INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 16, Issue 6, (2026) E-ISSN: 2222-6990

Climate Change and Ideological Representations on Zhihu: A Critical Discourse Perspective

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DOI Link: http://dx.doi.org/10.6007/IJARBSS/v16-i6/28282

Published Date: 15 June 2026

Abstract

Climate change is a global concern, whereas public discourse around it varies widely. In China, while the government and mass media advocate international cooperation and individual responsibility, user discourse on Zhihu—China's largest knowledge-based social media platform—reflects skepticism and resistance, potentially hindering public climate engagement. This study draws on Critical Discourse Analysis to examine ten high-engagement Zhihu posts (each with over 5,000 agreements) from 2023–2024. The findings show that Zhihu users employ rhetorical strategies such as sarcasm, parallelism, and comparison to frame themselves as powerless victims, constructing national identification and solidarity in opposition to external critiques, thereby resisting climate action and contesting dominant media narratives. This study enhances climate communicators' understanding of public climate narratives and identity construction on Chinese social media.

Keywords: Climate Change, Discourse Analysis, Rhetorical Strategy, Zhihu, Ideology

Introduction

Climate change represents not only an environmental crisis but also a complex and contested communication challenge (Eslen-Ziya, 2022). Although it has been repeatedly emphasised by scientists, governments, and the media, public concern remains relatively low in many regions (Jang & Hart, 2015). One reason is that climate change, by nature, is gradual, abstract, and often imperceptible at the individual level (Weber, 2016). In recent years, this communicative gap has been compounded by a decline in public trust in scientific authority, leading to a climate discourse that is increasingly polarised and politicised (Eslen-Ziya, 2022). These dynamics raise critical questions about how individuals perceive, interpret, and respond to climate narratives, particularly in public and digital spheres.

Social media platforms, in particular, have transformed climate communication from a predominantly top-down dissemination model into a decentralized and interactive arena

where official narratives, public skepticism, emotional responses, and ideological conflicts coexist (Du, 2021). These developments raise important questions about how individuals interpret climate issues, negotiate meaning, and position themselves ideologically within online public discourse.

In 2021, the IPCC (Intergovernmental Panel on Climate Change) released its Sixth Assessment Report, clearly affirming that climate change is driven by human activity. Following the 2015 Paris Agreement, most countries, including China, have committed to emissions reduction targets. China has set two major goals: carbon peaking before 2030 and carbon neutrality by 2060. These commitments are supported by national strategies such as *the Climate Change Adaptation Strategy 2035* and *the 2024 Annual Report on China's Policies and Actions to Address Climate Change*, which emphasise industrial decarbonisation, carbon market development, and broad public engagement through education and advocacy.

China employs climate discourse to enhance its role in global governance, drawing on narratives like ecological civilisation and pragmatic modernisation (Peizhi, 2022). However, policy success relies not only on top-down initiatives but also on public participation and understanding (Du, 2021). While official media emphasise cooperation and national responsibility, public discourse—especially on Zhihu, China's largest knowledge-based platform (Deng et al., 2020)—often reflects doubt and resistance toward climate policies (Du, 2021).

Social media functions as a discursive system, where text serves as the primary medium through which social issues are constructed, negotiated, and circulated. These platforms consist of actors, linguistic structures, and meanings and play an increasingly central role in shaping social practices (Albert & Salam, 2013). Interactions on Zhihu foster relationship-building, shape social contexts, and reflect power dynamics that may catalyse broader societal issues (Dickey & Lewis, 2010). Language serves as a tool for both meaning-making and identity construction (Gee, 2014). Therefore, from a social constructivist perspective, discourse on Zhihu is not merely communicative but constitutes a form of social practice that can shape collective understanding and public action.

To analyse these dynamics, this study adopts Critical Discourse Analysis (CDA), which moves beyond surface-level interpretation to examine the institutional context, relationships among discourse participants, and the hegemonic shifts embedded in communicative acts (Chouliaraki & Fairclough, 2004). Accordingly, this research seeks to uncover how climate change discourse on Zhihu is discursively constructed, how ideological positions are embedded and contested in these interactions, and how public voices engage in upward communication to challenge or reframe dominant narratives.

Although existing studies have addressed public awareness (Wang & Zhou, 2020) and science communication (Yang, 2022), few have examined the ideological dimensions of grassroots discourse on climate change in the Chinese digital context. This study responds to that gap by applying CDA to explore how climate change is discussed, resisted, or reconstructed by users on Zhihu. Grounded in Fairclough and Fairclough's (2015) view of discourse as a form of social practice and van Dijk's (2000) ideological discourse model—which highlights how speakers construct positive images of the in-group ("Us") and negative portrayals of the out-

group ("Them")—this research focuses on the discursive strategies and ideological orientations embedded in public climate discourse.

