting framings. Of course, they do not always induce drastic attitudinal changes (*see* Extract S2), yet they help broaden people's thinking to new or even alternative perspectives (*see* for example, "if I could see those kinds of things, I would be more motivated to continue" by P404).[5]

Extract 5. Constructing hope.

Comments	**Framing strategies:** Interaction (*categories*)
P405: Personally, I really have the feeling of, okay, suppose I'm 80 (..) I would feel very guilty if I haven't done anything now. I don't know how you guys see that?	Question (*issue & identity*)
P404: (..) sometimes I think a bit like: I'm doing it, but others aren't (..) and then I think, well, what's the point of me putting in so much effort. But yeah, every little bit helps, of course.	Problematizing (*issue & identity*)
(..)	
P405: I have the same a little bit, I feel like I won't be able to solve this alone. However, you can encourage your circles (..) And then, they encourage their circles. I think that could be a way. It won't solve the whole problem, but it's a start to a bit of a mindset change (..) What I see working, for example, is my roommate – if I look at them (..), they have changed quite a bit. (..)	Solving (*issue & identity*)
P401: Usually, you need examples. (..) you see people not eating meat, you're more likely to do it as well than if you don't see it anywhere. I think it definitely helps if someone starts doing it. (..)	Integration (*issue*)
P403: Yeah, I just think you have to set an example. Encourage people to join in. (..) on a world population of now 8 billion. That it helps a lot. That's still a lot of individuals, and it makes a large group. Something like that, you have to make them aware.	Integration (*issue*)
P402: I don't remember all those numbers, but during that internship, I read numbers about what you save as an individual, and it's quite a lot. So, if those numbers would be known. Because of those, I was really like, I am making a bit of a difference as these are actually large numbers. So, I think you will then get less of the idea that "what I do doesn't matter, it doesn't make a difference".	Solving & Explanation (*issue & identity*)
P404: Yeah, I agree. I think if I could see those kinds of things, like how much of a difference I can make, then I would be more motivated to continue. (..)	Nuancing (*issue*)
Facilitator: And now that you hear that you can actually have a significant impact, what does that do to you (looks at 404)?	Question (*process*)
P404: Yeah, I do think, well, you can really do more to stimulate the climate. I already thought I could reduce meat consumption, but now I think, "why not give it a chance?".	Support (*issue*)

Discussion and conclusion

The purpose of this study was to investigate how young adults use framing-strategies to influence the interactional processes in their conversations with peers about climate change. We employed Interactional Framing Theory (IFT) to qualitatively analyze focus-group discussions, and we innovated the paradigm by deepening its conceptual breath (i.e. extending the framing strategies) and widening its dynamical focus (i.e. beyond framing differences). Overall, the results showed that young adults forge diverse forms of consensus to create conversational safety, even in situations where they deployed polarizing interaction strategies.

Consistent with previous research (Dewulf & Bouwen, 2012), young adults' framing category strategies mostly revolved around thematic issues (e.g. policies or behaviors), which suggests that the discussions were largely characterized by attempts to define, and indeed co-construct, the meaning of climate change (actions). In contrast to more conflictual settings, such as the highly combative climate change blogosphere (van Eck et al., 2020) or debates between citizens and politicians (van Vuuren-Verkerk et al., 2021), remarkably few process framings were used. In similar contrast to prior literature, next to no negative identity/ relationship framings were employed. In fact, these strategies were introduced in much more inclusive ways (Ross & Rouse, 2022): to position the self as flexible in conflictual settings; forge shared ingroup identities; and/or discuss perceived "problematic" traits of others by incorporating them into a collective identity.

Moreover, going beyond the use of framing categories, the results indicate that young adults share a dual motivation to (1) nurture an environment of conversational safety and (2) avoid conflict in face-to-face discussions. Indeed, although conflictual interactions did start with contradicting, escalating, or even devaluating strategies, the dynamics oftentimes shifted to more consensus-seeking approaches. We identified 18 strategies, including three broader approaches which were actively utilized to nurture diverse forms of agreement.

First, young adults used integration and alignment strategies to co-construct a shared meaning about climate measures, especially when the framing differences were perceived as small. Combined with ingroup inducing framings, these strategies helped them create, through an "iterative reflective process" (Jack et al., 2020, p. 1), shared climate truths. This finding underlines once again that it is important in climate change dialogues to focus on the common ground of conversational partners (e.g. experiences, values, identities) (Corner & Clarke, 2016).

