A Cognitive Analysis of Selected American and Egyptian Coronavirus Cartoons

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Abstract

After the majority of the Egyptian and American citizens had received the vaccinations against coronavirus pandemic, most public and private institutions, like schools, factories, etc., in both societies began to reopen in favor of the economy. Although the vaccinated and unvaccinated people were in a bad need of following the additional protective behaviors required to control the pandemic, many people began to live naturally without following the precautionary measures. Therefore, the researcher selects cartoons from the American and Egyptian websites to cover such a period of coping with the pandemic. The researcher aims to investigate the message encoded by the cartoonists, how it is decoded by the cartoon reader, and the strategies involved in this encoding-decoding process in the data under investigation. Data for the study comprise six purposively selected online cartoons (3 Egyptian cartoons and 3 American ones). The researcher uses insights from relevance theory to analyze the explicature, implicated premises and implicated conclusions of the data under investigation. The present study concludes that relevance theory proves to be an effective tool in analyzing the multimodal texts as represented in COVID-19 cartoons. Another conclusion is that the cognitive context (i.e. background knowledge) plays a vital role in the process of inferring the implicature of the Coronavirus cartoons.

Key words: Egyptian cartoons, American cartoons, relevance theory, explicature, implicated premises, and implicated conclusions

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1. Introduction

After the majority of the Egyptian and American citizens had received the vaccinations against coronavirus pandemic, most public and private institutions, like schools, factories, etc., in both societies began to reopen in favor of the economy. Although the vaccinated and unvaccinated people were in a bad need of following the additional protective behaviors required to control the pandemic, many people began to live naturally without following the precautionary measures. Therefore, the researcher selects cartoons from the American and Egyptian websites to cover such a period of coping with the pandemic. The present study analyzes on the cognitive level the verbal and non-verbal modes employed in the American and Egyptian cartoons reflecting the first period of coping with the virus. The researcher adopts Sperber and Wilson's (1986) relevance theory following the distinction between explicature, implicated premises and implicated conclusions. In addition, Forceville (1999, p.174) argues that relevance theory "encourages scholars to compare texts from different media because their intentions and effects can be subsumed under the same general heading of manifesting the aim to convey certain assumptions (or ideas, moods, feelings)". Also, Forceville (2005) argues that cartoons involve both verbal and non-verbal cues, and visual cues are not always explicit, so the cartoons readers may provide different inferences for the cartoons.

1.1 Objectives of the study

The present study aims to analyze the explicature (including visual metaphor) and implicated premises that cartoons involve in order to reach the implicated conclusions of the data under investigation, using insights from Sperber and Wilson's relevance theory. That's to say, the present study aims to investigate the message encoded by the cartoonist, how it is decoded by the cartoon reader, and the strategies involved in this encoding-decoding process in the data under investigation.

1.2 Research Questions

1. What are the strategies involved in the encoding-decoding process in the selected American and Egyptian Coronavirus cartoons?

2. What are the cognitive effects that the cartoonists intend the viewers to process in the selected cartoons?

2. Literature Review

Many scholars have tackled different multimodal studies (e.g. ads, cartoons, etc.) employing Sperber and Wilson's (1995) relevance theory. This section reviews how these multimodal texts are studied using insights of relevance theory to contextualize the present study and show the research gap.

Maria Jesus Sanz (2013) analyzes visual and verbal stimuli in 20 political advertisements of the Labor Party, using relevance theory, pictorial metaphor, and incongruity theory of humor. The analysis is mainly based on the billboards' explicature, implicated premises, and implicated conclusions. The paper concludes that employing both relevance theory and the two-stage incongruity-resolution theory of humor help understand the humorous nature of the data under investigation. Furthermore, billboards' viewers' background knowledge, i.e. their cognitive context, is an essential element in the decoding process. Also, visual metaphor in the data analyzed includes unexpected comparisons between political figures and unusual characteristics attributed to them.