Ultimately, this research aims to contribute to a better understanding of climate communication in China, particularly how online discursive practices shape and reflect public engagement with climate governance. Moreover, it offers insights into the ideological dynamics that inform citizen responses to climate change in the context of social media-driven knowledge production and media discourse. Specifically, this study analyses ten high-engagement posts (each exceeding 5,000 likes) collected from the climate change topics on Zhihu (1st January 2023–31st December 2024). It seeks to answer the following research questions:

1. What are the dominant themes in Zhihu users' climate change discourse?
2. What linguistic features characterise expressions of resistance or scepticism?
3. What ideologies are embedded in these discursive constructions?

Literature Review

This section outlines the current landscape of climate change research in China, focusing on three interrelated dimensions: national-level discourse, media discourse, and individual public discourse. Drawing on existing literature, this study highlights key divergences between individual perceptions and the official narratives promoted by the state and media. Such discrepancies may pose significant challenges to the effective implementation of climate policies, hindering public engagement and policy responsiveness (Du, 2021).

Climate Change Discourse of Governments and Media in China

Government discourse on climate change in China includes official statements, policy documents, leaders' speeches, and state-sponsored media coverage. According to Trombetta (2019), China has adopted a securitisation framework to legitimise environmental policies by linking climate action to energy security, economic transition, and the promotion of ecological civilisation. In parallel, Peizhi (2022) argues that China utilises climate change as a discursive instrument to enhance its soft power in global governance. Through themes such as pragmatic ecological modernisation, climate nationalism, ecological civilisation, and civic environmentalism, the Chinese government positions itself as both a responsible actor and a normative leader, advocating for a more equitable international order rooted in culturally specific ideological frameworks rather than Western models. These official narratives are reinforced by state media to shape national identity and political legitimacy in the domain of climate politics.

Du (2021), through a longitudinal analysis of People's Daily and Guangming Daily (2000–2018), identifies three dominant media frames: the diagnostic frame presents climate change as a scientifically proven reality primarily caused by human activity; the prognostic frame emphasises low-carbon development and structural energy transition as both ecologically necessary and economically advantageous, while also calling on developed countries to take greater responsibility for international cooperation; the motivational frame appeals to universal moral concerns, urging immediate action and portraying China as a responsible global power.

Taken together, these discursive strategies reflect a coordinated effort by the Chinese state to legitimise environmental governance, promote international cooperation, and construct a globally responsible national image (Song et al., 2022; Yu et al., 2023). This official discourse also plays a central role in shaping public opinion and consolidating state authority in climate communication.

Climate Change Discourse of Individuals and Users of Zhihu

Zeng et al. (2023), through a large-scale national survey, revealed that although general awareness of climate change and its anthropogenic causes is widespread, public understanding remains shallow. Moreover, the Chinese public generally expects strong governmental involvement in climate governance, with economic concerns emerging as a major point of attention (Zeng et al., 2023). Similarly, Wang and Zhou (2020), based on over ten years of survey data, confirmed that most Chinese respondents perceive climate change as real and human-induced and believe the government should bear primary responsibility for mitigation efforts. While levels of awareness vary, there is broad support for low-carbon lifestyles and green consumption, with many individuals willing to pay a premium for environmentally friendly products. Furthermore, the public expresses strong support for international cooperation, a position shaped in part by media narratives that frame climate change as a shared global challenge requiring collective action.

However, in contrast to national surveys that indicate broad public acceptance of anthropogenic climate change (Pan et al., 2022; Zeng et al., 2023), discourse on Zhihu reveals a more sceptical and contested landscape (Du, 2021). According to Deng et al. (2020), 75% of Zhihu users are under 30 years old, and 44% are from first-tier or new first-tier cities. First-tier cities, such as Beijing, Shanghai, Guangzhou, and Shenzhen, are key national hubs for politics, economics, and culture (Yi et al., 2021), while new first-tier cities are high-performing urban centres (Zhang et al., 2022). Zhihu's Q&A format attracts scientists and scholars, fostering a knowledge-orientated and critical online environment (Yang, 2022). As of the latest data, the topic "climate change" on Zhihu has accumulated over 150 million views and 120,000 discussions, reflecting active engagement and making users' perceptions both valuable and credible for scholarly analysis. Zhihu users' scepticism is expressed not only through questioning the causal role of human activities but also by disputing the allocation of responsibility for climate action (Du, 2021). User discussions range from anthropocentric to ecocentric perspectives and frequently reflect nationalist or individualistic orientations (Du, 2021). Moreover, many users criticise existing climate policies as insufficient and express resistance to state-promoted behavioural norms, often prioritising individual needs over collective obligations (Du, 2021).

Critical Discourse Analysis and Ideology

Discourse, understood not merely as language or conversation, but as a system of meaning-making that constructs identities, relationships, and social realities (Foucault, 1982; Kress, 1989). Critical Discourse Analysis (CDA) provides a powerful framework for examining how language functions as a form of social practice embedded within broader structures of power and ideology (Fairclough, 1992; van Dijk, 1993). At its core, CDA is concerned with uncovering how discursive practices contribute to the production and reproduction of social inequalities (Fairclough, 1989).

