RESEARCH ARTICLE

Analysis of Covid-19 Visual Metaphors in Pakistani Editorial Cartoons

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ARTICLE INFO	ABSTRACT
	The COVID-19 pandemic has had a profound global impact, leading to an upsurge in visual representations of its social, political, and cultural implications. Editorial cartoons, known for their concise societal commentary, serve as powerful instruments. This study examines visual metaphors in editorial cartoons from Pakistani English-language newspapers, DAWN and Daily Times, during the peak of the pandemic in 2020. Anchored in Conceptual Metaphor Theory and Visual Metaphor Theory, this research uses a qualitative approach to analyze ten editorial cartoons, identifying and interpreting visual and multimodal metaphors. The study reveals that these cartoons portray COVID-19 through diverse conceptual domains such as a Chinese dragon, death, war, a game, a plague, a conqueror, and forces of nature. These metaphors use visual tropes, cues, and symbols to convey complex ideas about the pandemic. Additionally, the research highlights how local cultural and contextual factors, along with universal symbols, influence the creation and interpretation of these metaphors. The cartoons balance local and global elements, addressing the pandemic on both scales. This study enhances the understanding of visual metaphor use in health and crisis communication, particularly in non-Western contexts, and provides insights into the role of editorial cartoons in shaping public discourse during a public health crises.

INTRODUCTION

The COVID-19 pandemic declared a global health emergency by the World Health Organization (WHO) on January 30, 2020, and categorized as a pandemic on March 11, 2020, ushered in a period of widespread disruption, public anxiety, and sociopolitical upheaval. By the end of 2020, the virus had infected over 82 million individuals and caused more than 1.8 million deaths globally (World Health Organization, n.d.). In Pakistan, the first case was confirmed on February 26, 2020, prompting nationwide lockdowns, significant economic distress, and considerable strain on the healthcare infrastructure. During this period of uncertainty, traditional and digital media played a vital role in disseminating public health information and shaping narratives around government response and citizen behavior. Among various media formats, editorial cartoons emerged as a particularly influential genre due to their capacity to translate complex socio-political and health-related issues into accessible, visual narratives that engaged diverse audiences.

Editorial cartoons have long served as effective instruments of public commentary, capable of distilling multifaceted events into succinct and impactful imagery. Their communicative effectiveness lies in the strategic use of visual metaphors that capture abstract concepts through familiar or culturally resonant imagery. Scholars have emphasized the significance of media in influencing public understanding, countering misinformation, and promoting resilience during health crises (Anwar, Malik, Raees, & Anjum, 2020; Mheidly & Fares, 2020). Within this broader media ecology, editorial cartoons stand out for their ability to provoke reflection, critique dominant discourses, and elicit emotional resonance (Byrne, 2002; Pagliawan, 2017). During the COVID-19 pandemic, cartoonists utilized metaphorical devices such as personification, monster imagery, and

war metaphors to depict the virus and its consequences, offering visual critiques of both public and governmental responses (Labbé, 2022; Abdel-Raheem, 2021).

The use of metaphor in editorial cartoons is not merely stylistic but deeply cognitive. Conceptual Metaphor Theory (CMT), introduced by Lakoff and Johnson (1980) posits that human cognition is structured through metaphorical mappings from concrete source domains to abstract target domains. This framework has been extended into the visual domain by scholars such as Forceville (1994; 2008), who demonstrated that visual and multimodal metaphors can communicate complex ideas in accessible formats. Editorial cartoons, therefore, serve as multimodal texts that integrate verbal and visual elements to construct layered meanings (Maes & Schilperoord, 2009; Liliana & Forceville, 2011)

Historically, visual metaphors have been pivotal in shaping public narratives during major health crises, including the HIV/AIDS and Ebola epidemics, by enhancing message retention and critical awareness (Wigston, 2007; Obonyo, 2011; Nwabueze, 2017). The immediacy of visual media makes it particularly effective in low-literacy contexts like Pakistan, where the literacy rate is approximately 58%, ranking the country 124th out of 169 nations according to the World Health Organization's recent assessment (Zarifian, 2020; Ashfaq, Russomanno, & Robinson, 2022). During the COVID-19 pandemic, editorial cartoons in Pakistan uniquely blended cultural, religious, and political symbolism to localize global discourses. For example, references to economic suffocation were metaphorically aligned with globally recognized injustices such as George Floyd's final words, "I can't breathe," to highlight the pandemic's economic toll on ordinary citizens (Aazam, 2020).

Additionally, cartoons served as platforms for satirical resistance, critiquing government mismanagement, exposing misinformation, and amplifying public dissent (Rafi, 2020; Xiaowen, 2021). This ability to reflect societal anxieties through humor and critique underscores the importance of visual metaphor analysis in understanding how media frames influence public perception in times of crisis. War metaphors that depicted COVID-19 as an invading enemy and frontline healthcare workers as soldiers were particularly prevalent, reinforcing urgency and collective responsibility (Abdel-Raheem, 2021; Xiaowen, 2021). Other metaphors framed the virus as a natural disaster, invoking themes of helplessness, unpredictability, and the need for strong leadership (Musolff, Vilar-Lluch, & Kondo, 2022).

