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	<p align="center">RESEARCH ARTICLE </p>
	<p align="center"><b>Visual Satire as Public Health Communication: Exploring the Awareness-Raising Function of Caricatures during the COVID-19 Pandemic</b></p>
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<p><b>Keywords</b></p>	<p>Caricature; Visual Satire; Public Health Communication; COVID-19; Semiotics; Awareness; Media Representation; Pandemic Messaging; Humor in Crisis; Health Literacy.</p>
<p><b>Abstract</b></p> <p>This study investigates the communicative and awareness-raising power of caricature images during the global COVID-19 health crisis. While caricature is conventionally regarded as a humorous and satirical art form, it has historically served as a strategic medium for social commentary and collective consciousness-building. In the context of the pandemic, caricature artists became indirect health educators, producing visual messages that blended humor with instruction to address the dangers of viral transmission. Employing a semiological and cultural-interpretive analytical approach, the research examines the symbolic representations, visual metaphors, and semantic codes embedded in selected COVID-19-related caricatures disseminated through newspapers and digital media. The findings demonstrate that caricature images played a pivotal role in demystifying scientific concepts, alerting the public to risks, normalizing preventive behaviors such as mask-wearing and social distancing, and shaping collective emotional responses to uncertainty and fear. Moreover, caricatures contributed to shaping public memory of the pandemic through satirical documentation of political decisions, social practices, misinformation, and public debates. The study concludes that visual satire should be recognized as an influential tool of public communication, capable of transcending linguistic barriers, simplifying complex messages, and promoting health literacy in times of crisis. It highlights the need for interdisciplinary integration between public health communication and visual cultural production to prepare societies for future health emergencies.</p>	
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## Introduction:

The caricature image is known as a tool that provokes laughter and spreads joy and amusement among audiences. It possesses a humorous and satirical character that has made it a center of attraction and interest for the public across all categories and age groups. This is because it deals with all aspects of life social, political, economic, and even sports thus becoming an important means of expressing significant issues and events, as well as a valuable source of education and idea transmission. Given the strong symbolic meanings it conveys, the image has become equivalent to words indeed, "it is said that" a picture is worth a thousand words. Consequently, we are witnessing the remarkable development of the image and its ability to reach every corner of the world. While words may fail to convey meaning to all people due to language differences, the image transcends these barriers as it speaks directly to the eye.

Beyond being a medium for expressing issues and events, the caricature image also serves as an instrument of awareness, providing information and knowledge to the public especially during crises faced by societies. A prime example is the recent health crisis caused by the deadly coronavirus pandemic. During this period, caricature artists joined efforts to confront the pandemic through their drawings, which vividly reflected the crisis. Many artists prioritized raising public awareness about the risks of the virus. Numerous caricatures encouraged the use of medical masks to prevent infection, stressed the importance of caution to avoid exposure, and highlighted the necessity of social distancing. All these messages were conveyed through their artistic creativity, with drawings rich in meaning and symbolism.

The exceptional health circumstances were a sufficient reason for caricature artists to face the pandemic with their usual sarcasm, using the creativity of their brushes to combine humor with the surrounding social, political, and economic conditions. Traditionally, caricature artists have been known for their satirical criticism of politics and politicians, mixing seriousness with irony. However, with the spread of COVID-19, their focus shifted toward raising public awareness of the dangers of the virus.

Accordingly, this study aims to shed light on the awareness-raising role played by this satirical art specifically caricature images in educating the public about the dangers of the pandemic. Based on this, the central research question is formulated as follows:

What is the awareness role played by caricature images during the COVID-19 crisis?

#### **Research Questions:**

- How did caricature artists depict the health conditions caused by the COVID-19 pandemic?
- What are the main themes addressed by caricature artists during the COVID-19 crisis?

#### **Research Objectives:**

- To identify the role played by caricature images in raising public awareness during the COVID-19 pandemic.
- To reveal the way caricature artists depicted the health conditions resulting from the COVID-19 pandemic.

#### **Significance of the Study:**

This study holds great importance as it sheds light on the awareness-raising role of caricature images during the COVID-19 crisis. Its significance lies in addressing a vital and sensitive topic the health crisis experienced by societies in recent years.