Second, to deal with the factual (or emotional) ambiguities of the politics of climate change *without* fueling confrontations, young adults employed constructive framings, such as problematizing, solving, explaining, and summarizing. By focusing on ways to further the discussion instead of defeating their peers, they were able to create, at least temporarily, a safe and resilient conversational space (Colvin et al., 2020). These interactional dynamics, hence, show the value of listening to the issues that people have, and trying to solve problems with them, rather than investing in unidirectional climate messages.

Importantly, these results may, at least in part, be attributed to the fact that young adults are still in the process of forming their climate positions (i.e. "plasticity"): research has shown, for example, that young adults are often less convinced about their stances than older segments of society, and they are generally more confused about scientifically correct climate knowledge (Corner et al., 2015), both of which may explain the lack of correction by peers.

Third, when clear framing differences emerged, young adults often utilized harmonizing strategies (i.e. reconciliation, nuancing, or understanding) to demonstrate their positive intent towards others: indeed, by conveying that they valued the opinion of others, by taking elements of their arguments seriously, and by framing the self as flexible, they were able to resolve some of the framing differences. A valuable future research direction would therefore be to explore what types of positive intent can diffuse emotional tensions, and how far in the direction of the other one needs to go to bridge divides (Itzchakov & DeMarree, 2022).

Of course, our study, like any other, has limitations. The focus-groups consisted of young Dutch adults from the broader Amsterdam area. With our pre-survey, we tried to arrange groups with diverse views. While we believe that the identified conversational dynamics may transfer to other young adults in the Netherlands, future research needs to confirm this. Further, we acknowledge that our focus group discussions were prone to social desirability-, moderator-, and selection biases. Future research needs to point out to what extent our findings can transcend to more ordinary conversations, as well as to other age groups, nationalities, and climate measures. One could use remotely moderated focus groups, a novel methodology that produces high quality conversational data (Prosser et al., 2024). Moreover, another question for future research is how our inductive qualitative findings hold up in quantitative and generalizable analyses.

Nevertheless, our study has implications for the study and practice of climate change communication. Indeed, the young adults' aim to maintain conversational safety has, potentially, both positive and negative consequences. On the one hand, conversational safety fosters an environment where people feel comfortable expressing their opinions, listening, and learning from each other, all of which are considered as prerequisites of productive discourse in a democratic society (Dobson, 2014). On the other hand, however, difficult conversations and seeking confrontation also serves a constructive purpose in democratic societies: if people prioritize maintaining conversational safety, it could lead to a conversational deadlock impeding progress on the necessary attitudinal and behavioral changes needed to address climate change. Our research, hence, underscores the importance of studying conversations in the interactional paradigm.

We recommend practitioners to focus on the *art of dialogue* to uncover diverging views, address underlying fears, and create mutual understanding. Similar to many deliberative democracy approaches (e.g. Strandberg, 2015), dialogue is a conversational method that focuses on fostering a shared understanding among interlocutors through listening, perspective taking, expressed respect, and honesty (van Burgsteden et al., 2022). Dialogue is a skill that requires practice – such as learning how to question and challenge an interlocutor respectfully. When practiced

effectively, it can be a powerful tool for change and inspire climate action (Corner & Clarke, 2016). Climate cafés are existing examples where youth can practice dialogue, but education could also provide a platform to develop these soft skills, particularly on controversial topics (Samuelsson, 2016). Practitioners can consult Climate Outreach's Talking Climate and Youth programs, which include evidence-based reports on how to have difficult climate conversations, especially with youth (climateoutreach.org).

Going forward, we should be careful with assuming that climate change conversations between people with extremely different opinions also automatically fuel antagonism. There is still much to learn about how constructive conversations should be held, yet our results do suggest that we should foster more – not less – conversations. Ultimately, it seems healthy for people to exchange ideas, and we hope our study inspires others to explore the dynamics of such conversations, both scientifically and practically.

Notes

1. We received ethical approval for this research by the Ethics Review Board of the Faculty of Social and Behavioural Sciences from the University of Amsterdam (ID: 2022-CS155717).
2. Average political ideology on a scale from 1 (extremely left) to 10 (extremely right) was 4.5.
3. All extracts have been translated from Dutch.
4. Participants are coded with the number of their focus group (1–7), a "0", and then their number in their focus group (1–5).
5. *See* also "I find it interesting to think about what you are saying" (P301) in Extract S2.

Data availability statement

Transcripts of the focus groups cannot be shared publicly.

Disclosure statement

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