While substantial literature explores visual metaphors in Western media, there remains a dearth of research focused on non-Western contexts such as Pakistan, where media discourses are shaped by unique cultural, political, and socio-economic dynamics. This study addresses this gap by investigating the visual metaphors employed in Pakistani editorial cartoons during the COVID-19 pandemic. Specifically, the research analyzes cartoons published in two leading English-language newspapers, *DAWN* and *Daily Times*, throughout 2020, a period marked by the initial outbreak and subsequent policy shifts in public health management.

The study employs Conceptual Metaphor Theory (CMT) and Multimodal Discourse Analysis (MDA) as its guiding theoretical frameworks. It adopts a qualitative methodology to address the following research objectives:

1. To examine the conceptual domains used to metaphorically attribute characteristics to the COVID-19 pandemic in selected editorial cartoons.

2. To describe the specific visual strategies employed in editorial cartoons to convey metaphorical meaning in the context of COVID-19.

3. To analyze the influence of modalities (visual elements, verbal text, or a combination of both) on the construction and interpretation of visual metaphors related to the COVID-19 pandemic.

4. To evaluate the cultural and contextual factors that shape the interpretation of visual metaphors in editorial cartoons related to COVID-19 in Pakistan.

Corresponding to the research objectives, the following research questions guide this study:

1. What conceptual domains are employed in selected editorial cartoons to metaphorically depict aspects of the COVID-19 pandemic?

2. How are specific visual strategies utilized in editorial cartoons to convey metaphorical meaning in the context of COVID-19?

3. In what ways do different modalities (visual elements, verbal text, or a combination of both) contribute to constructing and interpreting visual metaphors related to the COVID-19 pandemic in editorial cartoons?

These research questions are designed to provide a comprehensive exploration of the use of visual metaphors in editorial cartoons about COVID-19 in Pakistan, addressing both the structural aspects of these metaphors and their sociocultural implications.

By situating the analysis within the intersection of visual rhetoric, cultural discourse, and crisis communication, this study contributes to the growing body of interdisciplinary scholarship on media and metaphor. It offers insights into how culturally embedded visual metaphors in editorial cartoons mediate public understanding during health emergencies, with broader implications for media literacy and policy communication in non-Western settings.

2.MATERIALS AND METHODS

This study employed a qualitative research design grounded in Conceptual Metaphor Theory (CMT) and Multimodal Discourse Analysis (MDA) to examine how editorial cartoons published during the COVID-19 pandemic in Pakistan employed visual metaphors to communicate crisis-related themes. The methodology was designed to allow for detailed analysis of metaphorical representations embedded in visual media, with attention to cultural, political, and social specificity.

2.1 Sampling Procedures

The corpus for analysis consisted of editorial cartoons published in two widely circulated Pakistani English-language newspapers, *DAWN* and *Daily Times*. These outlets were selected due to their high credibility, national reach, and substantial coverage of COVID-19-related events. Cartoons published between January 1 and December 31, 2020, were retrieved from the newspapers' official online archives.

Inclusion criteria were as follows:

Explicit reference to the COVID-19 pandemic or its consequences.

Presence of metaphorical representation, either visual (monomodal) or visual-textual (multimodal).

Publication during the calendar year 2020.

Sufficient clarity in metaphorical construction to allow for conceptual analysis.

A total of 668 editorial cartoons were initially retrieved (*DAWN*: 307; *Daily Times*: 361). Of these, 141 cartoons directly addressed the pandemic. A purposive sampling strategy was applied to select 10 cartoons for detailed analysis, ensuring diversity in metaphor types, themes, and temporal coverage across the year. This sample size was sufficient to achieve theoretical saturation for qualitative analysis.

2.1.1 Data Collection and Variables

Cartoons were downloaded in digital format and categorized according to metadata including:

Publication date

Newspaper source

Cartoonist identity

Dominant metaphorical themes

Metaphor identification followed Conceptual Metaphor Theory (Lakoff & Johnson, 1980) and applied the Visual Metaphor Identification Procedure (VISMIP) proposed by Steen (2018). This procedure allowed for systematic differentiation between literal and metaphorical components and ensured reliability in identifying visual metaphorical constructs.

2.2 Research Design

An explanatory mono-method qualitative design was employed to facilitate in-depth thematic interpretation of metaphorical constructs. Editorial cartoons were treated as culturally embedded discursive texts, analyzed using inductive thematic analysis integrated with multimodal discourse analysis. This design enabled the study to explore how visual metaphors were structured and interpreted within the Pakistani socio-political context.

2.3 Analytical Framework and Procedure

The analysis followed a four-stage framework integrating established theoretical and methodological approaches in metaphor and multimodal analysis:

Initial Visual and Textual Analysis

Literal visual and textual elements in each cartoon were objectively identified to establish a descriptive foundation.

Metaphor Identification

Metaphorical incongruities were located using Schilperoord and Maes' (2009) framework and Steen's (2018) VISMIP. Additionally, Forceville's (2011; 2016) visual metaphor typology was applied to distinguish between monomodal and multimodal metaphors.