Van Dijk (1993) distinguishes his approach within CDA by foregrounding the role of cognition as the interface between discourse and dominance. He argues that social cognitions—shared representations and ways of thinking emerging from social interaction—mediate how individuals interpret texts and communicative events. These cognitive structures, shaped by social practices, enable ideologies to take hold and normalise particular worldviews. Ideologies, in this sense, are "organised sets of beliefs" (van Dijk, 2000) that sustain unequal power relations by legitimising the interests of dominant groups while obscuring their constructed nature (Woolard, 1998).

Ideology plays a central role in functioning as a cognitive framework shaped by social experience and group affiliation (van Dijk, 2000; Woolard, 1998). For ideologies to gain legitimacy as "universal truths", they must be supported by political, economic, or symbolic power (Woolard, 1998). As Wodak (2014) points out, language subtly encodes ideological positions and power relations, and CDA seeks to uncover these often implicit structures and inequalities.

Parker (1992) extends this view by situating discourse within material social structures such as capitalism, highlighting how discursive formations support specific institutions and exert ideological effects. Discourses, as Marin (1983, as cited in Parker, 1992) puts it, "inhabit texts" and are actualised through them. They thus provide a window into the symbolic and material dimensions of social life. Moreover, Fairclough (2003) situates discourse within broader social, cultural, and ideological structures, emphasising the need to examine how discourse both reflects and reproduces social relations.

Within the context of climate change discourse, this theoretical framing is particularly salient. CDA offers a methodological entry point for analysing how discourse strategies serve to construct collective identities and position users in relation to dominant climate narratives. Public talk about climate issues reflects not only environmental concerns but also contested ideological terrains, which are similar to the culturally embedded meanings stated by Hulme (2015). As ideologies require political, economic, or symbolic power to become naturalised as "universal truths" (Woolard, 1998), examining user-generated discourse on platforms like Zhihu provides insight into how alternative interpretations and resistant subject positions emerge. In line with Fairclough's (2003) conceptualisation of discourse as social practice and van Dijk's (2000) emphasis on ideology as a means of maintaining or contesting symbolic power, this study explores how users construct identities, assign responsibility, and critique or align with state-promoted climate ideologies.

Methodology

Fairclough (1992) conceptualises discourse as a form of social practice wherein ideology operates as a system of thoughts, discourses, and signifying practices that shape and sustain social structures (Woolard, 1998). Discourse and its texts are not neutral; rather, they are infused with ideological assumptions that both reflect and reproduce power relations (Wodak, 2001). Potter and Edwards (1990) further assert that discourse serves as a potent vehicle for the transmission and reinforcement of ideology. From this perspective, ideology influences social cognition and regulates social practices (van Dijk, 2000). Building on these foundations, Fairclough and Fairclough (2015) proposed a critical discourse analysis framework comprising three interrelated dimensions: text analysis, discourse practice analysis, and social practice

analysis. This framework clarifies the dynamic process that produces, interprets, and embeds discourse in wider socio-cultural and ideological contexts. In this light, CDA theory is inextricably linked to ideological theory: ideology shapes language, language constructs social reality, and social reality, in turn, reshapes cognition and ideology. Figure 1.1 illustrates the theoretical framework of this study, which integrates these perspectives to analyse the generation and interpretation of climate change discourse as a discursive practice situated within ideological structures.