#### **Research Methodology and Tools:**

This study adopts the semiological analytical method, which aims to deconstruct symbols and extract the underlying meanings behind the lines and shapes contained within caricature images. "Julia Kristeva" defines semiology as "a set of techniques and steps used to investigate the ways in which the circle of meaning is completed within a given system. It is a scientific approach that reveals, analyzes, and critiques meaning within a system, as well as the components and rules that shape this meaning" (Kristeva, 1996, p.19).

The semiological method, described by "Roland Barthes" as "a form of precise inquiry into the deep levels of both iconic and linguistic messages," requires the researcher to maintain neutrality toward these messages, while at the same time striving for comprehensiveness by addressing other dimensions psychological, social, and cultural that may, in one way or another, support the analysis (Barthes, 1964, p.133).

Additionally, the study draws upon "Martine Joly's" approach, which seeks to interpret and deconstruct the symbols of images in a highly detailed manner.

#### **Study Population and Sample:**

The population of this study consists of caricature images published on the social media platform Twitter, which were widely shared and retweeted by users. The study focuses on analyzing the most frequently circulated caricature images related to the COVID-19 pandemic on Twitter.

As for the study sample, a purposive sampling method was adopted, in which the researcher deliberately selects the elements of the sample “based on certain characteristics or features that serve the objectives of the research” (Abdul Hamid, 2000, p.141).

### Conceptual Definitions:

#### Role:

According to "Ahmed Zaki Baddawi" in the Dictionary of Social Science Terms, the term “role” is defined as “the expected behavior of an individual within a group and the dynamic aspect of the group’s structure. While status refers to the individual’s position within the group, role refers to the pattern of behavior required by that position. An individual’s behavior is determined in light of his or her own expectations as well as those of others. These expectations are influenced by the understanding of both the individual and others regarding the rights and duties associated with their social position. The boundaries of a role include those actions accepted by the group according to the prevailing cultural standards of behavior” (Baddawi, 1993, p.395).

#### Awareness:

According to Muʿjam Maqāyīs al-Luġha (The Dictionary of Linguistic Measures), "awareness" is derived from the word "wa'y", meaning understanding, clarification, and guidance. It originates from awareness, which refers to retention, comprehension, perception, and action. The root meaning of wa'y implies “to gather or contain something.” Thus, the concept of awareness can be defined as the process of providing individuals and communities with information and guidance with the aim of improving their behaviors for the better.

#### Caricature Image:

A caricature image is one that carries within it deep meanings and connotations expressed through its lines, shapes, and colors. "Shanhoud (2003, p.13)" defines caricature as “an expressive art form that is easy to understand and appreciate. It implies departing from geometric harmony and regularity of form, disregarding natural proportions, and employing exaggeration and distortion of shapes.”

#### Health Crises:

Health crises are sudden emergency events that pose a serious threat to the health of individuals or the community. These crises may result from the outbreak of certain diseases, such as epidemics, or from natural or human-made disasters that lead to a sudden deterioration in the health status of the population (Definition of Health Crises and Their Types, p.9).

#### COVID-19 Pandemic:

COVID-19 is a disease caused by a new strain of the coronavirus. The English name COVID-19 is derived as follows: “Co” from Corona, “Vi” from Virus, and “D” from Disease. The disease was previously called 2019 Novel Coronavirus and is linked to the same family of viruses that includes those responsible for Severe Acute Respiratory Syndrome (SARS) and some types of the common cold (Lisa, D.S., p.67).

#### Twitter Platform:

Twitter emerged in 2006 as a research project developed by the American company Obvious, and it was officially launched to users in the same year (New Media and Social Networks, p.75). The name Twitter derives from the term “tweet”, meaning “chirping”, and it adopted the bird as its symbol. It is a microblogging service that allows users (“tweeters”) to send short text messages not exceeding 140 characters per message. These messages can be considered as concise summaries that capture extensive details (Al-Arishi, Salma bint Abdulrahman, & Al-Dosari, Mohammed, 2015, p.43).

#### The Role of Caricature Images in Promoting Health Awareness During the COVID-19 Crisis:

The importance of caricature images is not limited to being a means of expressing and communicating issues and events to the public in a summarized form that conveys details words often fail to capture. This unique ability has earned caricature images a significant level of importance and popularity among audiences. They have maintained a

strong presence even during times of crisis whether economic, health-related, or otherwise becoming a crucial tool for awareness.

