

Conceptual Metaphors in Weather-Related Expressions on Instagram

Nurianti Sitorus^{1*}, Idawati Sitomurang²

¹Publishing, State Polytechnic of Creative Media,

²Teknik Informatika, Amik Parbina Nusantara.

Corresponding author*

torus@polimedia.ac.id

Abstract: This study investigates the use of conceptual metaphors in weather-related expressions on Instagram, focusing on how metaphorical language shapes public opinion on climate change of seasonal changes and associated health risks. Using Lakoff and Johnson's (1980) Conceptual Metaphor Theory as the analytical framework, the analysis reveals three dominant metaphorical patterns: *weather as an agent*, *disease as an enemy*, and *seasonal transition as a journey*. These metaphors help translate abstract meteorological information into familiar experiential terms, enhancing message clarity and influencing audience perceptions of vulnerability and precaution. The findings highlight the important role of metaphor in digital climate and health communication, particularly in framing risk and encouraging preventive behavior on social media platforms.

Keywords: Conceptual Metaphor; Semantic Cognitive; Weather-related expressions; Instagram.

Introduction

Language is not merely a tool for communication but a reflection of how humans conceptualize and make sense of the world. One of the most influential frameworks illustrating this connection is conceptual metaphor theory (CMT), introduced by Lakoff and Johnson (1980), who argue that human thought is fundamentally metaphorical in nature. According to their view, metaphors allow abstract experiences—such as emotions, social relationships, and personal states—to be understood in terms of more concrete domains (Climent dan Coll-Florit, 2021). Weather, as a universally experienced natural phenomenon, often serves as a rich source of metaphorical structuring, shaping how people communicate about mood, conflict, uncertainty, and change (Grady, Oakley, Coulson, 1999).

Metaphor plays a central role in shaping how people conceptualize and talk about their experiences. Since the publication of Lakoff and Johnson's *metaphors we live by* (1980), metaphor has been understood not merely as a stylistic device,

but as a fundamental mechanism of human cognition (Glucksberg, 1989). Within this framework, people often use concrete, familiar phenomena—such as weather—to express abstract ideas like emotions, relationships, or social situations. Weather expressions such as “*stormy relationship*,” “*bright future*,” or “*clouded judgment*” have long been embedded in everyday language. But metaphors are also used in religious setting activity such as preaching or teaching morality (Veremchuk, 2022).

In the digital era, social media platforms have become dynamic spaces where linguistic creativity thrives (Bataeva, 2024). Instagram, in particular, combines visual and textual elements, providing users with opportunities to express emotional states, personal reflections, and evaluations through captions, hashtags, and comments (Ang, Huang, L., & Ng, 2022). Weather-related expressions such as “*storm of emotions*,” “*sunny vibes*,” “*cloudy mind*,” or “*warming up to new beginnings*” are frequently employed to frame personal experiences in metaphorical terms. These

expressions often draw from embodied and culturally shared associations between weather patterns and human psychological states.

Despite the widespread use of metaphorical weather expressions online, studies examining them within the context of Instagram remain limited. Exploring these metaphors is important because they offer insight into how users linguistically construct identity, express emotions, and engage in social interaction in visually oriented digital spaces (Gibbs, 2008). Furthermore, investigating weather-related conceptual metaphors in Instagram posts can reveal how traditional metaphorical mappings identified by Lakoff and Johnson persist, evolve, or take on new nuances in contemporary online communication. Although prior linguistic research has examined conceptual metaphors in literature, advertisements, political discourse, and everyday conversation, studies focusing on Instagram are still limited. Even more scarce are studies specifically analyzing weather-related metaphorical expressions on social media. Investigating these metaphors is crucial because they reflect how individuals make sense of their lived experiences in digital settings, and how metaphorical thinking adapts to new modes of communication.

Based on the explanation above, this research aims to fill the problems stated below:

1. What types of conceptual metaphors are found in weather-related expressions in Instagram posts?
2. How do Instagram users employ weather metaphors to express emotions, experiences, or personal evaluations?

This study therefore aims to analyze the types and functions of conceptual metaphors encoded in weather-related expressions in Instagram. By applying the principles of conceptual metaphor theory, the research seeks to uncover how Instagram users employ weather as a symbolic resource to articulate feelings, attitudes, and experiences in a highly interactive digital environment.