Another study by Maria del Mar Rivas-Carmona (2014) in which she analyzes nine cartoons dealing with gender equality and women's rights. Her data is collected from different online platforms and newspapers from different countries. The present paper, using insights from Sperber and Wilson's (1986) relevance theory, examines both the strategies used by the cartoonists to encode their messages and the strategies used by the audience to decode such messages. Rivas-Carmona concludes that relevance theory is an effective tool for analyzing her data. Moreover, she finds out that the cartoons in her research depend mainly on non-verbal modes, especially visual metaphors. Finally, the cartoonists make use of the readers' cognitive schemata to leave a positive cognitive effect.

Charles Forceville (2005) examines Peter van Straaten's calendar cartoons; they appear in the form of a tear-off calendar in the year 2001. In his paper, Forceville (2005) aims to detect the effect of the three aspects of context, namely time and place in which the cartoons are accessed, and the conventions of the genre of calendar on both activating the reader's background knowledge and his interpretation and comprehension of these cartoons. He adopts Sperber and Wilson's (1995) relevance theory to the analysis of the data investigated. Forceville's (2005) paper has the following conclusions. First of all, the interpretation of some of van Straaten's calendar cartoons depends on the three contextual factors: time of access, place of access, and conventions of the genre, i.e. calendar cartoons. These three aspects are defined in terms of Wilson and Sperber's (2004) explicature, implicated premises, and implicated conclusions. Secondly, relevance theory has proven to be a framework effective in analyzing mass media texts just as it is in face-toface communication. Thirdly, Forceville (2005) holds that "any differences in interpretation among individual viewers will depend on which implicated time, place, and genrebased premises are activated"(p73). Fourthly, Sperber and Wilson's (2004) concept of cognitive effect is pertinent to the calendar cartoons analyzed. To illustrate, some of van Straaten's calendar cartoons either lead to the introduction of new assumptions in the viewer's cognitive environment or the strengthening of relevant assumptions.

Silveira and Ibanos's paper (2014) tests the possibility of applying Sperber and Wilson's (1986) relevance theory to three advertisements aiming to promote ideas, and consisting of verbal and pictorial cues. After analyzing the sample, the researchers stress the importance of the existence of both a context and inferential processes to efficiently interpret the ads. Thus, communication is not achieved by encoding and decoding messages, but by providing contextual clues to build the desired inference about the intentions of the communicator (Silveira & Ibanos's paper, 2014, p.542). Another conclusion is that advertisers are restricted by both the audience's expectations and the maximization of relevance. Both researchers argue that advertising may require more than the balance between cognitive effects and mental effort. Although processing inferences are higher than expected, the audience can achieve optimal relevance in the three ads analyzed because "the mental effort was balanced by plausible contextual effects to be obtained selected according to the consistency criteria with the relevance principle" (Silveira & Ibanos's paper, 2014, p.542).

Maria del Mar Rivas-Carmona (2014a) analyzes women's rights cartoons using Sperber and Wilson's (1986) relevance theory. She aims to investigate the role of relevance theory in the cartoonist's encoding of his/her messages to his/her readers, and the impact of the verbal and non-verbal modes that exist in cartoons on the reader's decoding of these messages. The researcher concludes that relevance theory proves to be an effective tool for the analysis of work-life cartoons. Secondly, the cognitive context (i.e. the viewer's background knowledge) plays a vital role in the process of inferring the cartoon implicature. Unlike men, women, in the data under investigation, are portrayed as trying to make a balance between family duties and work burdens.

Ahmed Abdel-Raheem's (2018) paper tests the applicability of a model merging three theories, Sperber and Wilson's (1986) relevance theory, Hutchinson), Suls's (1972) incongruity-resolution model, and Fauconnier and Turner's

(2002) conceptual blending theory, to the analysis of verbal and visual in 45 humorous cartoons. Data are purposely selected from two Egyptian newspapers, Al-Ahram and Al-Akhbar, to analyze the US reaction and threats to cut its aid after the 30th of June 2013 event when Egyptian President Morsi was toppled. Abdel-Raheem's (2018, p.16). Abdel-Raheem (2018) concludes that humor in political cartoons results from opposition between the pictorial (or verbal) components of cartoons. Another conclusion is that humor emerges from the blending of two different domains. Additionally, multimodal humorous blends may be pivoted on input mental spaces that are perceived as being innocuously and playfully inappropriate or even tabooed (e.g., death in Figure 3; sex and body taboo in Figure 6; or political dissatisfaction in Figure 5). In addition, hyperbole, as Abdel-Raheem (2018) concludes, is an important element in humor creation through "exaggerated facial expressions, physical characteristics and clothes" (p.16).

