

Framing food insecurity: An analysis of linguistic and conceptual metaphors in Pakistani media discourse during the Ukraine war

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Abstract: *Metaphor analysis in media studies is crucial as it unveils the hidden narratives and cognitive structures that underlie the portrayal of critical issues, offering a deeper insight into how media shapes public perceptions and influences policy decisions. The current article's exploration of metaphors in Pakistani media discourse during the Ukraine conflict sheds light on the persuasive power of metaphors in framing food insecurity, making a significant contribution to understanding their role in shaping public discourse during global crises. This article presents a qualitative content analysis of linguistic and conceptual metaphors used in Pakistani media discourse during the Ukraine conflict to frame food insecurity. The study addresses three research questions: what are the dominant metaphors used, what are their functions in shaping public perceptions, and what is the metaphors' potential for addressing food insecurity during global crises. Food insecurity is depicted as a natural calamity, an economic crisis, and a state of emergency according to an examination of stories in three major English-language Pakistani newspapers: Dawn, The News International, and The Express Tribune. These evoked strong feelings, communicated urgency, and placed blame for the issue on different parties. The metaphors also functioned to highlight the gravity of the situation and called for quick action from the government and international community.*

Keywords: food insecurity, media discourse, metaphors, newspaper, public perceptions, Ukraine war, global crises, linguistic, conceptual

Introduction

Twelve nations, including Pakistan, were named in a recent policy brief by the UN's ESCAP (2022) as vulnerable to the consequences of the Ukraine crisis. For nations with particular economic structures and conditions, the brief emphasizes the dangers of rising food and energy costs, declining capital inflows, and changing business conditions. It is important to highlight how Pakistan is managing problems like food shortages given its susceptibility to these dangers. Public perceptions of food insecurity in Pakistan are greatly influenced by media discourse. This can have a major effect on public attitudes and policies and can effect public opinion toward government interventions in this regard.

Metaphors are used in media discussions to evoke strong emotions in the public, simplify complicated problems, and affect public perception (Tewksbury & Scheufele, 2019). In order to understand complicated concepts, metaphors are essential (Lakoff, 2014; Lakoff & Johnson, 1980). They can aid in people's understanding of abstract topics by connecting them to physical ones (Hill, 2017). To illustrate the seriousness of the issue of food insecurity, for example, metaphors like "hunger clock" or

"food deserts" might be employed (Semino, 2021). Additionally, metaphors may evoke strong feelings and communicate gravity and urgency, which can be particularly helpful in emergency circumstances.

To analyze the use of recurrent linguistic and conceptual metaphors in Pakistani newspapers, this study seeks to answer the following questions in relation to the war in Ukraine:

RQ1: what are the dominant linguistic and conceptual metaphors used to frame food insecurity in Pakistani media during the war?

RQ2: what are the functions of these metaphors in shaping public perceptions of food insecurity in Pakistan during the Ukraine conflict?

Using a qualitative content analysis approach, the current study examines a sample of articles concerning the Ukrainian crisis. It focuses on articles published in three prominent Pakistani newspapers between February 2022 and February 2023. This article analyzes the conceptual metaphors and vocabulary used to characterize food insecurity. It also focuses on how they affect the general public views regarding this issue.

Literature Review

Conceptual Metaphor Theory

Cognitive linguistics is a sub discipline concerned with the ways of understanding abstract ideas in terms of concrete experiences through conceptual metaphor theory (CMT). It was first proposed by George Lakoff and Mark Johnson in their 1980 book *Metaphors We Live By*. It postulates that the more we develop physical understanding of the world, the more complex concepts we derive in values, emotions and political ideologies vis-à-vis the world. They assign a fundamental role to metaphors in that these are not merely linguistic production but provide the basis how think about the world and orient ourselves in it (Steen, 2017). In other words, physical experiences and sensory observations of the world give a foundation to our understanding of abstract concepts. Concepts such as time is often represented in terms of metaphors of a container, a river or a line, and the events are conceptualized as points at different points along these objects.