Domain Mapping

Conceptual mappings between source domains and target domains were identified using Forceville and Bounegru's (2011) structured "A IS B" metaphor formula.

Multimodal Interaction Analysis

Interactions between visual and verbal elements were analyzed using Phillips and McQuarrie's (2004) visual rhetoric typology and Multimodal Discourse Analysis approaches as developed by Kress and van Leeuwen (2001) and Machin and Ledin (2020). Particular emphasis was placed on cultural symbolism and ideologically embedded meanings within the Pakistani context.

This integrated analytical framework allowed for methodical identification, classification, and interpretation of visual metaphors. It also ensured analytical transparency and reproducibility while maintaining sensitivity to the socio-cultural specificities of the research setting.

3. RESULTS

The qualitative analysis of ten editorial cartoons published in *DAWN* and *Daily Times* during 2020 revealed ten dominant metaphorical themes used to visually represent the COVID-19 pandemic in Pakistan. These metaphors evolved chronologically and were constructed using culturally embedded imagery, personification, visual exaggeration, and intertextual references.

3.1 COVID-19 as a Foreign Threat

Initially, COVID-19 was depicted metaphorically as a foreign threat, frequently represented by a Chinese dragon, emphasizing the virus's external origins and perceived foreignness. The cartoon utilizes visual dominance to present COVID-19 as a black-scaled Chinese dragon confronting an anthropomorphized, perspiring Earth. Through metaphorical incongruity, the cartoon replaces the virus with a culturally loaded mythical creature. Applying Schilperoord and Maes' (2009) substitution model, the dragon serves as a replacement metaphor to evoke similarity. The metaphor COVID-19 IS A MONSTER is formed by mapping the power and threat of the dragon (source domain) onto the virus (target domain), following Forceville's (2011) "A IS B" model. The image achieves a multimodal (verbo-visual) metaphor through the textual anchor "CORONAVIRUS" and its visual correspondence. The metaphor draws heavily on Chinese iconography, rendering the piece politically potent, especially in light of early Sinophobic discourses. Visual hyperbole (the looming dragon), personification (Earth as a man), and irony are employed to evoke affective and cognitive responses from Pakistani viewers (see **Figure 1**).

Figure 1: Editorial Cartoon 1

Note. Cartoonist: Feica. Newspaper: Daily Times. Dated: 1st February 2020.

3.2 COVID-19 as Death

As the pandemic intensified, editorial cartoons increasingly employed death imagery, notably personifying COVID-19 as the Grim Reaper. This cartoon introduces the Grim Reaper, a universal symbol of death, approaching a globe under threat. The scythe inscribed with "CORONA" marks a direct verbal-visual integration. The metaphor COVID-19 IS DEATH operates on a conceptual level, transforming the abstract threat into a tangible fatal entity. The source domain "Grim Reaper" maps onto the target domain "COVID-19," forming a contextual multimodal metaphor. While the Grim Reaper is a Western cultural trope, its global intertextuality makes it legible within Pakistani media. Personification, juxtaposition, and symbolic framing contribute to the cartoon's meaning-making process, while recurring spectators (bald man, crow, and girl) function as audience proxies. (See **Figure 2**).

Figure 2: Editorial Cartoon 2

Note. Cartoonist: Feica. Newspaper: Daily Times. Dated: 29th February 2020.

Healthcare Workers as Warriors and Sisyphus

Zahoor's cartoon depicts a lone figure labeled "HEALTH SYSTEM" combating a disproportionately large COVID-19 virion. This image invokes two interrelated metaphors: FIGHTING COVID-19 IS WAR and FIGHTING COVID-19 IS A SISYPHEAN TASK. The cartoon relies on exaggeration, with the virion rendered in hyperbolic scale and equipped with spike proteins. Domain mapping aligns the source domains of "warrior" and "Sisyphus" with the target domain of COVID-19, emphasizing the overwhelming burden placed on healthcare systems. The fusion of visual metaphors, metonymy (one doctor for the whole system), and synecdoche (single virion for the pandemic) adds conceptual density. Despite critiques of militaristic metaphors in health discourse, Pakistani audiences interpret such depictions as calls for unity and resilience (see **Figure 3**).
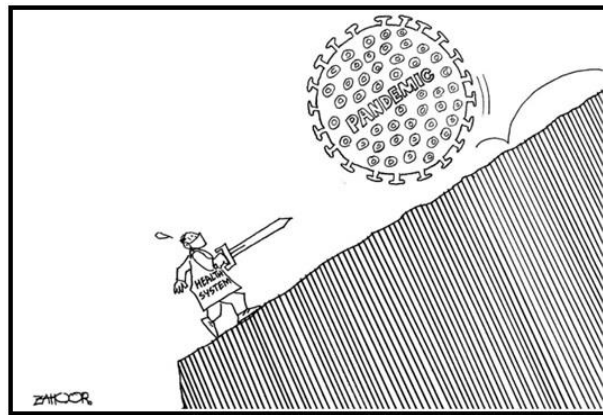