To conclude, the review of literature concerning multimodal texts and cartoons shows a gap in studying both American and Egyptian cartoons from a cognitive perspective. Through the insights of relevance theory, cartoon viewers can better understand the cognitive strategies involved in the encoding-decoding process.

3. Theoretical Framework

- 3.1 Sperber and Wilson's (1986) Relevance Theory
- I. Relevance Principle and its two assumptions

Theory is considered Relevance an important contribution to both communication and cognition processes. It was developed by Dan Sperber and Deirdre Wilson (1986) co-authored a monograph entitled *Relevance*: who Communication and Cognition. According to Wilson (2016), relevance theory is based on three notions of Grice's (1989) work, yet it differs from Grice's approach to communication in some respects. In contrast to Grice's first notion, relevance theory stresses the importance of the hearer who infers the utterance's intended meaning. As opposed to Grice's framework that stresses the importance of obeying CP's maxims in getting the utterance meaning, Sperber and Wilson coined (1986) the "communicative principle of relevance" according to which the utterance producer provides a piece of information (through the use of verbal or non-verbal modes) to which the utterance receiver pays his attention in order to infer the implicit message or the implicature. In other words, to infer the utterance producer's implicature, the receiver uses his "cognitive context", i.e. cultural, ideological, and personal knowledge) (Rivas-Carmona, 2014, p.83). The Relevance Theory is based on two assumptions/ principles: the cognitive principle of relevance and the communicative principle of relevance.

1. Cognitive Principle of Relevance

First of all, according to the cognitive principle of relevance as Wilson and Sperber (2004) assume, the search for relevance is one of the features that are unique to human beings' cognition, so they search for relevant information during the communication process. For both theorists, an input (an utterance, a facial expression, a cartoon, an image, etc.) is relevant if it is related to an individual's background information (what he knows, expects, hopes, etc.), or his cognitive environment. In relevance-theoretic terms, for Wilson and Sperber (2002), an input is relevant to an individual if it has a positive cognitive effect, i.e. it makes a difference in the addressee's representation of the world. To illustrate, a positive cognitive effect is caused when the addresser can bring about an effect on the addressee's cognitive representation of something. In other words, an input is more or less relevant according to its effect on the cognitive environment of the addressee (Wilson& Sperber, 2004). Moreover, the context of an input plays an important role in the process of achieving a positive cognitive effect. Sperber and Wilson (1986, p.107) define "contextual implication" as an important cognitive effect realized employing both the input and the context together. Popular of positive cognitive effects kinds may include "strengthening, revision, and abandonment of available assumptions" (Wilson & Sperber, 2004, p.251). Sperber and Wilson (1986) contend that we tend to select a particular stimulus, despite the existence of other competing stimuli, because it is "more relevant than any alternative input available to us at that time; the greater the positive cognitive effects achieved by processing an input, the greater its relevance will be" (Wilson & Sperber, 2004, p.252).

The second criterion to determine the relevance of an input is the effort exerted on the part of the addressee to process that input; an input is relevant if it has a positive effect and does not compel the addressee to exert much effort in processing such an input (i.e. the effort of inference, the effort of perception, the effort of memory, etc). "The greater the processing effort expended, the lower the relevance of the input to the individual at that time" (Wilson & Sperber 2004, p.609).