CMT argues that metaphors are present in all forms of language and are often invisible due to moralized usage in everyday language use. Researchers have gathered linguistic metaphors and, based on the examples, proposed that conceptual metaphors facilitate the understanding of abstract concepts through more concrete domains. In this conceptual framing, physical domains are proposed seen as source domains and abstract ideas as the target domains. Lakoff and Johnson's explanation of how metaphors work can be explained by the distinction between structural metaphors, orientational metaphors, and ontological metaphors. A structural metaphor is a type of metaphor in which one concept is structured in terms of another. For instance, argument is conceptualized as war (Gibbs, 2017). Such a metaphor enables us to understand and make sense of the concept of argument by mapping it onto the concept of war. An orientational metaphor is one that organizes a whole system of concepts into another one and is based on both physical and cultural experience. For example, in one culture the future is in front of us and in another in the back (Zinken, 2015). In the ontological metaphor, something is projected onto something else, for example, inflation being an entity.

Metaphors offer the ways of seeing the abstract activities, emotions, or ideas as entities or substances. Metaphors can be used to directly link major crises to horrendous events like war such as we saw in Covid-19 pandemic when "war language" was frequently employed to frame the metaphors for the dangers posed by the unprecedented fast spreading of this viral disease (Gulzar et al., 2021a). Ontological metaphors are important because they enable us to rationally deal with our experiences. Based on real similarity, perceived similarity, and generic level similarity, image schemas, and experience (Kiseleva & Trofimova, 2017). Image schemas are abstract and pre-conceptual structures based from our experiences of the world. They are important in the formation of conceptual metaphors.

A container schema is one such example of an image schema that is easy to imagine graphically. Consider it as a circumference containing an x inside. In this sense, image schemas are embodied pre-linguistic structures of experience that motivate conceptual metaphor and form a basis for understanding complex concepts (Jensen, 2022). The following lines give a brief overview of four tools: conceptual metaphor, source domain and target domain, image schemas, and blending theory. These tools can also help in identifying and analyzing underlying metaphors in a given text and basic cognitive structures and conceptual domains that are blended to produce metaphors.

Conceptual metaphors:

Conceptual metaphor is a term that refers to the use of a linguistic expression or a symbol to represent or understand another concept or domain. The most important thing about this tool is that it helps to uncover the metaphors used in a text, whether implicit or not. Such a metaphor comprises one example, such as the phrase 'navigating life,' in which life is related to as a journey through a dangerous and unpredictable sea, which needs to be navigated with guidance in order to arrive at a certain destination. Researchers can determine conceptual metaphors in a text that give clues about deeper meanings and assumptions in the discourse that underlie intellectual worldviews, and that inform how the world is understood.

Source domain and target domain:

Cognitive linguistics uses the source domain and target domain analysis as a tool to find the mapping onto each other domains that are mapped onto each other in a conceptual metaphor. According to this framework, the source domain is that domain from which the metaphor draws its mental image or structure and the target domain is the domain to which the metaphor is applied. In the metaphorical mapping 'navigating life', the source domain is the domain of sailing, with the picture of steering a ship through the open seas, whereas the target or applied domain to which the metaphor applies is the abstract domain of life. With the help of the source and target domains of a metaphor, we can better understand the conceptual structure and organization of the metaphorical mapping.

Image schemas:

An image schema is a mental representation of the physical world upon which we base our perception and understanding of the physical world. In this sense, they are the basis for how we conceive the world and interact with it. Often, metaphors are created using these schemas. Through examining the image schemas in a text, we can understand how a particular metaphor works to convey connotative meaning in a powerful emotive manner. For instance, the image of "up" and "down" as the image schema for "ups and downs" in life provide orientation to understand an abstract concept in terms of concrete navigational terms. By analyzing these schemas, we can understand how specific metaphors draw on our understanding of the physical world to make sense of conceptualization of complex struggles and issues in life.

Blending theory:

The blending theory is a useful tool to discover conceptual domains that are blended in a text. We can understand possible cognitive processes that help to form metaphorical expressions through the process of blending and morphing of conceptual domains (Dreyfus et al., 2015). Blending theory therefore helps in understanding underlying domains in a metaphor and offers explanation regarding the complex relation that underpins them. For example, blending theory can be used to analyze how the domains of life and sailing are blended in the 'navigating' metaphors to form a new conceptual structure. Based on this, the experience of navigating through the challenges of life can be communicated in metaphorical terms.