Figure 3: Editorial Cartoon 3

Note. **Cartoonist: Zahoor. Newspaper: *DAWN*. Dated: 21st March 2020.**

3.3 COVID-19 as a Game

In early April 2020, COVID-19 containment efforts were metaphorically illustrated through the Which-A-Mole game. This metaphor highlighted the frustration, unpredictability, and recurring resurgence of the virus, visually reflecting containment challenges across regions within Pakistan. Utilizing the visual structure of a Whac-A-Mole arcade game, this cartoon presents COVID-19 as elusive and unpredictable. The mole holes are labeled with Pakistani provinces, and two frontline workers attempt to "whack" virion-headed moles. The source domain "Whac-A-Mole" (a chaotic, repetitive game) maps onto the pandemic, forming the metaphor FIGHTING COVID-19 IS (playing) A (losing) GAME. The cartoon features no explicit text beyond visual identifiers, making it a monomodal visual metaphor. Replacement and irony are the central visual tropes. The satire lies in equating a public health crisis with a child's game, critiquing the reactive strategies of the government. Metonymy (COVID-19 as a mole) and synecdoche (individual workers as the entire frontlines) deepen interpretative complexity (see **Figure 4**).
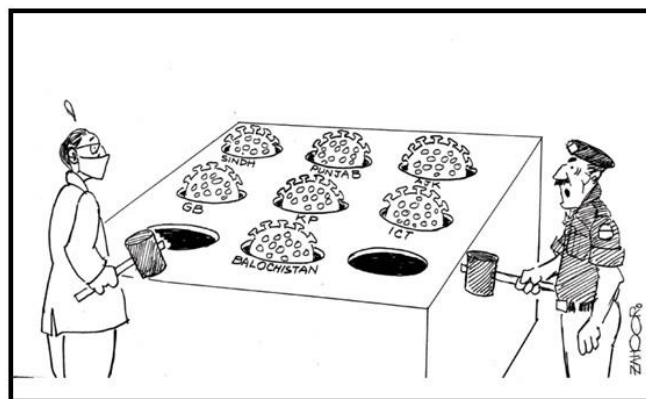

Figure 4: Editorial Cartoon 4

Note. **Cartoonist: Zahoor. Newspaper: *DAWN*. Dated: 1st April 2020.**

3.4 COVID-19 as Plague

Another significant visual metaphor likened COVID-19 to a historical plague using imagery derived from the Pied Piper story. This reinforced historical anxieties about pandemics, effectively framing the virus within a familiar cultural narrative. Here, Feica invokes the COVID-19 IS A PLAGUE metaphor through an intersexual allusion to the Pied Piper myth. Two flute-playing doctors lead virus-rats away from an observing crowd. The rats are fused with COVID-19 spike proteins, while the textual anchor "DOCTORS" emphasizes the profession. The metaphor operates as a monomodal visual metaphor rooted in the folklore of disease-bearing rats and savior-figures. Fusion and juxtaposition link the pandemic to earlier plagues, and synecdoche (doctors for the medical system) reflects society's hope in healthcare leadership. Color and framing techniques, including an L-shaped compositional flow and polychromatic contrasts, reinforce narrative meaning. The cartoon critiques crisis management while celebrating medical intervention (see **Figure 5**).
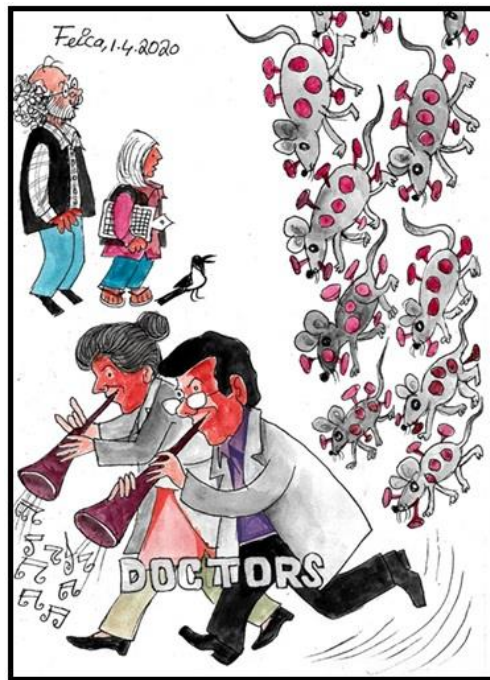

Figure 5: Editorial Cartoon 5

Note. Cartoonist: Feica. Newspaper: Daily Times. Dated: 1st April 2020.