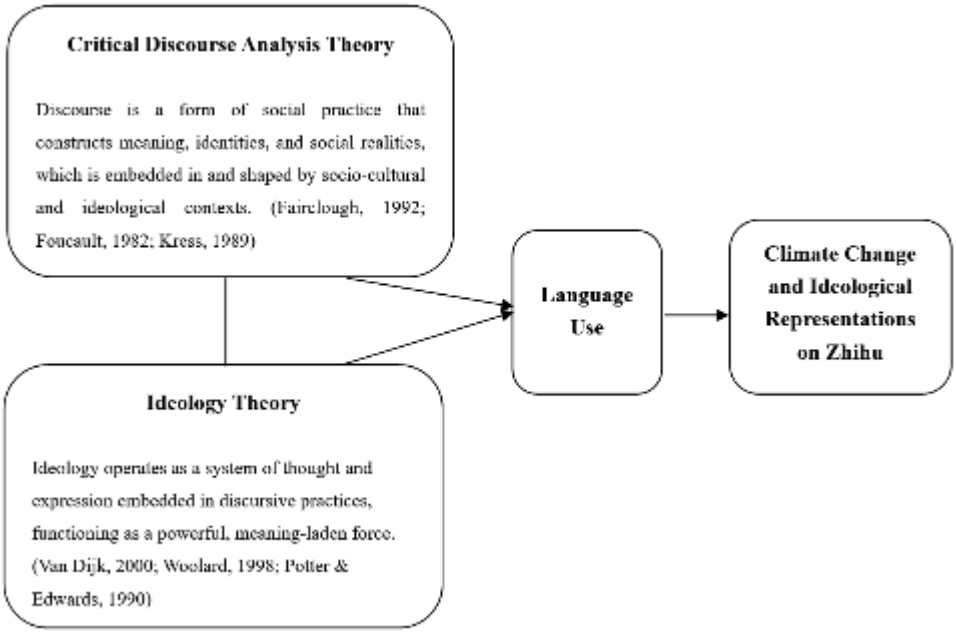

Figure 1.1 Theoretical Framework of the study

Van Dijk (2000) established four principles that facilitate the expression of a variety of ideological stances through subtle ideological analysis: Emphasise positive things about Us; Emphasise negative things about Them; De-emphasise negative things about Us; De-emphasise positive things about Them. This implies that the term "Us" always denotes positive statements and convictions in a social setting, while "Them" denotes negativity, condemnation, and other detrimental attitudes (Ramanathan & Hoon, 2015). To this end, the study employs Critical Discourse Analysis (CDA), with particular reference to Fairclough and Fairclough's (2015) theory and van Dijk's (2000) ideological framework. This includes examining the linguistic features of climate change discourse and how discourse emphasises the positive attributes of the in-group ("Us") and the negative traits of the out-group ("Them") to articulate and reproduce ideological positions.

Data Collection

This study adopts a qualitative approach to examine user-generated climate change discourse on Zhihu, a Chinese question-and-answer platform. The research involves rhetorical analysis and ideological interpretation of selected posts, following a five-stage procedure: Stage 1: Browsing climate-related content on Zhihu; Stage 2: Screening posts that are thematically relevant and have high user interaction; Stage 3: Downloading full-text content of selected posts; Stage 4: Manual coding of thematic and linguistic features; Stage 5: In-depth discourse and ideological analysis.

Zhihu (https://www.zhihu.com) features a built-in search bar that enables users to explore a wide range of topics. By entering the keyword “climate change”, several related themes emerge, including “Climate Change” (170 million views, 136,000 discussions), “Global Climate Change” (35.31 million views, 18,000 discussions), and the subtopic “Global Warming” (230 million views, 147,000 discussions). Given their thematic relevance and high public engagement, all three topics were included in the scope of data collection.

For accessibility, Zhihu supports browser-based translation, allowing non-Chinese users to navigate the platform. To clarify the data collection process, Figure 1.2 shows the English-translated interface of the Zhihu homepage. Figure 1.3 illustrates the step-by-step procedure: entering the keyword “climate change” in the search bar, selecting the relevant topic, filtering for “prime posts” (i.e., high-quality posts recommended by the platform), and sorting answers by the number of likes or approvals, which indicates user endorsement. These highly ranked answers form the basis of the textual dataset. Publicly available profiles show that among the ten users, three had blank profiles; five users filled in their industries, auditing, finance, machinery manufacturing, video games, and consulting and analysis. This suggests that climate change communication is a topic that involves users with multidisciplinary and multi-industry backgrounds.

Figure 1.2 The Zhihu Homepage
(https://www.zhihu.com)

Figure 1.3 Process to Access Data (https://www.zhihu.com/search?q=%E6%B0%94%E5%80%99%E5%8F%98%E5%8C%96&type=topic; https://www.zhihu.com/topic/19578906/top-answers; https://www.zhihu.com/question/631285465)

To address the research gap regarding public contestation of climate responsibility and action on Zhihu, this study focuses on user-generated discourses that challenge or reject climate policy narratives. The dataset comprises prime posts published between 1st January 2023 and 31st December 2024, selected for their high engagement and explicit expression of scepticism or resistance. Responses were ranked by the number of likes, and only posts exceeding 5,000 likes were included. In total, 10 posts were selected, yielding 4432 words, which were compiled in an Excel spreadsheet for subsequent analysis. The coding process combined manual annotation with thematic and linguistic analysis. Posts were first categorised by thematic content, with sub-themes (e.g., economic concerns, responsibility attribution) identified under broader oppositional stances toward climate action. Subsequently, drawing on Fairclough and Fairclough's (2015) framework, linguistic features—including lexical choices, grammatical structures, modality, metaphor, and framing—were systematically coded. Finally, to examine ideological construction, thematic patterns were integrated with linguistic strategies, guided by van Dijk's (2000) model of ideological discourse, particularly the emphasis on positive self-representation ("Us") and negative other-representation ("Them").