The role of media in framing food insecurity

The current study understands the complex role of media discourse in shaping public perceptions about food insecurity during times of global crises. Due to its wide reach and impact, media discourse can have a major effect on the public perception and attitude towards important issues (Mohi-ud-Din et al., 2021). The significance of how food insecurity is framed in media discourse is especially important. It is a powerful tool to communicate burning issues to the general public in emotive terms. The use of metaphors can also influence policy decisions and macro-level interventions in times of crisis. The current study is concerned with how dominant linguistic and conceptual metaphors used in Pakistani media discourse frame food insecurity against the backdrop of the Ukraine war using metaphors to achieve communicative and ideological goals (Wolfsfeld et al., 2022). It is important to stress that that media framing is often not neutral but is implicated in power struggles around media ownership, political alignment, and cultural norms (Hussain, 2017; Khan & Khan, 2016). Thus ideological stance toward social, economic, or educational issues can be underpinned by power struggle and group agenda.

Methodology

The present research article follows Mayring (2015) and Braun and Clarke (2012) in their approach toward qualitative content analysis. It explores the use of linguistic and conceptual metaphors in the three prestigious English language newspapers in Pakistan: Dawn, The News International, and Express Tribune from February 2022 to February 2023. The study seeks to examine the metaphors employed in the war to depict food insecurity. The relevant data was selected using purposive sampling technique. The researchers used NVivo 12, the most recent version of a widely used software tool for qualitative data analysis following key steps of immersion in the data, noting sub-themes, forming main themes, and modifying themes in the light of new information emerging from the data analysis (Alam, 2021).

The researchers chose articles on food insecurity in Pakistan during the Ukraine conflict, focusing on uncovering the current linguistic and conceptual metaphors that constitute the media discourse. The analysis is focused on identification of the linguistic and conceptual metaphors used to frame food insecurity during the war. In the data analysis, the most commonly used linguistic and conceptual metaphors in Pakistani discourse media to frame the food insecurity in the Ukraine conflict are identified. In the next step, their functions are analyzed in terms of shaping public perception. The data analysis process was done in several iterative steps. The linguistic and conceptual metaphors were first identified by reading the data source multiple times. Secondly, the metaphors were coded and categorized according to their function. Third, the coded data were analyzed for patterns and themes. The researchers followed a systematic and transparent approach in content analysis to ensure validity and reliability of the data. The research questions were used to develop the coding categories, which were continually revised and refined as the analysis proceeded. Moreover, the data were coded by two researchers independently. They then discussed any discrepancies to guarantee consistency and reliability.

Results

The Daily “Dawn”

In the article, “Ukraine War: Threats and Opportunities for Pakistan” (Jilani & Abbas, 2022), the authors take a holistic view to analyze effects of this war on Pakistan. They use economic metaphors to explain the changing dynamics of the world order which present challenges and opportunities for Pakistan. They see the war between Russia and Ukraine as a key event that has changed the global balance of power. The article uses metaphors like the “balance of payment crisis” to describe the precarious financial situation of Pakistan’s economy. This metaphor is to suggest that Pakistan’s economy is on the brink, and a small weight could make it tip in either direction, just like a balance. It shows that there is a need for a balance between imports and exports to avoid economic instability. The metaphorical use of ‘balance’ as a physical object then projects the concept of economic fragility and emphasizes the importance of economic management.

In another metaphor, 'new multipolar world order', the article emphasizes the new global balance of power, where many countries have power and influence. In this sense, this metaphor signifies that the world is moving away from a unipolar or bipolar system. The Russia-Ukraine war is viewed as a catalyst that is speeding up this transition to the new world order. This can pose both opportunities and threats for Pakistan. This metaphor aids in explaining why this conflict is important and why Pakistan needs to reposition itself politically. The source domain is the physical world with many poles or centers of gravity. The world of international relations and power is the target domain that is where many countries (or regions) have influence. As the poles of a magnet influence the surroundings, it is the same with the different centers of power that influence the global political and economic landscapes.