This was clearly observed during the global health crisis of the past two years, namely the COVID-19 pandemic. Caricature images played a prominent role in raising people's awareness and guiding them on how to behave in such circumstances. Caricature artists contributed significantly to enhancing public health awareness aimed at prevention and avoiding infection with COVID-19. Their expressive drawings vividly portrayed the dangers of the pandemic and its devastating effects on the entire world young and old alike particularly highlighting the suffering and difficult conditions faced by doctors, who were described as the "white army" in recognition of their sacrifices and endurance during this challenging period.

### **The Diversity of Topics Addressed by Caricature Artists During the COVID-19 Health Crisis:**

Caricature is considered one of the most powerful art forms that constantly interacts with the issues of societies and their daily lives, particularly in times of crisis. Through their artistic brush, caricature artists express human fears in a manner that blends seriousness with satire. During the COVID-19 pandemic, most caricature drawings revolved around the crisis itself, which came to dominate other topics mainly political and social that artists used to address. The pandemic became the central concern of the entire world, and artists sought through their drawings to raise societal awareness about the dangers of the virus. Among the most prominent themes treated in these caricatures are:

#### **First: Promoting Social Distancing:**

This theme was one of the most frequent in caricature drawings. The concept of social distancing emphasizes the avoidance of gatherings and close physical contact between individuals measures that doctors considered among the most effective ways to slow the spread of the virus and thus protect people from infection.

#### **Second: Correcting Rumors and Misinformation About the Pandemic:**

The artists' objectives were not limited to raising awareness about the risks of COVID-19; many also sought to counteract false news and rumors spread by unreliable online sources. For instance, some caricatures aimed to correct misinformation regarding the safety and importance of vaccination against the virus.

#### **Third: Supporting Medical Professionals:**

Caricature artists used their drawings to express the difficult conditions faced by doctors during the pandemic. Many works depicted healthcare workers enduring immense hardships as they battled COVID-19. The great efforts made by doctors, nurses, and other health professionals around the world were recognized and honored through these drawings. In several caricatures, doctors were referred to as the "white army" a tribute to their dedication, fatigue, and perseverance.

Moreover, these images called for society's support of healthcare workers by adhering to health guidelines and recommendations to help reduce infection rates. Some caricatures also illustrated the doctors' personal experiences with their patients and the enormous risks they took to save lives, often working long hours without rest. Other drawings focused on the psychological toll of the pandemic on doctors, who were forced to stay away from their families for weeks or even months. Artists highlighted the importance of providing psychological support, which they regarded as essential under such circumstances.

#### **Fourth: Providing Preventive Health Guidance**

Caricature artists also focused on promoting compliance with health measures such as home quarantine and other preventive practices. Masks were a recurring symbol in these artworks, along with various health recommendations, including frequent handwashing, disinfecting purchased items, and avoiding handshakes all depicted humorously yet effectively to encourage public adherence to safety measures.

#### **Semiological analysis:**

##### **The first image:**



### Description:

To begin, it is essential to present a technical overview of the caricature image:

- Title of the image: Those Who Refuse Social Isolation to Confront COVID-19!
- Caricature artist: The Jordanian artist Imad Hajjaj.
- Source: Twitter.

In the image under analysis, we observe a man sitting on a couch, tied up with medical masks all over his body. One mask is fastened tightly around his mouth and nose and attached to the couch. Additional masks are used to bind him from his chest down to his legs. Another mask is placed on the left side of the couch, and one more mask appears tied to the base of the seat near the bottom of the staircase. We can also see that the man's hands are tightly bound with masks, restricting his movement.

The man shows clear signs of anger on his face. He is wearing an orange shirt, gray trousers, and black shoes. On his left side, there is a staircase with wooden railings, while on his right side, there is a closed wooden door. On the wall behind him hangs a sign that reads: "Stay home whether you like it or not." At the top of the image, the caption reads: "Those Who Refuse Social Isolation to Confront COVID-19."