3.5 COVID-19 as a Conqueror

The metaphorical depiction of COVID-19 as a conqueror emerged through adaptations of iconic imagery, notably the Iwo Jima flag-raising. This representation conveyed the virus's global dominance and destructive power, visually signaling its overwhelming impact This cartoon visually reconfigures the iconic image of the 1945 *Raising the Flag on Iwo Jima* by substituting the American marines with anthropomorphic COVID-19 virions. The flag they raise reads "PANDEMIC" in bold red letters. The metaphor COVID-19 IS A CONQUEROR is established through conceptual mapping that connects historical imagery of military triumph with the global dominance of the virus. The cartoon functions as a monomodal visual metaphor wherein visual elements alone construct meaning. The source domain of "victory in battle" is fused with the target domain "COVID-19," transforming the pandemic into a victorious military force. The satirical inversion of the original patriotic scene employs visual irony, replacement, and synecdoche to dramatize the perceived helplessness of humanity. The supporting characters symbolizing the Pakistani public are rendered as stunned spectators, underlining the gravity of the situation. Cultural intertextuality enhances the metaphor's resonance, with the act of flag-raising symbolizing dominance in both local and global contexts (see **Figure 6**)

Figure 6: Editorial Cartoon 6

Note. Cartoonist: Feica. Newspaper: Daily Times. Dated: 3rd April 2020.

3.6 COVID-19 as Politicians

In this editorial cartoon, former U.S. President Donald J. Trump is depicted with a head composed of a spiked COVID-19 virion, chasing a masked, anthropomorphic Earth. The visual metaphor COVID-19 IS TRUMP critiques Trump's leadership during the pandemic, equating the virus with the political consequences of his policies. The cartoon uses a monomodal visual metaphor, as the lack of textual anchors places interpretive weight on visual representation alone. Fusion is the dominant visual trope in this cartoon. Trump's facial features merge with the virus establishing metaphorical incongruity. Personification of Earth and hyperbolic size difference enhance the emotional impact. Cultural symbolism is leveraged through Trump's widely recognizable persona, making the metaphor accessible to global audiences. While Feica's typical Pakistani characters are absent, the composition, color, and posture evoke urgency and satire. Visual synecdoche and metonymy further connect the image of Trump to global political mismanagement, representing how leadership failures amplified the pandemic's spread (see **Figure 7**).

Figure 7: Editorial cartoon 7

Note. Cartoonist: Feica. Newspaper: Daily Times. Dated: 30th April 2020.

3.7 COVID-19 as Economic Suffocation

The metaphor of economic suffocation was vividly illustrated through symbolic imagery, notably referencing George Floyd's "I can't breathe" phrase, to reflect economic hardships and societal oppression intensified by pandemic-related restrictions and unemployment This cartoon draws a powerful comparison between the murder of George Floyd and the economic suffocation caused by the COVID-19 pandemic. An anthropomorphic COVID-19 virion, bearing the likeness of Derek Chauvin, kneels on a man labeled "UNEMPLOYMENT," stylized in the posture of Floyd. Textual anchors like "CAN'T BREATHE" reinforce the metaphor COVID-19 AS ECONOMIC SUFFOCATION. This verbo-visual multimodal metaphor operates by mapping the public's economic vulnerability onto a globally recognized act of racial injustice. Visual simile and personification are combined with fusion techniques, yielding a layered metaphor that extends beyond health discourse to encompass socio-political critique. Supporting characters express shock, mirroring public sentiment. The cartoon draws on intertextual and emotional cues to stimulate reflection on the dual crises of inequality and pandemic precarity. While culturally rooted in Pakistan, the metaphor has universal resonance due to its reference to a globally known injustice (see **Figure 8**).

Figure 8: Editorial cartoon 8

Note. Cartoonist: Feica. Newspaper: Daily Times. Dated: 8th June 2020.

3.8 COVID-19 as Inevitable

Zahoor's cartoon portrays a monstrous COVID-19 virion trapped within an hourglass, its grains of sand slowly burying a distressed man in the lower chamber. The verbal anchor "Difficult months ahead: PM" situates the cartoon in its Pakistani context. The metaphor COVID-19 AS INEVITABLE is formed through mapping the inexorability of time onto the pandemic. As a multimodal metaphor, it combines a symbolic visual structure with textual reinforcement. The source domain "hourglass/time" is fused with "virus," suggesting both the relentless passage of time and the looming threat of the virus. Visual hyperbole exaggerates the size of the virion and the claustrophobic setting, while visual metonymy (hourglass for time) and irony intensify the metaphor's urgency. The cartoon taps into temporal anxiety, illustrating how public fears are shaped by official discourse and media narratives. The hourglass also acts as a symbolic container, referencing Lakoff and Johnson's (1980) container metaphor where the virus encapsulates the unfolding future (see **Figure 9**).
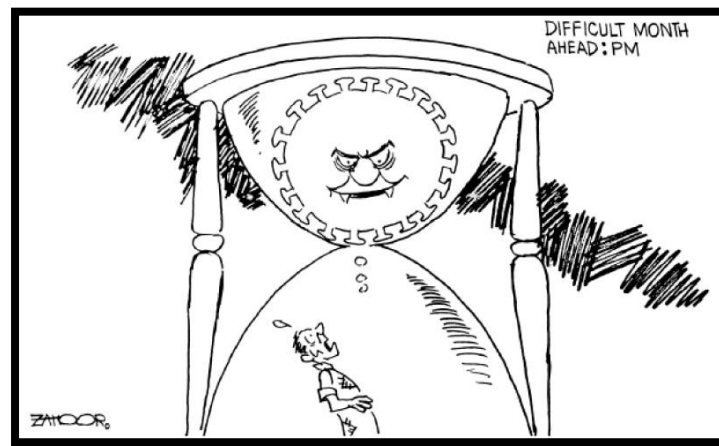
Figure 9: Editorial cartoon 9

Note. Cartoonist: Zahoor. Newspaper: DAWN. Dated: 24 June 2020.