A different article "Food Insecurity and War" (Shahid, 2022) published in the daily Dawn during the Ukraine war uses vivid dramatic metaphorical imagery to portray the complex interplay of war, climate change, pandemics, and food insecurity. One striking metaphor used is "Wars make weapons even out of food," which highlights how conflict can transform something as fundamental as food into a tool of oppression and violence. The article also discusses the indirect impact of the war in Ukraine on global food availability. Pakistan, which has become heavily reliant on Ukrainian wheat imports, is especially vulnerable. The phrase "wars make weapons even out of food" is a conceptual metaphor that highlights the impact of war on basic necessities, such as food. The metaphorical source domain is "weapon" and the target domain is "food". The image schema behind the metaphor is the transformation of one thing into another. This conveys a sense of urgency and powerlessness in the face of conflict, where even the most fundamental human needs can be turned against us. The article also uses 'squeeze' as a metaphor to describe the impact of Ukraine war on the global food supply chain. This metaphor can explain how war influences food insecurity in an indirect way and why the global cooperation and coordination are necessary to address these challenges. The metaphorical 'squeeze' in this context is an example of the image schema of physical compression or pressure being applied to an object.

In the article, "War Threatens Ukraine's Place in Global Food Security" (AFP. 2022), the article uses metaphors to compare the damage caused to Ukraine's agriculture sector from Russia's invasion to a physical injury that needs to be repaired in order to restore functionality. The damage assessment and restoration of lost assets metaphors imply that the agriculture sector repair is analogous to the repair of an injured body. The metaphor of restoring lost assets is used in the text to emphasize the importance of repairing the agriculture sector in Ukraine to regain its previous role in global food security. The damage Russia's invasion has caused to Ukraine's agriculture sector is framed with metaphors of survival and rehabilitation. The metaphors work by mapping the source domain of the physical injury and recovery to the target domain of agricultural damage and repair. The metaphor of "restoration of lost assets" compares the repair of Ukraine's agriculture sector to the rehabilitation of an injured body. This metaphor suggests that the sector has lost its former functionality and productivity and must be rehabilitated to the level it had before the injury, as a person after an injury has to be rehabilitated to recover his former physical capabilities.

The News International

In "How the war in Ukraine can impact us", Mansoor Ahmad (2022) uses the metaphor of damage assessment to emphasize that the damage should be assessed in terms of its extent and impact on Ukraine's agriculture sector. This means that the sector has been subjected to great damage and needs urgent attention as much as a person with a serious injury needs medical attention. The metaphor of "restoration of lost assets" compares the repair of Ukraine's agriculture sector to the rehabilitation of an injured body. This metaphor suggests that the sector has lost its former functionality and productivity and must be rehabilitated to the level it had before the injury. The metaphor emphasizes the need to return agriculture to its previous level of productivity to help Ukraine maintain its role in the global food security.

Further, the text compares the fall in production and exports to a spreading fire, using the metaphor of

stoked. The image of "spreading fire" shows the insidiousness of the situation and how urgent the problem is. This metaphor has the source domain of a wildfire, in which a small flame can result in large damage. The effect of the fall in food production and exports is the target domain, as a decrease in the food output of one country can quickly spread to other countries and lead to a global food crisis. In the text, the metaphor of "stoked" is also used to describe the fall in food production and exports which has raised concerns of a global food crisis. This metaphor is the source domain of the concept of stoking a fire, which is adding fuel to a fire in order to make it burn more intensely. The third metaphor uses the word "survival" in the sentence "the world's collective focus is being channeled into the 'survival' of today's crises". This metaphor depicts the world as a living organism that is struggling to survive amidst multiple threats. It uses the conceptual metaphor of crisis as a threat with the source domain of a living organism and the target domain of today's crises.

In "A World in Recession" (Suleri, 2023), metaphors describe the global economic situation, specifically focusing on Pakistan's economy. The phrases "troubled waters," "economic turmoil," and "tumbling global economies" use water-related metaphors to represent the current state of the world economy. The metaphor of "troubled waters" refers to a situation where there are problems and challenges in the economy, much like the turbulent waters of a river or ocean. "Economic turmoil" implies a state of great disturbance and confusion in the economy. This indicates that the world economy is currently facing a difficult period, and it is not certain when the situation will improve. Finally, "tumbling global economies" connotes that the world economy is falling or collapsing.