Data Analysis and Results

This study employs Fairclough and Fairclough's (2015) theory, which views discourse production and interpretation as forms of social practice in which ideology plays a mediating role (van Dijk, 2000), to identify the themes, linguistic features, and ideological elements embedded in climate change discourse. According to Fairclough and Fairclough (2015),

discourse is essentially an interactive behaviour, and such interactions contribute to the formation of power relations at the social level. Therefore, Zhihu users' discussions about climate change can be regarded as a type of social practice that actively shapes the power dynamics surrounding climate discourse on the platform. When Zhihu users express their views on climate change, their ideas and knowledge can be understood as forms of ideology (Gal & Irvine, 2019), and both the production and interpretation of discourse are shaped by these ideological frameworks. On this public media platform, the discourse users generate is evaluated through likes, comments, and ranking. This process constitutes not only an interpretation and consumption of discourse but also an act of discursive empowerment by other users. In this way, the process from discourse production to the establishment of power relations is completed.

Through thematic categorisation and textual-level coding of the collected climate change discourse—focusing on lexical choices, grammatical structures, modality, metaphor, and framing—we identified the main discursive themes and linguistic features. Furthermore, by analysing the discursive construction of "Us" and "Them", we examined the underlying ideological expressions embedded in the discourse. A summary of the thematic categories and textual features is presented in Table 1.1 and Table 1.2, respectively.

Themes of Climate Change Discourse on Zhihu

Analysis of climate change discourse on Zhihu reveals three recurring themes: attribution of responsibility, low perceived capacity for climate action, and climate optimism. The themes and meanings are listed in Table 1.1, and interpretations are provided in the following sections.

Table 1.1
Themes of Climate Change Discourse on Zhihu

Themes	Meaning
Attribution of Responsibility	Climate change is primarily the result of long-term industrial development in advanced economies, challenging narratives that place undue responsibility on ordinary citizens, particularly in developing countries.
Low Capacity for Climate Action	Meaningful climate action requires a certain level of economic security, which many ordinary citizens do not possess.
Climate Optimism	Using specific area temperature rises to illustrate the benefits of climate change

Attribution of Responsibility

Some Zhihu users argue that ordinary people should not be held primarily accountable for climate change. They attribute the root causes to long-term industrial development in wealthy, developed countries and to large-scale natural events such as wildfires. As shown in example 1.

*Example 1. "How come we didn't see them jumping on the bandwagon when the **California fires**, Hawaii fires, Canada's mountain fires, and Australia's fires were going on and saying that the temperatures were rising? Could it be that **mountain fires in the West are cold**?"*

The speaker cited the collective silence of Western countries in the face of wildfires and used sarcasm such as "*wildfires are cold*" to criticise Western countries for inaction and condoning climate destruction.

Low Capacity for Climate Action

Users express scepticism about the effectiveness of individual actions in addressing climate change. They highlight economic constraints and argue that climate responsibility should first fall on the affluent, who have the means and lifestyle flexibility to make impactful changes, such as reducing waste or limiting high-emission activities like frequent air travel.

*Example 2. "The water used to irrigate a **golf course** is equivalent to the amount of water a person uses for ten years. A **private jet trip** can wipe out the energy-saving achievements of hundreds of people...A female star's household **electricity consumption** is as high as 200,000 degrees per year. It is ironic that the rich enjoy the blessings and the poor have to bear the difficulties." "I ride a shared bike for 20 minutes to go to work early in the morning."*

The speaker cited the high-carbon consumption behaviours of the rich, such as irrigating golf courses, flying private jets, and excessive electricity use, and compared them with their own tight budgets to illustrate that the rich are more capable of climate action.

Climate Optimism

Some speakers adopt an optimistic or dismissive stance toward climate change: they view climate warming as potentially beneficial to northern China's agriculture and ecology, citing examples such as China's Inner Mongolia desert turning into an oasis as rainfall increases and people in Heilongjiang Province, a high-latitude province, being pleased about rising temperatures.

Linguistic Features of Climate Change Discourse on Zhihu

By coding the corpus in terms of lexical choices, grammatical structures, modality, metaphor, and framing, we found that linguistic features varied across different thematic categories. However, the overall patterns revealed frequent use of strong modal expressions, as well as a high occurrence of parallel structures and rhetorical questions. A summary of the key linguistic characteristics identified in the climate change discourse is presented in Table 1.2.

Table 1.2
Linguistic Features of Climate Change Discourse on Zhihu

Thematics	Lexical Choices	Grammatical Structures	Modality	Metaphor	Framing
Attribution of Responsibility	Private jet; developed country; wildfire; Rich people	Parallelism; Rhetorical Question	Strong negative tone; Strong Modal Adverbs (e.g. surprisingly)	Wildfire is cold	Us (China) vs You (the West)
Low Capacity for Climate Action	Environmental Tax; sacrifice; Freeze to death	Passive Voice; Parallelism; Rhetorical Question	Exaggeration; Contrast	struggle vs. surrender; Battery Consumables	Environmental Economic Framework
Climate Optimism	The rain line moves north; Revitalize	Rhetorical question	Obviously,	Geographical Metaphor	Historical empirical framework

Linguistic Features of Discourse on Attribution of Responsibility
Discourses on responsibility attribution often highlight the high-carbon lifestyles of Western elites—such as private jet travel, golf course irrigation, and high meat consumption—in contrast with low-consumption behaviours of ordinary people. These posts frequently use parallel structures, rhetorical questions, and a strong negative tone (e.g., with modal adverbs like *surprisingly*) to express disbelief and critique. As Whalen et al. (2009) note, sarcasm, often marked by irony and exaggeration, serves as a rhetorical tool to challenge dominant narratives. In Example 2, a binary oppositional frame contrasts rich and poor, implying that the wealthy should bear greater responsibility for climate change.