3.10 COVID-19 as an Avalanche

Zahoor's final cartoon metaphorically presents COVID-19 as a monstrous snowball rolling down a slope, symbolizing its rapid escalation during Pakistan's second wave. The visual metaphor COVID-19 IS AN AVALANCHE maps the source domain of the "snowball effect" which is a familiar concept denoting uncontrollable amplification onto the target domain of the pandemic. This cartoon is without text, and hence, qualifies as a monomodal pictorial metaphor. Personification and visual hyperbole are central tropes. The anthropomorphic features of the virion and its exaggerated fangs evoke menace and urgency. Visual incongruity comparing a virus to an avalanche triggers cognitive engagement, supported by pictorial runes indicating fear and panic among fleeing figures. Contextually, the metaphor aligns with Pakistan's mountainous geography. The cartoon uses spatial composition and metaphorical mapping to depict COVID-19's escalating impact, constructing a layered commentary on contagion, fear, and public vulnerability through visual design. (see **Figure 10**).
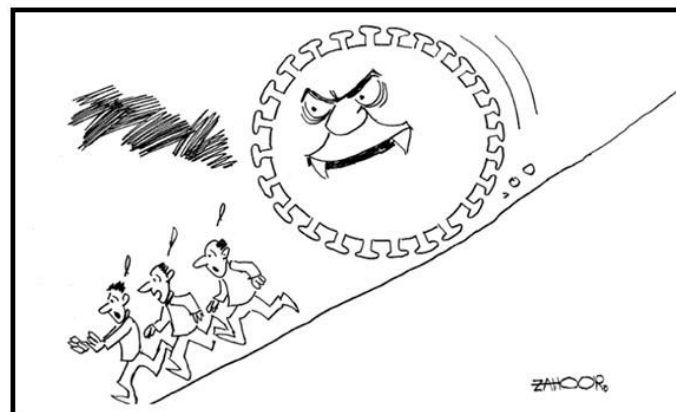

Figure 10: Editorial cartoon 10

Note. Cartoonist: Zahoor. Newspaper: DAWN. Dated: 5th November 2020.

4. DISCUSSION

The editorial cartoons analyzed in this study offer critical insights into how metaphors are used to frame public understanding of COVID-19 in a high-stakes, low-literacy context. By systematically applying Conceptual Metaphor Theory (Lakoff & Johnson, 1980) and Multimodal Discourse Analysis (Kress & van Leeuwen, 2001; Machin & Ledin, 2020), this discussion interprets the significance of the five analytical categories employed in the results (see **Figure 11**).

	Date	Newspaper	Cartoonist	Conceptual Domain	Source Domain	Metaphor Type	Conceptual Mappings	Visual Strategies
1	01-02-2020	Daily Times	Feica	Monster/Mythical Creature	Chinese Dragon	Hybrid Metaphor	Monster/Chinese Virus as COVID-19	Hyperbole, Juxtaposition
2	29-02-2020	Daily Times	Feica	Death	Grim Reaper	Symbolic Metaphor	Death as COVID-19	Personification, Symbolism
3	21-03-2020	DAWN	Zahoor	War	Warrior/Sisyphean Task	Structural Metaphor	War as COVID-19	Juxtaposition, Hyperbole
4	01-04-2020	DAWN	Zahoor	Game	Whac-A-Mole	Structural Metaphor	Game as COVID-19	Irony, Exaggeration
5	01-04-2020	Daily Times	Feica	Plague	Pied Piper	Cultural-Specific Metaphor	Plague as COVID-19	Cultural Narrative, Hyperbole
6	03-04-2020	Daily Times	Feica	Conqueror	Raising the flag Iwo Jima	Symbolic Metaphor	War/Conqueror as COVID-19	Historical Reference, Symbolism
7	30-04-2020	Daily Times	Feica	Political Figure	Trump	Hybrid Metaphor	Politicians as COVID-19	Caricature, Political Satire
8	08-06-2020	Daily Times	Feica	Economic Suffocation	Law Enforcement	Pictorial Simile	Death/Suffocation as COVID-19	Metonymy, Symbolic Representation
9	24-06-2020	DAWN	Zahoor	Time Running Out	Hourglass	Personification Metaphor	Monster/Time as COVID-19	Temporal Symbolism, Urgency
10	05-11-2020	DAWN	Zahoor	Avalanche	Snowball/Snowballing Effect	Integrated Metaphor	Monster/Avalanche (Natural Disaster) as COVID-19	Natural Disaster Imagery, Hyperbole

Figure 11: Grouping Chart

Note: The grouping chart is systematically organized into eight sections:

(1) date of publication, (2) name of the newspaper, (3) name of the cartoonist, (4) conceptual domains employed, (5) source domain, (6) metaphor type, (7) conceptual mappings, and (8) visual strategies utilized. Among these, five constitute the primary analytical categories: conceptual domains, source domain, metaphor type, conceptual mappings, and visual strategies.