"A Failed Model" (Bhatti, 2023) uses multiple metaphors to describe the economic crisis faced by Pakistan. Using different source domains, the metaphors help to convey the severity of the situation. The first one constructs the economic crisis in terms of a sea in which the majority of Pakistanis are in peril of drowning. The second constructs the economic crisis in terms of a slow-motion train wreck as the pace of soaring inflation has outpaced the negligible increases in wages. The third constructs the economic crisis as a disease that is infectious and spreading in the world economy. The metaphor highlights the contagiousness of the economic crisis and its global impact. The fourth metaphor constructs the economic crisis as a sinking ship in which the current economic conditions are likely to deteriorate further. The metaphor captures the sense of doom and gloom associated with the economic crisis. The fifth metaphor constructs capitalism as a failing system that is depriving the poor and the working class of essential services, needs, and utilities. It underlines the failure of the capitalist system in meeting the needs of the majority of people.

The Express Tribune

In "Ukraine, Russia War: Implications for Pakistan" (Mirza, 2022), Ayesha Mirza uses metaphors to frame the Ukraine war as a heat source affecting most countries in the world. It constructs the war as a powerful and destructive force. That it can create commodity shortages and surging prices, which can potentially spill over to other countries, including Pakistan. Another metaphor used is the war as a fire that can spread beyond the boundaries of Ukraine and last longer than expected. It creates a sense of urgency and danger. The text uses metaphors related to the supply and demand of commodities. Commodities like wheat and LNG are used to illustrate the impact of the conflict on Pakistan's economy. The metaphor of Russia and Ukraine being "off the market" constructs them as unavailable sources of agricultural products. That it is creating a shortage that Pakistan may need to cover with expensive imports. Analogously, the metaphor of LNG companies "backing out" of contracts constructs them as unreliable and opportunistic. That it is forcing Pakistan to purchase expensive LNG from alternative sources. The text also uses metaphors related to physical and political boundaries to illustrate how the conflict affects Pakistan's society and politics. For example, the metaphor of Afghan refugees crossing borders constructs them as displaced and vulnerable populations that Pakistan may need to accommodate. Similarly, the metaphor of Pakistan being "caught in a complex situation" constructs its diplomatic relations passing through a difficult period. That it is a delicate balancing act that requires

careful navigation to avoid alienating any side.

Shantanu Mukherjee's (2022) article titled "Ukraine War takes Toll on East Asian Economies" contains several metaphors that contribute to the understanding of the global economic situation. The world is described as "hyper-connected," which suggests that our economies and societies are deeply intertwined. Thus events in one part of the world can have ripple effects across the globe. This can lead to both positive and negative outcomes. The war in Ukraine is described as "upending the fragile economic recovery". This constructs a ship that has been capsized. Connotatively, it suggests that the war has disrupted the progress that was made in terms of economic stability. It also implies that the economic recovery was vulnerable to external shocks. The phrase "inflationary pressures" describes the effect of the war on commodity prices. It constructs a metaphor of inflation as a force that is pressing down on the global economy.

The phrase "dampening business confidence" constructs the metaphor of a flame that can be extinguished or dampened. It suggests uncertainty and risk can have a cooling effect on economic activity. That business confidence is a key driver of economic growth and that it must be protected and nurtured. In this case, the source domain is heat and the target domain is confidence. The image schema is one of a flame being extinguished or dampened. This implies that business confidence is a key driver of economic growth. The phrase "clouded by rising Covid-19 cases" constructs a metaphor of a cloudy sky that obscures the view of the economic landscape. The source domain is the weather. The image schema is one of a cloudy sky that obscures the view of the landscape, suggesting that uncertainty and unpredictability are making it difficult to see the way forward. It implies that the pandemic is a major obstacle to economic recovery. That clear skies are needed for growth and stability of the economic sector. The phrase "prolonged supply chain disruptions" constructs the metaphor of a chain that has been stretched to the breaking point. The source domain is physical objects, and the target domain is the supply chain. The image schema is one of a chain. This metaphor implies that supply chain disruptions are a major risk to economic stability and that resilience and flexibility are needed to mitigate these risks.