Linguistic Features of Discourse on Low Capacity for Climate Action
Some discourses express a sense of low capacity for climate action through the use of emotionally charged phrases such as *environmental tax*, *sacrifice*, and *freeze to death*. These expressions reflect the perception that climate action would further reduce the already limited quality of life for lower-income individuals. Speakers often position themselves as the exploited, accusing the affluent class of appropriating the rhetoric of climate change to justify the extraction of resources and impose burdens on the less privileged, while continuing to enjoy their material comforts.

Example 3. "10% of the people who control 90% of the resources, fake-modelling and crying to the earth's environment for no other reason than to get the remaining 90% of the ***battery consumables*** *to work together so that they can renew their good enjoyment."*

In example 3, the speaker compares himself and the general populace to "*battery consumables*", emphasising that the upper classes, who possess the majority of the resources, derive their well-being from the consumption of the resources and labour of the lower classes. In other words, the objective of Western climate change propaganda is to encourage the conservation of resources among the general populace, rather than to encourage the wealthy to act independently.

Example 4. "Northbrook is leaking greenhouse gases that we can't save in a hundred years of energy conservation. ***Does anyone reflect on that?*** *The Europeans closed their eyes and said it was a Russian bomb. Germany restarted a coal-fired power plant that had been sealed for half a century, …****Anyone reflect on this?*** *A country's forest fires twice a year, once a half a year,* ***anyone reflect?*** *Japan's sewage discharge into the sea,* ***anyone reflect?*** *Ohio is soaked through,* ***anyone reflect?*** *No.* ***Because America doesn't pay people to reflect."***

Example 4 utilises the passive voice to emphasise the speaker's sense of victimhood and lack of agency in climate action. Through the use of parallelism and rhetorical questioning, the repetition of phrases creates a cohesive meaning and emotional intensity. The speaker cites the climate-destroying behaviour of certain countries and asks, "Has anyone reflected on this? No." The contrast between the facts presented and the lack of response (no one reflects) adds to the strength of the accusation. The final line, "*The U.S. doesn't pay people to reflect*," functions as sarcasm, suggesting that U.S. climate change discourse is driven more by financial interests than scientific integrity. These linguistic strategies reinforce the perception of unequal responsibility and highlight the sense of injustice felt by individuals who perceive themselves as disproportionately burdened by climate policies.

Example 5. …the earth's environment will be completely wasted by the rich…If you want to protect the environment, you can consider ***making a transfer payment*** *in exchange. There is no such thing as unilateral* ***sacrifice****. …learn from the* ***Southern Ming Dynasty****.* ***Don't*** *tell me about national justice and human responsibility. When it is time to* ***fight****, fight. If the fight fails,* ***surrender*** *to the Qing Dynasty directly….* ***Double losses*** *or more losses are* ***definitely*** *better than a single* ***win****!*

Example 5 adopts an environmental-economic frame, portraying climate action as a question of cost, sacrifice, and unequal burden. The speaker references transfer payments and personal sacrifice to highlight the economic trade-offs, then draws a historical parallel to the Ming Dynasty's fall, symbolising resistance and reluctant surrender. The final slogan— "Losing together is better than letting one side win"—expresses a confrontational stance rooted in disillusionment and perceived injustice in global climate policy.

Linguistic Features of Discourse on Climate Optimism

In contrast to the previous two themes, climate optimism discourse expresses a positive attitude toward climate change. Such discourse employs terms like *northward shift of the rainfall belt* and *revitalisation* to describe the perceived environmental improvements brought about by warming temperatures and increased precipitation in northern China. Some users adopt geographic metaphors to express climate optimism, such as comparing Inner Mongolia to Jiangnan. By likening a cold, arid region to a warm and fertile one, these metaphors highlight perceived environmental improvements resulting from climate change. As illustrated in example 6.