### ❖ The Denotative Level:

#### 🚩 The Formative (Visual) Message:

1. Medium: This caricature image was published on the social media platform Twitter.
2. Frame: The image has no defined frame, giving it an open composition that emphasizes the central subject.
3. Framing (Focus): The artist focuses primarily on the man depicted in the image, who occupies a large portion of the visual space, drawing immediate attention to his situation.
4. Angle of View: The angle of the scene is lateral (side view), as indicated by the visible position of the couch and the man's sitting posture. This angle allows the viewer to observe both the man's body language and the surrounding environment.
5. Composition and Layout:

The forms within the image are clear and simple, arranged in a straightforward and familiar composition that the eye perceives immediately before focusing on the linguistic message. The interpretation of this image is based on the hierarchical importance of its visual elements and components, which can be analyzed as follows:

1. The man sitting on the couch, bound with medical masks.
2. The sign displayed on the wall.

3. The door.

4. The linguistic message at the top of the image.

#### Lines and Shapes:

- Curved and straight lines represent the movement and posture of the man sitting on the couch.
- Curved and balanced lines form the structure of the couch.
- Rectangular shapes represent the medical masks and the rectangular sign displayed on the wall.
- Straight and parallel lines make up the door and the wooden panel.
- A horizontal shape symbolizes the floor.

#### Colors and Lighting:

The image features a mixture of diverse colors with varying shades, contributing to its expressive depth and visual balance.

- The green color characterizes the couch on which the man is seated.
- The man's clothing includes an orange shirt, gray trousers, and black shoes.
- The medical masks visible in the image are blue with white edges, and the floor of the room also appears in a blue tone.
- The brown color dominates both the door and the staircase, as well as the sign on the wall, which also contains yellow elements within it.
- The gray color is used for the door handle, attached to the wooden panel.
- The black color is used for the text written both at the top of the image and inside the wall sign.
- The wall itself appears in a bright yellow hue, adding a sense of contrast and visual emphasis to the scene.

#### The Iconic message:

Iconic functions	The implication at the second level	The meanings at the first level
The Characters	The Man Sitting on the Couch	The Citizen Refusing Social Isolation
Objects	<ul style="list-style-type: none"> <li>- Door.</li> <li>- Picture.</li> <li>- Frame.</li> <li>- Wooden.</li> <li>- Columns.</li> <li>- Couch.</li> <li>- Door lock.</li> <li>- Face.</li> <li>- Mask.</li> </ul>	<ul style="list-style-type: none"> <li>- Safety and security.</li> <li>- Attraction of attention and alertness.</li> <li>- Firmness or adherence.               <ul style="list-style-type: none"> <li>- Comfort.</li> </ul> </li> <li>- Closure, control, and containment of the situation.</li> <li>- Prevention.</li> </ul>
The Place	The House	Tranquility, safety, and stability

#### The Linguistic Message:

The linguistic message appears in the following phrases:

**The first phrase, "Those Who Refuse Social Isolation to Confront COVID-19!",** serves as the title written at the top of the image, indicating the individuals' rejection of home quarantine during the spread of the pandemic.



The second phrase, “Stay home whether you like it or not,” appears as a command, instructing the individual to remain at home regardless of their willingness or refusal.

#### ❖ The Connotative Level:

This caricature was published during the spread of the COVID-19 pandemic and the implementation of social isolation measures in many countries due to the alarming outbreak of the virus. The image expresses people’s rejection of social isolation, symbolized by the man being tied to the couch to prevent him from leaving the house precisely the idea the artist sought to convey.

Social isolation was among the most important measures adopted by various nations to curb the escalation of this health crisis. It played a major role in confronting the deadly virus that claimed millions of lives worldwide.

#### Connotation of the Characters:

The caricature artist deliberately depicted a man sitting on a couch, tied with medical masks across his body, as a symbol of the necessity to comply with social isolation and remain at home in order to avoid infection with this dangerous virus.

#### Connotation of Shapes and Lines:

The Jordanian caricature artist Imad Hajjaj used straight and curved lines to represent the character’s body and clothing. The straight lines suggest stability and calmness, while the curved lines indicate disturbance and instability. They also express the facial features and emotional expressions of the character. Additionally, the circular shape seen at the beginning of the staircase symbolizes continuity and repetition.