Materials and Methods

Study area

The study is situated within the field of conceptual metaphor research, which examines how individuals use metaphorical mappings to understand abstract experiences through concrete, familiar domains. Positioned in the semantic-cognitive field of linguistics, the study explores how conceptual metaphors function as mental mappings that allow speakers to derive meaning from weather imagery when expressing emotions or experiences.

Research Design

This study employs a qualitative descriptive design rooted in the principles of Conceptual Metaphor Theory (CMT) proposed by Lakoff and Johnson (1980). CMT assumes that metaphor is a cognitive mechanism through which individuals understand abstract concepts via concrete source domains. In this research, weather functions as the source domain used to conceptualize emotional, psychological, or experiential target domains in Instagram posts. A qualitative approach was chosen to allow an in-depth analysis of metaphorical structures, patterns, and functions as they naturally occur in digital discourse.

Source of Data

The primary data consist of Instagram posts containing weather-related expressions in one account called *pandemictalks* in Instagram. The researchers take 5 posts in 2025 that use weather-related expression. The posts were collected from publicly accessible accounts to ensure ethical compliance.

Procedures

1. Relevant Instagram posts were identified using posted posts.
2. Each post was manually recorded, including the screen shoot of it
3. Data were archived in a spreadsheet containing:
 - Post ID (anonymous code)
 - Weather expression
 - Contextual notes

No personal identifiers were collected, ensuring compliance with ethical digital research practices.

Data analysis

a. Identification of Metaphorical Expressions

Weather-related expressions were examined to determine whether they function metaphorically or literally. Following Lakoff and Johnson (1980), expressions were considered metaphorical when they involved understanding one conceptual domain (emotions, situations, relationships) in terms of another (weather).

b. Classification of Conceptual Metaphors

Metaphorical expressions were grouped according to their conceptual mappings, such as:

- Emotions are weather
- Life situations are weather events
- Mood is temperature
- Change is wind

These categories were developed following the conceptual domain frameworks described by Lakoff and Johnson.

c. Interpretation and Thematic Analysis

Using thematic analysis, the study explored how Instagram users employed weather metaphors to express meaning, emotion, identity, or personal experience. Attention was paid to:

- Frequency of metaphor types
- Patterns of emotional expression
- Interaction between textual and visual elements
- Creative vs. conventional metaphor usage

This analytical approach enabled the uncovering of both cognitive structures and communicative functions of weather metaphors on Instagram.

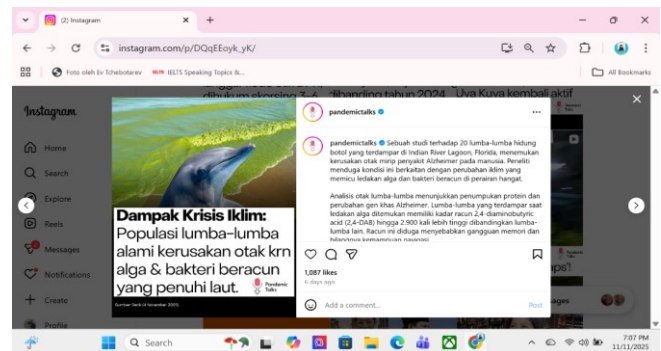
d. Validity and Reliability

To enhance analytical rigor, the study used:

- Analyst triangulation, where two independent coders evaluated the metaphor categories.
- Peer-review checking, where coding discrepancies were discussed and resolved.

- Consistency checks, ensuring that metaphor identification aligned with criteria established by CMT.

Results And Discussion



Post-1

Analysis of Result-1

Although the post is mostly scientific and informational, there are still metaphorical expressions, especially conceptual metaphors used to describe environmental conditions and effects. Here are the metaphors:

1. "Dampak Krisis Iklim"

(The impact of the climate crisis)

This phrase uses the crisis is a physical force metaphor. The word *dampak* ('impact') conceptualizes the climate crisis as a striking physical force that hits or injures something. Climate crisis is a dangerous force

2. "Laut yang penuh alga & bakteri beracun"

(Seas full of algae and toxic bacteria)

The expression *penuh* ('full') is metaphorical because it conceptualizes the sea as a container holding harmful elements. Conceptual metaphor: the sea is a container

3. "Ledakan alga"

(Algae bloom / algae explosion)

The word *ledakan* ("explosion") is a metaphor because algae don't literally explode; the phrase likens sudden growth to a violent physical explosion. Conceptual metaphor: sudden growth is an explosion.