Example 6. "…in northwestern China, many deserts are beginning to ***regain vitality****, not only because of persistent artificial tree planting, but also because China's* ***rain line has moved northward*** *…" "Is this still* ***Inner Mongolia****? A hint of* ***Jiangnan*** *flavour."*

Ideology in Climate Change Discourse

Ideology serves as the cognitive framework through which individuals interpret social realities, shaped by their interests and lived experiences (van Dijk, 2000; Woolard, 1998). In the context of climate change, once the issue aligns with political ideology, it becomes resistant to critique or alternative interpretation (Eslen-Ziya, 2022). On Zhihu, climate discourse reflects users' ideological stances and functions as a means of alliance-building in the public sphere. Many posts adopt a binary oppositional framing, consistent with van Dijk's (2000) model, which highlights the discursive strategy of emphasising in-group virtues and out-group faults while concealing opposing traits. The following analysis draws on this framework to examine the ideological expressions embedded in Zhihu users' climate discourse.

Justification of Individualism

As illustrated in Example 2, speakers frequently employ first-person pronouns ("I," "we") to construct a self-image of modest, low-impact living, in contrast to the affluent, high-consumption lifestyles attributed to Western elites. This framing enables them to shift the responsibility for climate change onto the wealthy by highlighting the carbon emissions linked to luxury consumption. Simultaneously, by invoking socio-economic disparity, speakers seek to legitimise their resistance to climate action mandates, presenting such expectations as unjust impositions on those with limited economic means.

Knowledge Sovereignty

Chinese geographer Ding (2010), in a public interview, stated that the 2°C temperature rise is only a computer simulation and does not necessarily lead to mass species extinction. Zhihu users quote his view to question the Western dominance in climate science, showing both a distrust of international climate standards and a trust in Chinese scientists. One widely liked user comment cited Ding's rhetorical question— "*Are Chinese people not human*?"—to criticise the unfair carbon emission quotas given to China under the IPCC framework. This illustrates how scientists who speak for national and public interests are seen as authoritative and trustworthy on Zhihu and are often granted symbolic knowledge authority.

Nationalism and Moral Resistance to Inequality

Some discourses express dissatisfaction with the unequal distribution of global climate responsibility, arguing that China did not benefit from historical carbon emissions but is now being asked to bear the cost of climate action. These narratives often construct a binary opposition between China and the United States or other developed countries, reflecting strong nationalist sentiment and a moral logic of resistance to inequality.

Example 9. Since 1850, the United States has emitted more than 509 billion tons of carbon dioxide… making it the world's largest cumulative emitter... Although China accounts for 11%, … It can't be said that the carbon dioxide emitted today causes the greenhouse effect, but the carbon dioxide emitted 20 years ago does not cause the greenhouse effect, right?

In Example 9, China's role as the current top emitter is downplayed by citing the U.S. as the largest historical emitter. Such strategies shift blame to Western countries and construct a nationalist discourse of solidarity.

Discussion

Building upon insights from thematic and linguistic coding, this study applies Critical Discourse Analysis (CDA) to investigate climate change discourses on Zhihu, China's largest knowledge-based social media platform. The analysis identifies key thematic strands, linguistic patterns, and ideological formations that shape public engagement with climate narratives. Extending Du's (2021) observations of public scepticism and resistance, this study situates Zhihu users' discourses within broader sociocultural and cognitive dynamics, informed by a social constructivist perspective. It further reflects on implications for climate communication strategies tailored to the Chinese digital context.

Three dominant thematic categories emerge from the analysis: attribution of responsibility, low capacity for climate action, and climate optimism. The first two categories are characterised by predominantly negative evaluations expressed through modal intensifiers, rhetorical questions, sarcasm, parallel structures, and binary oppositions. These linguistic devices serve dual functions: they operate as rhetorical strategies to persuade and reinforce group solidarity and as affective expressions of frustration towards perceived inequities in global climate governance and domestic policy implementation.

In responsibility attribution discourses, Zhihu users frequently invoke high-profile examples—such as celebrity private jet use or excessive consumption in affluent countries—as evidence of systemic hypocrisy. These references, framed through stark binary oppositions (e.g., "developed vs. developing nations" and "elites vs. ordinary citizens"), resonate strongly with van Dijk's (2000) theorisation of ideologically driven in-group/out-group schemata. Such discourse constructions enable users to position themselves as part of an aggrieved in-group (ordinary citizens or developing nations) pitted against a morally culpable out-group (elites or Western nations). This ideological framing garners high user engagement and reinforces narratives of relative powerlessness, which in turn legitimises resistance to top-down climate action.

The economic framing of environmental issues further underscores the public's perception that meaningful climate action presupposes a baseline of socio-economic security. Many users contend that uniform behavioural expectations—such as reducing carbon footprints—are unrealistic and unjust when applied across diverse social groups. This discourse constructs the ordinary individual as a structurally constrained actor whose limited resources exempt them from equal responsibility. Such narratives reflect what Fairclough (2003) identifies as the embedding of ideology within discursive practices, where material conditions shape not only linguistic choices but also the cognitive frameworks through which climate issues are interpreted.