The use of conceptual domains such as war, plague, and death reflects a shared cultural and emotional vocabulary through which crisis is traditionally understood. These domains facilitated audience comprehension by linking unfamiliar health scenarios with well-established cultural narratives. Source domains like the Grim Reaper, Sisyphus, and the Chinese dragon were visually powerful choices that drew on both local and global semiotic associations. These source domains operated as anchoring devices that helped viewers process COVID-19 through recognizable forms.

The metaphor types varied according to both the narrative intention and the visual mode of expression. Symbolic and hybrid metaphors allowed cartoonists to blend public health commentary with political critique. For instance, the metaphor "COVID-19 is Trump" used fusion and caricature to embody political failure in the face of crisis. Structural metaphors, such as "COVID-19 is a game," employed irony and visual simplification to critique the inefficacy of policy response. These categorizations align with Phillips and McQuarrie's (2004) typology, which emphasizes visual rhetorical structure as a critical component of persuasive visual design.

Conceptual mappings across all ten cartoons established meaningful correspondences between the abstract idea of COVID-19 and concrete or familiar experiences. These mappings were essential in creating cognitive frames for public interpretation. The mapping of "COVID-19 as economic suffocation" was particularly striking in its allusion to George Floyd's death, leveraging a globally resonant injustice to express local economic anguish. This kind of intertextual mapping extended the communicative power of the cartoon beyond national boundaries.

Visual strategies used by the cartoonists further amplified the metaphors' accessibility and affective impact. Techniques such as hyperbole in the depiction of the dragon and the avalanche, juxtaposition in war imagery, and personification of the Earth or healthcare workers enabled viewers to emotionally engage with abstract and often invisible threats. The stylistic choices of Feica and Zahoor also diverged meaningfully. Feica often employed caricature and political satire, while Zahoor's work leaned on symbolism, composition, and historical reference to guide interpretation.

Moreover, the visual metaphors evolved in chronological alignment with pandemic developments. Earlier metaphors centered on external threat and mortality, consistent with the global narrative in

the early stages of COVID-19. As the pandemic unfolded, cartoons increasingly addressed internal issues such as policy failures, economic distress, and psychological fatigue. This progression demonstrates the dynamic responsiveness of editorial cartoons to public mood and policy shifts.

This study offers a comprehensive analysis of the visual metaphors embedded in Pakistani editorial cartoons during the COVID-19 pandemic, emphasizing their role in projecting critical health messages and disseminating crisis narratives in a predominantly low-literacy society. Through the integrated application of Conceptual Metaphor Theory (CMT) and Multimodal Discourse Analysis (MDA), the research reveals how metaphorical constructs ranging from foreign threats, death, and war to political dysfunction, economic suffocation, and inevitable catastrophe were strategically employed to communicate the gravity of the pandemic.

Editorial cartoons in this context functioned as accessible yet potent multimodal texts, fusing culturally resonant imagery with universal crisis symbolism. Their visual metaphors enabled the transmission of complex public health, political, and social messages to broad audiences, many of whom may have limited engagement with formal textual media. In doing so, these cartoons contributed meaningfully to crisis communication, critique, and public awareness during an unprecedented global emergency.

This research highlights the unique capacity of editorial cartoons to serve as communicative instruments in environments where visual literacy often exceeds textual literacy. The findings emphasize the communicative power of culturally grounded visual strategies in promoting effective public engagement, especially in low-literacy and high-crisis contexts.

Future research should expand on these insights by examining audience reception, comparative cross-cultural metaphor usage, and the measurable influence of visual metaphors on health-related behaviors. Such investigations will enhance our understanding of visual media's role in shaping effective and inclusive public health communication during global crises.

Authors' Contributions

Syeda Arooj Zehra Rizvi conceived the research idea, carried out the metaphorical and multimodal analysis, and wrote the manuscript. Prof. Dr. Hamedi B. M. Adnan provided academic supervision, theoretical input, and critical feedback during manuscript development. Dr. Mohsin Hassan Khan was formally listed as co-supervisor on the project. All authors read and approved the final manuscript.

Conflict of Interest

The authors declare that they have no competing interests.

REFERENCES

Aazam, F. B. (2020). Discourse of fear and economic crisis: A multimodal analysis of Pakistani newspaper's political cartoons of COVID-19. *Linguistics and Literature Review, 6*(2), 1-12. doi:https://doi.org/10.32350/llr

Abdel-Raheem, A. (2021). Where COVID metaphors come from: Reconsidering context and modality in metaphor. *Social Semiotics, 33*(5), 1-40. doi:https://doi.org/10.1080/10350330.2021.1971493

Anwar, A., Malik, M., Raees, V., & Anjum , A. (2020). Role of Mass Media and Public Health Communications in the COVID-19 Pandemic. *Cureus, 12*(9), 1-12. doi:https://doi.org/10.7759/cureus.10453

Ashfaq, A., Russomanno, J., & Robinson, P. (2022). More than a message: Public health advocacy, political cartooning and COVID-19 challenges in Pakistan. In D. Stanley, & D. Brunn, *COVID-19 and a World of Ad Hoc Geographies* (pp. 771–793). Springer. doi:https://doi.org/10.1007/978-3-030-94350-9_147

Bounegru, L., & Forceville, C. (2011). Metaphors in editorial cartoons representing the global financial crisis. *Visual Communication, 10*(2), 209–229. doi:https://doi.org/10.1177/1470357211398446

Byrne, A. (2002). Perception, evidence, truth, and seeing. In M. Peres, *The concise focal encyclopedia of photography: From the first photo on paper* (pp. 240-251). Focal Press.