2. Communicative Principle of Relevance

Secondly, the communicative principle of relevance is based on the notion that the addressee searches for the most relevant stimuli to his cognitive environment, and the addresser exploits his knowledge of the addressee's cognitive environment and produces an input that is worthy of attracting the addressee's attention (Sperber & Wilson, 1986). Also, Wilson and Sperber (2004) contend that "inferential communication is not just a matter of intending to affect the thoughts of an audience; it is a matter of getting them to recognize that one has this intention" (p.255). To clarify, the addresser draws the addressee's attention as a means to reveal his real intention through using linguistic and non-linguistic tools, e.g. gestures, words, or any bodily action. As a result, the addressee is supposed to interpret the verbal and nonverbal stimuli of the input besides using his cognitive background to successfully infer the addressee's message. Because the addresser clearly signals his intention to the addressee, both theorists call such a process an "ostensive inferential process" that "involves an extra layer of intention" "(Wilson & Sperber, 2004, p.255). To illustrate, ostensiveinferential communication has to types of intention:

a. The informative intention: The intention to inform an audience of something.

b. The communicative intention: The intention to inform the audience of one's informative intention."(Wilson& Sperber, 2004, p.255)

An audience has to recognize the speaker's informative intention to achieve understanding, and through the speaker's use of ostensive stimuli, the audience can recognize the speaker's informative intention (Sperber& Wilson, 1986). To illustrate, ostensive stimuli are used on the part of the speaker to grasp the audience's attention to get at the communicative meaning of the utterance.

Sperber and Wilson (1995, pp.260-278) hold that optimal relevance is achieved if an ostensive stimulus is both "worth the audience processing effort" and " compatible with the communicator's abilities and preferences". As for the first case of optimal relevance, "a stimulus is worth processing only if it is more relevant than any alternative input available at the time" (Wilson & Sperber, 2004, p.257). An audience can effectively draw strong conclusions from the existence of ostensive stimulus. Moreover, for a communicator to be understood, he is to provide a stimulus as easily as possible to achieve both a cognitive effect on the audience and the intended goal. The second case of optimal relevance asserts that an ostensive stimulus should be compatible with the addressee's abilities and preferences. To illustrate, there are myriad ways that can achieve both the cognitive effect and a communicator's intended goal, yet the communicator uses an ostensive stimulus that best suits his interests and abilities. In Sperber and Wilson's (1986) approach, silence occurs when an audience is either unable or unwilling to provide relevant stimulus. Therefore, silence is considered as an ostensive stimulus that leads to implicature. Contrary to the relevancetheoretic approach, Grice's model, which stresses the importance of obeying the Co-operative Principle and its maxims (Quality, Quantity, Relevance, and Manner), considers silence as an apparent violation of the quantity maxim and claims that silence cannot lead to any implicature.

Although Sperber and Wilson's (1986) relevancetheoretic approach is a cognitive psychological theory, it has also a practical implication for pragmatics. For instance, to comprehend verbal communication, an audience starts with getting the linguistic meaning of an utterance, then adds the contextual factors (like reference assignment, disambiguation, interprets figures of speech in the utterance, etc.), and finally gets the intended speaker's meaning. Both the Communicative Principle of Relevance and optimal relevance notion propose a practical procedure for applying these sub-tasks.

Relevance-theoretic comprehension procedure

a. Follow a path of least effort in computing cognitive effects:

Test interpretive hypotheses (disambiguation, reference resolutions, implicatures, etc.) in order of accessibility.

b. Stop when your expectations of relevance are satisfied. (Wilson & Sperber, 2004: 260)

To illustrate, an audience exerts the least effort to get the utterance meaning as the speaker (within the limits of his abilities and preferences) is expected to produce an utterance that is as easy as possible for the audience to process, and the utterance easiness makes the audience stops at the first interpretation that satisfies his expectations of relevance. There should be only one interpretation for the audience to make because producing two interpretations will make the audience exert extra effort, and thus optimal relevance will not be achieved; the speaker will not achieve either a cognitive effect on the audience or his intended goal.