In contrast, the third thematic strand—localised climate optimism—appears to derive from personal observations of environmental changes, such as increased rainfall or milder winters in northern China. These localised and experiential perspectives stand in tension with global narratives of crisis, diminishing the perceived immediacy and severity of climate change. This divergence highlights a key issue in climate communication: the tendency of macro-level or globalised narratives to appear abstract and disconnected from individuals' lived experiences. The discourses analysed were contextualised within three high-profile news events: the mass death of snow crabs in Alaska, vegetation growth in Antarctica, and the temporary surpassing

of the 2°C warming threshold reported by the UN. While these events were widely circulated on Chinese platforms—some originating from domestic outlets (e.g., Xinhua News Agency) and others republished from international sources (e.g., CNN via Sohu News)—they were often presented in distant and generalised terms. This discursive distance contributes to public disengagement and scepticism, as users fail to connect such narratives with their immediate social and material realities.

Overall, Zhihu users' understandings of climate change diverge significantly from the dominant climate narratives promoted by national media (Du, 2021). While consistent with Du (2021)'s earlier findings, this study offers a more detailed analysis of climate scepticism and resistance. It reveals that users often build their discursive frameworks around international news events, celebrity behaviour, and personal lived experiences, rather than national policy narratives such as low-carbon development or energy transition. Moreover, expressions of dissatisfaction regarding living standards reveal an underlying tension between material concerns (e.g., income, healthcare) and environmental advocacy. The near absence of references to national policy initiatives, such as carbon neutrality goals or energy transition strategies, suggests a communication gap between state-led climate narratives and public perceptions. This finding aligns with Fairclough and Fairclough's (2015) observation that discourse operates at the intersection of text, discourse practice, and social practice, where ideological misalignments can hinder effective public engagement.

Drawing on these findings, the study proposes several implications for climate policymakers and communicators: (1) increase local relevance by connecting climate narratives to phenomena directly affecting individuals' everyday lives, thereby reducing perceived abstraction; (2) align climate messaging with socio-economic priorities, integrating concerns about income, health, and quality of life into environmental advocacy to enhance public receptivity; and (3) humanize and clarify policy discourse by presenting accessible explanations of climate policies and illustrating how environmental goals intersect with personal and collective well-being.

Conclusion

This study employs Critical Discourse Analysis (CDA) to investigate how Zhihu users—on China's largest knowledge-based social media platform—construct narratives around climate change. By focusing on discourses of attribution of responsibility, low capacity for climate action, and climate optimism, the analysis uncovers a repertoire of linguistic strategies, including intensified modality, rhetorical questioning, parallel structures, and sarcasm. These linguistic forms function not only as persuasive devices but also as markers of ideological alignment and emotional engagement, allowing users to negotiate their positions within global climate governance and domestic environmental policies.

The findings illuminate how climate discourses on Zhihu are embedded within broader ideological frameworks such as nationalism, individualism, and scepticism toward global equity claims. Many users construct themselves as structurally constrained actors—victims of disproportionate global responsibility allocation—while simultaneously questioning Western scientific authority and challenging dominant environmental narratives through references to lived, localised experiences. Such discursive practices align with van Dijk's (2000) conception of ideologically mediated social cognition, wherein shared interpretations of

climate issues reinforce group identities and mobilise resistance to perceived external pressures.

This study underscores the critical role of digital platforms in shaping public climate consciousness and highlights the power of emotionally charged and ideologically infused language in fostering engagement and collective meaning-making. From a practical standpoint, the findings suggest that climate communication strategies in China should move beyond abstract, globalised narratives to address concerns more directly tied to individuals' everyday lives—such as economic security, health, and quality of life. Enhancing the accessibility and relatability of climate policies could strengthen public trust and willingness to participate in climate action.

Nevertheless, this research is not without limitations. The analysis draws on a purposive sample of ten high-engagement Zhihu posts, which, while offering valuable insights into prevalent discursive patterns, may not fully capture the heterogeneity of perspectives across the platform. Future studies could adopt larger, more diverse datasets to explore how discursive practices evolve in response to shifting geopolitical contexts, emerging climate events, and changes in domestic policy. Longitudinal research might also reveal how sustained exposure to state-led climate narratives interacts with grassroots discursive formations over time.

Ultimately, this study contributes to a growing body of scholarship on climate communication in digital spaces, offering a nuanced understanding of how language mediates between ideology, identity, and public engagement in the context of global environmental challenges.

Statements and Declarations

Supplementary Materials:

Climate Change Adaptation Strategy 2035 is available at https://cset.georgetown.edu/publication/national-climate-change-adaptation-strategy-2035/

The 2024 Annual Report on China's Policies and Actions to Address Climate Change is available at https://www.mee.gov.cn/ywgz/ydqhbh/wsqtkz/202411/W020241106685054014098.pdf

The video of the interview of Chinese scientist Ding (2010) is available at https://youtu.be/HcgNr5TH08E?si=zCTGcYfxJTUDSR3v.

Conflict of Interest

The author declares no conflict of interest.

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