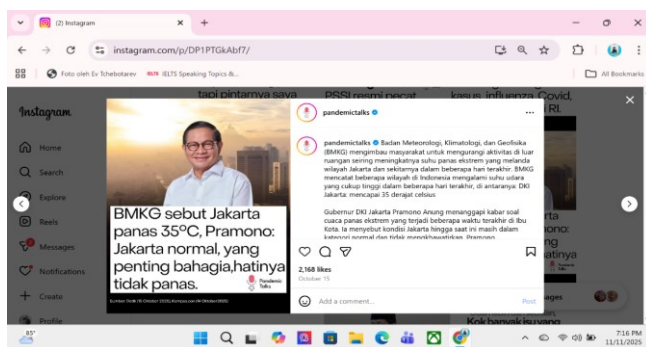
4. "Kondisi ini memicu ledakan alga"

(This condition triggers an algae explosion)

The verb *memicu* ("to trigger") is metaphorical — imagining environmental changes as if they pull the trigger of a weapon. Conceptual metaphor: causes are triggers / events are firing mechanisms

5. "Racun ini diduga menyebabkan gangguan..."

(This toxin is suspected to cause disruptions...) The term *gangguan* ('disturbance') conceptualizes the brain or navigation ability as a system that can be interrupted like a machine. Conceptual metaphor: the brain is a machine



Post-2

Analysis of Result - 2

1. "Hatinya tidak panas."

("The heart is not hot.")

This is a metaphorical expression, not literal. The heart cannot physically be hot or cold in emotional terms.

Meaning:

a. *Panas* = anger, irritation, emotional heat

b. *Tidak panas* = calm, peaceful, not angry

Conceptual Metaphor: emotion is temperature, anger is heat, a calm person is cool / not HOT This mapping aligns with Lakoff & Johnson's (1980) common conceptual metaphor: "anger is heat" (such in "He was boiling with rage.")

2. "Yang penting bahagia."

("What matters is being happy.")

This can connect to another conceptual metaphor commonly discussed in cognitive linguistics: happiness is up / bright / warmth. Though the text doesn't explicitly say "warm," the contrast with

panas (anger) suggests warmth vs. heat as emotional states.

3. Implicit metaphor: Comparing literal heat with emotional heat

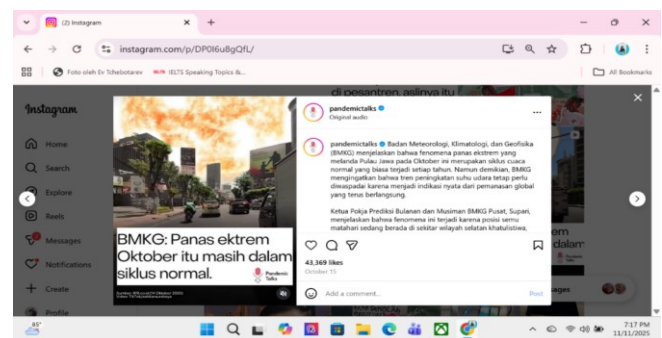
The post juxtaposes:

- Literal heat → Temperature reaching 35°C
- Emotional heat → Hati panas ("hot heart" = anger)

This creates a metaphorical evaluation: physical heat mirrors emotional heat

But the speaker says: "Yang penting hatinya tidak panas." ("What matters is that the heart is not hot.")

This shows that emotional heat is more important than physical heat.