II. Relevance and Comprehension

According Sperber and Wilson (1986).to communication does not only involve decoding the addresser's encoded message. Rather, the comprehension process involves both decoding the addressee's linguistic message (both verbal and non-verbal) and the addressee's inferential communication process. The addressee's task in the comprehension process, followed by the hearers/readers when interpreting, i.e. when constructing a hypothesis according to Wilson and Sperber (2002, p.261), is divided into three sub-tasks:

> -Constructing an appropriate hypothesis about explicit content (*explicatures*)

> -Constructing an appropriate hypothesis about the intended contextual assumptions (implicated premises)

-Constructing an appropriate hypothesis about the intended contextual implications (*implicated conclusions*)

First of all, the word "explicature" is derived from explicit, so it refers to the explicit content of the utterance or what is said explicitly. According to Sperber and Wilson (1996, p.182), an explicature consists of both "linguistically encoded and contextually inferred conceptual features". To illustrate, the first stage in an utterance interpretation is the decoding of words and their semantic representation; as a result, a linguistic logical form emerges from the semantic meaning of the linguistic input, leading to a proposition. In order to move from a logical form of an input to a proposition (or to get an utterance explicature), there are processes several involved: enrichment/filling gaps, assigning references, disambiguation, etc.

Secondly, the word implicature, a term coined by Paul Grice, is derived from the verb 'to imply' which means "to fold something into something else" (Mey, 1993, p.45). To illustrate, implicature (the implied meaning of an utterance) is inferred within the context of its occurrence to reach the input's code through the use of context, or "implicated conclusions". Implicatures are defined, in terms of relevance theory as, "implicitly communicated assumptions" (Sperber & Wilson, 1995, p.182). Clark (2013, p217) assumes that implicatures are divided into two kinds: "implicated premises" and "implicated conclusions. Implicated premises, for Sperber and Wilson (1995), are to be supplied by the hearer, who may retrieve them from memory or "construct

them by developing assumption schemas retrieved from memory", in order to get at an interpretation compatible with the relevance principle. On the other hand, implicated conclusions are inferred by both explicature of an utterance and the context of the utterance (Clark, 2013); to illustrate, the addresser produces an utterance with an implicature and expects that the addressee will get such an implicature. This is because the communicator tries to make his utterance as easy as possible to achieve relevance. The process of deriving implicatures consists of two steps; an audience must get the implicated premises before deriving the implicated conclusion (Grundy, 2000, 112). To see the difference, Sperber and Wilson (1995, p.194) provide the following example:

Peter: Would you drive a Mercedes?

car.

Mary: I wouldn't drive ANY expensive car.

Implicated premise: A Mercedes is an expensive

Implicated conclusion: Mary wouldn't drive a Mercedes.

Forceville (2014) argues that inferring implicature in multimodal texts does not necessarily come immediately after inferring explicature because "Relevance Theory has of comprehension is that of "multiple parallel adjustments" of the three inferential strategies: (a) to get the explicit content, (b) to derive implicatures, and (c) to access as much context as necessary to get (a) and (b)" (Abdel-Raheem, 2018, p.5). Sperber and Wilson (1995) claim that implicatures can vary in their degrees; they can be strong when the speaker takes the responsibility for providing a single interpretation (an implicated premise and conclusion) that satisfies his expectations of relevance while in weak implicatures there are several possible interpretations for which the hearer takes the responsibility, and thus there is some kind of ambiguity (Moeschler, 2012).

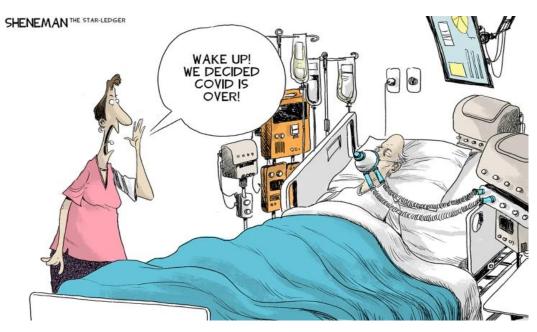
1. Methodology

The study uses a qualitative research design as the researcher merely collects the data, gives20 in-depth description of the data under investigation (analysis on both the multimodal and cognitive levels), and finally draws conclusions. Data for the study comprise six Coronavirus cartoons reflecting the period after the vaccine distribution. Data are mainly selected from the following websites: https://theweek.com/,

https://tribunecontentagency.com/article/,andhttps://www.cagle.com,https://www.almasryalyoum.com,https://www.youm7.com/.