The artist also employed geometric shapes to depict household elements, such as the couch on which the man is sitting, the wooden pillars of the staircase, and the picture frame on the wall.

#### The Second Image:



#### Connotation of the Linguistic Message:

The linguistic messages in this caricature appear in two main expressions:

The first phrase, “Those Who Refuse Social Isolation to Confront COVID-19!”, conveys the idea of the citizen’s refusal to comply with social isolation measures a reality that was evident as many people underestimated the seriousness of the pandemic. With the rapid spread of COVID-19 and the harm it caused to numerous individuals, many countries implemented strict public health measures to prevent further transmission, including mandatory social isolation and physical distancing among individuals.

The second phrase, “Stay home whether you like it or not,” serves as a directive statement, reflecting the government’s authority in enforcing such preventive measures, compelling citizens to remain at home regardless of their willingness.

#### Description:

- **Title of the image:** The image is untitled.
- **Caricature artist:** The Iranian artist Alireza Pakdel.
- **Source:** Twitter.

In this image, painted in soft shades of blue with varying tones, we see a nurse sitting in an intensive care unit at a hospital. She appears exhausted, leaning against a wall on which there is a drawing of her family her husband and children symbolizing emotional longing and sacrifice.

Near the nurse, there are drawing tools, suggesting that she drew the image of her family on the wall herself. In the opposite corner of the room, a hospital bed can be seen carrying a patient, connected to a ventilator and a heart rate monitor.

The room also contains a closed window, through which the darkness of the night and shining stars are visible, adding a sense of solitude and melancholy to the overall atmosphere.

#### ❖ The Denotative Level:

#### 🚦 The Formative (Visual) Message:

1. Medium: This caricature image was published on Twitter and circulated widely through user tweets. It was among the most shared caricature images at the time.

2. Frame: The image is enclosed within a white frame that borders it on all four sides.

3. Framing (Focus): The focus in this caricature is on the nurse leaning against the wall, slightly inclined toward the drawing on the wall representing her family.

4. Angle of View: The angle of the scene is lateral (side view), which is evident from the nurse’s sitting posture and the position of the patient lying on the hospital bed.

5. Composition and Layout: The image is composed of clear and simple shapes arranged in a straightforward way that can be understood at first glance. It consists of the following key visual elements:

1. The nurse sitting on the chair.
2. The drawing on the wall representing the nurse’s family.
3. The patient lying on the hospital bed in the intensive care unit.
4. The window.

#### 6. Lines and Shapes:

- Curved and straight lines express the bending motion of the nurse’s body.
- Curved and straight lines also form the drawing on the wall that represents her family.
- A rectangular shape represents the window, with lines depicting the bars or panels within it.
- Parallel and straight lines form the respiratory monitor and medical devices.
- A horizontal shape symbolizes the floor.
- Curved and straight lines construct the patient and the hospital bed.
- Curved lines depict the patient’s blanket.
- A circular shape represents the ventilator used by the patient.

#### 7. Colors and Lighting:



The image features closely related color tones, with blue in various shades dominating most of the composition.

#### **The Iconic message:**

The Iconic Functions	The Denotations at the First Level	The Connotations at the Second Level
The Characters	The Woman The Man 1 (behind the woman) The Two Children The Man 2	The Nurse The Nurse's Husband The Nurse's Children The Patient
The Place	The Intensive Care Room	The Deterioration of the Patient's Health Condition

#### **The Linguistic Message:**

The image contains no linguistic message, as the caricature artist deliberately avoided using words or dialogues between the characters. Instead, the artist relied solely on visual expression through the drawings and the symbolic composition of the scene.

#### **The Connotative Level:**

This caricature expresses the suffering and sacrifices of the “white army” the doctors and nurses during the COVID-19 pandemic. It depicts the pain, deprivation, and emotional distance they endured from their families and children while fulfilling their duties. The artist sought to convey this emotional and humanitarian reality to the viewer through visual elements alone.

#### **Conclusion:**

There is no denying that caricature art plays a vital and fundamental role in portraying crises and real-life situations especially health-related ones. It serves as a powerful and influential medium that affects individuals and societies alike.

This caricature, in particular, focuses on illustrating the difficult conditions faced by doctors and nurses during the pandemic and the depth of their suffering, while also reinforcing the importance of quarantine and preventive measures, which artists around the world sought to emphasize through their drawings.