El-Refaie, E. (2003). Understanding visual metaphor: The example of newspaper cartoons. *Visual Communication, 2*(1), 75–95. doi:https://doi.org/10.1177/1470357203002001755

Forceville, C. (1994). Pictorial metaphor in advertisements. *Metaphor and Symbol, 9*(1), 1–29. doi:http://dx.doi.org/10.1207/s15327868ms0901_1

Forceville, C. (2008). Go figure! New directions in advertising rhetoric. In R. McQuarrie, *The Cambridge Handbook of Metaphor and Thought* (pp. 462–482). Cambridge University Press. doi:https://doi.org/10.4324/9781315704029

Forceville, C. (2016). Pictorial and multimodal metaphor. In N. Klug, & H. Stöckl, *Handbuch sprache im multimodalen kontext* (p. 214). De Gruyter. doi:https://doi.org/10.1515/9783110295979

Kress, G., & van Leeuwen, T. (2001). *Multimodal discourse. Modes and media of contemporary communication.* Bloomsbury Academic.

Labbé, F. P. (2022). Stigma and blame related to COVID-19 pandemic: A case-study of editorial cartoons in Canada. *Social Science & Medicine, 296*, 1-11. doi:https://doi.org/10.1016/j.socscimed.2022.114803

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by.* University of Chicago Press.

Machin, D., & Ledin, P. (2020). *Introduction to multimodal analysis.* Bloomsbury Publishing. doi:https://www.doi.org/10.5040/9781350069176

Maes, A., & Schilperoord, J. (2009). Visual metaphoric conceptualization in editorial cartoons. In Urios-Aparisi, & Forceville, *Multimodal metaphor* (pp. 211-238). De Gruyter Mouton. doi:https://doi.org/10.1515/9783110215366.3.213

Mheidly , N., & Fares , J. (2020). Leveraging Media and Health Communication Strategies to Overcome the COVID-19 Infodemic. *Journal of Public Health Policy, 41*, 410–420. doi:https://doi.org/10.1057/s41271-020-00247-w

Musolff, A., Vilar-Lluch, S., & Kondo, K. (2022). *Pandemic and Crisis Discourse.* Bloomsbury Publishing. Retrieved from http://digital.casalini.it/9781350232709

Nwabueze, C. (2017). Framing of cartoons on Ebola Virus disease in selected Nigerian dailies: A content analysis. *Journal of Healthcare Communications, 2*(1), 1–7. doi:https://doi.org/10.4172/2472-1654.100047

Obonyo, L. (2011). Talking health: HIV/AIDS in Kenya 'Toons'. *African Communication Research, 4*(2), 343–368.

Pagliawan, D. (2017). Tales behind single frames: Narrative attributes of editorial cartoons. *International Journal of Comparative Literature and Translation Studies, 4*(2), 2349–9451.

Phillips, B., & McQuarrie, E. (2004). Beyond visual metaphor: A new typology of visual rhetoric in advertising. *Marketing Theory, 4*(1-2), 113-136. doi:https://doi.org/10.1177/1470593104044089

Rafi, M. &. (2020). Language of COVID-19: Discourse of fear and Sinophobia. *Social Sciences & Humanities, 39*(2), 57–70. doi:https://doi.org/10.2139/ssrn.3603922

Steen, G. (2018). *Visual metaphor: Structure and process* (18 ed.). John Benjamins Publishing Company. doi:https://doi.org/10.1075/celcr.18

Wang, Y. (2021). The metaphors and their critical analysis in COVID-19-related cartoons. *Open Journal of Modern Linguistics, 11*, 539–554. doi:https://doi.org/10.4236/ojml.2021.114041

Wigston, D. (2007). AIDS and political cartoons: A case study. *Communication: South African Journal for Communication Theory and Research, 28*(2), 74–94. doi:https://doi.org/10.1080/02500160208537944

World Health Organization. (n.d.). *Emergencies: Coronavirus disease (COVID-19) pandemic*. Retrieved from World Health Organisation (WHO): https://www.who.int/europe/emergencies/situations/covid-19

Xiaowen, X. &. (2021). How we conceptualize epidemic: Visual metaphors of COVID-19 in editorial cartoons. *Academic Journal of Humanities & Social Sciences, 4*(9), 101–111. doi:https://doi.org/10.25236/AJHSS.2021.040916

Zarifian, M. (2020). Cartoon as a means of mass communication in modern media space. *Actual Problems of Linguistics and Intercultural Communication*, 52-60.