2. Analysis

5.1 Cognitive Analysis of the American Cartoons



Cartoon no.1 (COVID is over, <u>https://theweek.com/political-satire/1009480/covid-is-over</u>)

I. Word and Image Explicature

Enrichment, reference attribution, and disambiguation lead to the conclusion that on the right side of the cartoon there is a lady, who doesn't belong to the healthcare staff, shouts loudly to wake up a patient. The woman, who may be his wife or one his family members, cares about the patient and asks him to leave the hospital because, as she claims, "we decided COVID is over". To illustrate, she tells him that they should cope with the coronavirus and stop the protection measures "as if" a pandemic is over. It is not clear here what the pronoun "we" refers to, but she doesn't mention that the health sector spokesperson officially declares the end of the epidemic; therefore, it is a personal decision not authorized by the health workers in the US government. It is clear that the patient lying in an ICU bed suffers from COVID-19 pandemic so severely that he is on a ventilator, and his eyes are closed; therefore, he may have lost his consciousness. The lady's exaggerated facial expressions, i.e. her wide open mouth, her open eyes and her raised hand, indicate her loud voice trying to wake the patient up who isn't in his full consciousness to hear his relative's appeal. Hyperbole here plays an essential role in the drawing under investigation as it enhances the sense of incongruity. Humor in cartoon no.1 from incongruity between results the patient's two deteriorated health condition which is clear in the image and the lady's insistence in waking him up and getting him out of the hospital.

I. Implicated Premises

Sheneman published cartoon no.1 on January 27, 2022 in *The Week*. Meanwhile, the Omicron variant hits the United States. Although such a variant is less threatening, it is the most contagious strain of the coronavirus as it spreads faster than any other variants, and hospitals receive high numbers of covid-19 patients and ICUs occupancy is high. According to the WHO, "in the last week, more than million new COVID-19 cases were reported in our region This is the highest number of weekly cases since the pandemic started and is 32% higher than the previous week".

II. Implicated Conclusion

The cartoonist criticizes the lady's proclaim that the COVID-19 is over despite the high number of patients in the ICUs. In other words, he implicates that the pandemic end is not a personal arbitrary decision; instead, the

coronavirus will end when people take protective precautions to protect themselves and the community as well. Coping with the virus doesn't mean giving up taking basic precautions to keep yourself and others safe once. Your decision to just live with COVID-19 means someone else may die from it.



Cartoon no.2 (Blame our economic woes on the unvaccinated,

<u>https://tribunecontentagency.com/article/20211207edphc-a-</u> <u>tif/</u>)

I. Word and image explicature:

Via disambiguation, reference attribution and enrichment, the cartoon viewer can identify the identities of the three participants. The cartoon viewer should have background knowledge to determine that the first man with a red hat and a white t-shirt belongs to the anti-vaccine

campaign in the U.S. The second gentleman wearing formal clothing is of an authority and may belong to Biden's administration while the third represented participant is a green virus referring to the coronavirus epidemic. It is noticed that the COVID-19 pandemic is personified as an angry person, with a human mouth, legs, and a hand pointing at the anti-vaxxer accusing him of the bad economic and health conditions. Hyperbole is essential in humor creation in the cartoon under investigation; there is exaggeration in the anti-vaxxer's size (indicating his alleged physical strength) and his facial expressions (his wide open mouth and open eyes) indicate his loud voice out of his anger with the political administration that contributed to the bad economic conditions in the U.S. There is also exaggeration in the politician's reaction to the anti-vaxxer accusation; his exaggerated smile and his hand in his pocket apparently indicates his indifference to the anti-vaccine supporter, yet the droplets around his face indicate that he is stressed and worried. In addition, there is exaggeration in the coronavirus facial and body expressions when reacting to the politician's blame; its furious face, closed eyes, wide open mouth, and its pointing hand imply its loud voice and anger during blaming the anti-vaxxer. Such an endless of circle of blame is a source of humor creation in cartoon no.2. In other words, juxtaposition of the represented participants' opposed feelings contribute to the humorous effect.