The immense efforts made by doctors, nurses, and all healthcare workers around the globe represent an extraordinary act of sacrifice, firmly establishing in people's minds the strength, resilience, and honorable status of the white army within society.

#### **Ethical Considerations**

This research adheres to standard ethical principles of academic and scientific inquiry. All caricature materials analyzed were publicly accessible and used exclusively for scholarly and non-commercial purposes. The study ensures that no identifiable personal data, defamation, or harmful representation of individuals or specific groups is included in the analysis. Interpretations of imagery are carried out with respect for cultural sensitivity, intellectual property rights, and contextual objectivity.

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### Conflict of Interest

The author declares that there is no conflict of interest regarding the publication of this research. The analysis and interpretations are entirely based on academic inquiry and are not influenced by any personal, institutional, or financial interests.

### References

1. Abdel-Hamid, M. (2000). *Scientific research in media studies* (1st ed.). Cairo, Egypt: Alam Al-Kutub.
2. Al-Areishi, J. H., Abdulrahman, S., & Al-Dosari, M. (2015). *Social networks and values: An analytical perspective* (1st ed.). Amman, Jordan: Al-Manhajiyah Publishing and Distribution.
3. Aliev, F. H. (2022). Human capital as a philosophical problem. *Bank and Policy*, 2(1), 49–53.
4. Badawi, A. Z. (1993). *Dictionary of social science terms*. Beirut: Librairie du Liban.
5. Barthes, R. (1964). *Éléments de la sociologie*. *Revue Communication*.
6. Benidir, L. (n.d.). *Main means and activities for the prevention and control of COVID-19 in schools*. New York: UNICEF Secretariat.
7. Bunyatova, S. (2022). Truth and its theoretical and philosophical models. *Bank and Policy*, 2(1), 87–93.
8. Definition of Health Crises and Their Types. (2025, June 9). Retrieved November 5, 2025, from Mawdoo3.com.
9. Hien, N. T. T. (2022). Digital economic development in Ho Chi Minh City in the current period. *Bank and Policy*, 2(1). [<https://bankandpolicy.org/open-access-archive/10-bank-and-policy-vol2-issue-1-2022.html>](<https://bankandpolicy.org/open-access-archive/10-bank-and-policy-vol2-issue-1-2022.html>)
10. Kristeva, J. (1996). *Recherche pour une sémanalyse*. Paris.
11. Lin, J. W., & Sharizan, A. R. (2025). Study on the impact of COVID-19 on financial markets & institutions: A literature review on experience in Malaysia. *Science, Education and Innovations in the Context of Modern Problems*, 8(10), 831–846. [<https://doi.org/10.56352/sei/8.8.74>](<https://doi.org/10.56352/sei/8.8.74>)
12. Nazarov, B. (2022). Power in the world on the basis of “similar scenarios” changes (Eastern Europe, CIS, Middle East and Africa). *Bank and Policy*, 2(1), 22–28. [<https://bankandpolicy.org/open-access-archive/10-bank-and-policy-vol2-issue-1-2022.html>](<https://bankandpolicy.org/open-access-archive/10-bank-and-policy-vol2-issue-1-2022.html>)
13. Shamhoud, T. K. (2003). *The art of caricature: Glimpses of its beginnings and its presence in the Arab world and worldwide* (1st ed.). Amman, Jordan: Dar Azmina.
14. Uoc, T. M. (2025). Basic issues of Vietnam’s market economy and digital economy in the context of post-COVID-19. *Science, Education and Innovations in the Context of Modern Problems*, 8(6), 193–200. [<https://doi.org/10.56352/sei/8.6.21>](<https://doi.org/10.56352/sei/8.6.21>)
15. Yadav, U. S. (2022). Performance of women in MSMEs during the COVID-19 pandemic in India: Strategies for developing the handicraft sector with artisan as entrepreneur. *Bank and Policy*, 2(1). [<https://bankandpolicy.org/open-access-archive/10-bank-and-policy-vol2-issue-1-2022.html>](<https://bankandpolicy.org/open-access-archive/10-bank-and-policy-vol2-issue-1-2022.html>)