Post-3

Analysis of Post-3

Even though BMKG explains it as part of a *normal cycle*, the visual highlights the *felt experience* people have: the heat feels like fire. In Conceptual Metaphor Theory (Lakoff & Johnson, 1980), abstract experiences (such as changes in temperature, climate phenomena) are often understood through more concrete, physical, and bodily experiences humans map the intense physical sensation of burning onto the abstract concept of extreme heat. This is a classic embodied metaphor, where sensory experience grounds abstract reasoning

There are some conceptual metaphors such as

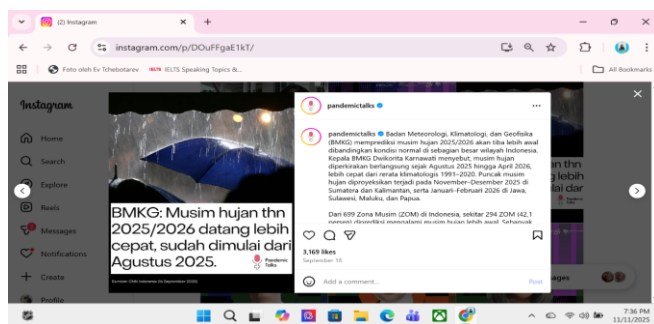
a. *heat is a force / a natural enemy*

b. Weather is a living agent (personification).
"Fenomena panas ekstrem ... merupakan siklus cuaca normal."

The “cycle” metaphor conceptualizes weather as a creature with predictable patterns of movement.

c. Time/climate change is movement in a cycle

Lakoff & Johnson show that humans understand time through spatial metaphors (for instance “moving forward,” “cycles returning”). “*panas ekstrem oktober*” is framed as something that visits and returns, like a traveler tracing a circular route.



Post 4

Analysis Post-4

Metaphor conceptual: Rain is a physical force / rain is an attacker

This metaphor emerges from embodied experience: when rain falls hard, humans feel physically struck. Thus, the abstract weather event is understood through bodily sensation. Cognitive domain mapping: (Brandt, 2005)

- Source domain: physical attack, force, impact
- Target domain: rainfall

2. Weather as a moving entity / seasons are travelers

The caption states:

a). “*Musim hujan tahun 2025/2026 datang lebih cepat...*” (The rainy season arrives earlier...). Here, seasons are moving entities.

b). Weather events arrive

Although seasons do not literally “travel,” language conceptualizes them as agents that move, come, go, arrive, or shift. While in Cognitive implication: Understanding time-based weather changes becomes easier when mapped onto spatial motion

c) weather is a scheduled event / climate is a timeline

Phrases like:

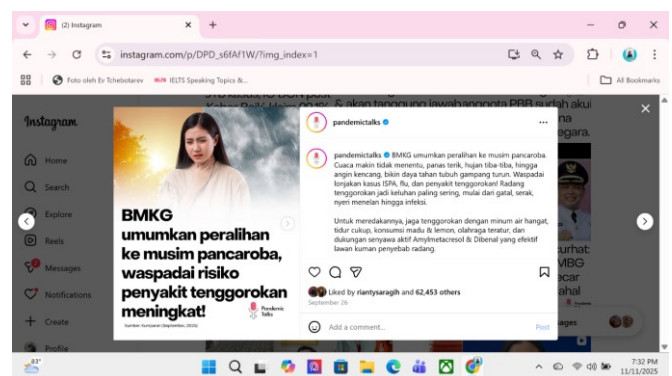
- “diprediksi” (predicted)
 - “dimulai” (started)
 - “lebih cepat dari rata-rata” (faster than usual)
 - “puncak musim hujan” (Peak of rainy season)
- construct weather as something that follows a schedule, like events in a calendar.

d) semantic–cognitive interpretation

The metaphors rely on embodied cognition:

- Intense rain feels like impact → leads to attack metaphor
- Temporal changes conceptualized as spatial movement → arrival metaphor
- Variations in climate understood through calendar comparison → timeline metaphor

These metaphors help audiences process complex meteorological information through familiar experiential frames.



Post-5

Analysis post -5

a. Here, weather is an enemy (*waspadai* as something people should be aware of).

Examples from the text:

- “Weather becomes unpredictable... strong winds, sudden rain... making the body’s immunity drop.”
- “Beware of increasing cases of flu, ISPA, and throat illness.”

It is also described as if it is actively attacking people or lowering their defenses. The effect is to prepare urgency and to encourage the audience to be alert and protective.

b. Weather/seasons as an agent (nature is a person)
The post states that “*Cuaca makin tidak menentu, panas terik, hujan tiba-tiba, hingga angin kencang*”.

Weather is treated as something that *acts, changes mood, and causes harm*—like a person with unpredictable behavior.