"Food Security, War, and Bystanders" (Cheema, 2022) says: "nature has gifted everything to Europe, including fertile lands". This metaphor constructs nature as a giver and Europe as a receiver. It portrays the natural environment as a benefactor of Europe's prosperity. The function is to create an image of Europe as a fortunate continent blessed with natural resources. Another metaphor is "the ring of war", which constructs the concept of war as a physical structure surrounding both Russia and Ukraine. This portrays war as a force that encircles and suffocates nations. That it limits their ability to grow and develop. It conveys the idea that war has a profound impact on the economies of countries, as well as on their people. It is a force that must be stopped to ensure global food security.

The metaphor "sitting on the fence and watching the game" constructs the idea of bystanders who are not innocent but implicated in the act of war. It portrays bystanders as individuals who are not taking action in the face of war. Its function is to highlight the responsibility of all individuals, even those who are not directly involved in the conflict. They are urged to take a stand against war and its effects. The metaphor "war factory" constructs the concept of war as an industry or business that manufactures destruction. This metaphor portrays war as a system that benefits certain individuals and groups. It stresses that war can never be justified and to emphasize the human cost of conflict. Finally, the metaphor "lab test" constructs the concept of war as an experiment, structured by a third party. In this experiment, the participants are not aware of the variables that determine the outcome. This metaphor portrays war as a manipulated process. Here, the warring parties are not in control of their own actions, but rather are manipulated by outside forces.

Conclusion

The above analysis shows that metaphors can serve as a powerful tool for communicating complex

issues in terms of tangible objects and substances. Metaphors are used to simplify and explain the issue of food insecurity to the public. To convey the severity of the issue, media outlets have used emotional and dramatic metaphors, including calling food insecurity “a weapon” or a “train wreck.” As Paglia (2018) points out, such powerful metaphors evoke an emotional response from the public. The use of metaphors is effective in communicating the seriousness of food insecurity. It also has the potential to be dangerous because it frames the problem of food insecurity as an epidemic out of control. Gustafsson et al. (2020) point out that this can lead to a feeling of ontological helplessness for the public. Individuals may perceive that the problem is too great to be solved. It is important that media outlets also report on the solutions to food insecurity. Steps such as government interventions and support for local farmers need to be equally highlighted. Analogous findings are reported in Gulzar et al., (2021b) in regard to a comparative analysis of Covid-19 multimodal messages for public awareness in Pakistan and India. Whereas India predominantly used metaphoric images that conveyed the danger and fear associated with this pandemic, Pakistani messages were more motivational in how to combat the disease and minimize its effects.

The findings in the current article are in line with recent literature in this area that has demonstrated that metaphors serve as powerful tools for framing and shaping public discourse (Flusberg et al., 2018). They can convey complex ideas succinctly and memorably, making them a valuable tool for media outlets. For instance, the metaphor of a 'hunger clock' has been widely used to demonstrate the urgency of the food insecurity crisis (Cooper et al., 2021). The use of dramatic direct comparisons is also instantiated in the use of language such as “hunger epidemic” to illustrate the breadth of the food insecurity crisis (Allcott et al., 2019). Similarly, "food deserts" describe areas where access to healthy food is extremely limited (Holland, 2018).

The current article demonstrates that metaphors are of different types, such as structural, orientational, and ontological metaphors (Lakoff, 1980). Structural metaphors structure one concept in terms of another. Orientational metaphors organize a whole system of concepts with respect to another whereas ontological metaphors project something concrete onto an abstract entity. This article has shown that metaphors can provide a way for people to make sense of abstract ideas by connecting them to more concrete ones. In this way, metaphors can provide a link between different realms of discourse. It thus allows us to make connections between what we understand and how we can use it to shape our perspectives on the world.

The current article analysis is limited to only three newspapers and selected articles published in them. With the growth of online discourse, there is a wealth of textual evidence available for analysis. Analysis of these sources can further help shed light on the functions and effects of metaphorical language in shaping public opinion and attitudes in times of crisis. To fully understand the impact of metaphors on the public, it is necessary to conduct more empirical studies. These studies can examine how the general public consumes and responds to metaphors introduced into the discourse by those in positions of power including media outlets, politicians, scientists, and opinion makers.

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