Here, we conceptualize natural phenomena as if they have intentions or agency. Lakoff & Johnson call this ontological metaphor, where abstract processes become *entities or agents*.

C. Season transition as a journey (change of state is movement)

Metaphor: change of state is motion

- The post says: *“peralihan ke musim pancaroba”*.
- The season *moves* from one state to another, as though traveling along a path.

d. Health as balance / warmth as safety

Metaphor: good health is balance/warmth, illness is cold/imbalance

- Advice: *“minum air hangat, tidur cukup, konsumsi madu & lemon”*.
- Warmth is conceptualized as a stabilizing, body protection.
- Cold conditions disrupt balance and cause disease.

This fits Lakoff & Johnson’s orientational metaphors, where physical experiences (warm vs. cold) structure abstract domains (health vs. illness).

e. Throat infection as a result of external force

Metaphor: the body is a container

- Symptoms like *“mulai dari gatal, sakit, nyeri menelan hingga infeksi”* are treated as things entering the body.
- The body is conceptualized as a container into which bad substances (germs) invade.

This aligns with the container metaphor identified by Lakoff & Johnson.

Discussion

After analyzing five posts from Instagram which posted and used weather-related expressions, the research can discuss that weather-related expressions on Instagram frequently rely on conceptual metaphors that shape how users perceive climate conditions and health risks. Following Lakoff and Johnson’s (1980) framework, the posts consistently frame *weather as an agent, season as travellers* portraying seasonal changes as

intentional forces that “cause,” “trigger,” or “bring” illness. At the same time, *disease is conceptualized as an enemy*, prompting audiences to “be alert,” “protect” themselves, and “fight” pathogens through preventive actions. These metaphors make abstract meteorological phenomena more relatable by grounding them in human experience, while also intensifying the sense of urgency and personal responsibility in health communication. Overall, the metaphors function not merely as stylistic choices but as cognitive tools that influence how Instagram users interpret weather transitions and associated risks.

Conclusions

This study demonstrates that weather-related expressions on Instagram are shaped by recurring conceptual metaphors that help users make sense of seasonal changes and their health implications. By framing *climate changing as a force, weather as an agent, disease as an enemy, and seasonal transition as a journey*, Instagram posts transform abstract meteorological information into familiar experiential terms that guide public interpretation. These metaphors not only enhance message clarity but also reinforce preventive attitudes by presenting weather and illness in dramatized, action-oriented ways. Overall, the use of conceptual metaphors plays a significant role in constructing meaning and influencing audience perceptions within digital health and climate communication.

References

- Ang, J. W., Huang, L. Q., & Ng, Y. N. (2022). Instagram As A Tool In Phenomenon-Based Learning: An Educational Design Research. *Pupil: International Journal Of Teaching, Education And Learning*, 6(1), 322-41.
- Bataeva, E. (2024). Social Phenomenon Of Instagram In Metamodern Condition. *Ideology And Politics Journal*, 2(26), 29-52.
- Brandt, P. A. (2005). *Mental Spaces And Cognitive Semantics: A Critical Comment*. *Journal Of Pragmatics*, 37(10), 1578–1594. <https://doi.org/10.1016/j.pragma.2004.10.019>

- Clement, S., & Coll-Florit, M. (2021). *Metaphor And Embodied Cognition: A Review*. *Journal Of Pragmatics*, 181, 113–125.
- Gibbs, R. W. (2008). *The Cambridge Handbook Of Metaphor And Thought*. Cambridge University Press.
- Glucksberg, S. (1989). Metaphors In Conversation: How Are They Understood? Why Are They Used?. *Metaphor And Symbol*, 4(3), 125-143.
- Grady, J. E., Oakley, T., & Coulson, S. (1999). Blending And Metaphor. In G. Steen & R. Gibbs (Eds.), *Metaphor In Cognitive Linguistics* (Pp. 234–246). Philadelphia, Pa: John Benjamins
- Lakoff, G., & Johnson, M. (1980). *Metaphors We Live By*. University Of Chicago Press.
- Veremchuk, E. (2022). Ontological Metaphors For Moral Concepts In The Bible: Introduction. *Acta Neophilologica*, 55(1-2), 177-191.

THIS PAGE INTENTIONALLY LEFT BLANK