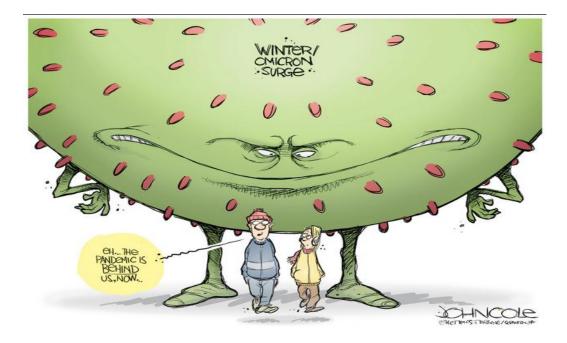
II. Implicated Premises

By the end of 2021, the COVID-19 pandemic badly affects the global economy. Like other countries, the U.S.

economy suffered from losses of income as a result of unemployment, poverty, inflation. The anti-vaxxers allied with Trump supporters in blaming Biden's administration for the post-COVID-19 loose economy resulting from inflation and unemployment rate.

III. Implicated Conclusion

The cartoonist criticizes the three represented participants who deny their responsibility for the deteriorated economic and health in the United States.



Cartoon no.3 (Covid is 'behind us' now, <u>https://www.cagle.com/john-cole/2021/12/covid-is-behind-us-now</u>.)

I. Word and Image Explicature

Cartoon no.3 presents a visual metaphor "the Omicron variant pandemic is a terrifying monster" to imply that the pandemic is scary and dangerous on people's lives. Hyperbole plays an essential role in the cartoon under investigation; there is an exaggeration in the Omicron's size, body reaction (its hands on hip), and facial expressions (its angry gesture) as a sign of danger and power over people. Therefore, hyperbole plays an important role in humor in the cartoon under investigation. To clarify, humor results from juxtaposition of two incongruous scripts. As for the first script, the man claims that the pandemic is "behind" them to indicate that it is under control and no longer harmful to them; however, in the second script the Omicron appears literally "behind" them in a huge terrifying look and seems threatening their lives.

II. Implicated Premises

Cole published cartoon no.3 on December 10, 2021. During that time, according to CDC, the Omicron variant of COVID-19 rapidly spreads in the U.S. resulting in an increase in the number of patients who need the ICUs beds. The danger of the Omicron variant is that it is easy to be transmitted and able to change its forms to still alive.

III. Implicated Conclusion

The cartoonist criticizes people ignoring the existence of the Omicron variant or their lack of awareness of the Omicron dangers. Another implicature is that the cartoonist suggests that people should continue taking precautions till the virus becomes really weak.



5.2 Cognitive Analysis of the Egyptian Cartoons

Cartoon no.4 (Post-pandemic world economy, https://www.almasryalyoum.com/caricatures/details/24976)

I. Word and Image Explicature

In cartoon no.4 there is a visual metaphor (and personification): "the economic crisis is a plastered patient with a walking stick". The economy is given the physical characteristics of a patient with a cast around his body (to get his broken bones healed) and a walking stick to refer to his inability to walk because of his broken leg. Therefore, the viewer can visualize the patient's bad health condition which is mapped into the economy referring to the post-COVID-19 global recession that the world economy suffered from. The cartoon also represents a blend- using a conceptual structure

from two incongruous mental spaces, namely an economic crisis and a patient treatment. Treating a patient frame includes a healthcare giver and patient while the economy frame includes arrow symbol, a chart, and an economy specialist to clarify the economic statistics. Here the patient deteriorated economy. Humor becomes results from juxtaposition of two opposing scripts (expected VS. unexpected); it is expected that the male nurse helps an old man to stand up because of his deteriorated health condition. What is unexpected is that the patient who needs help is a manifestation of the global economy recession in the postpandemic period.

II. Implicated Premises

Due to the coronavirus lockdown measures in 2020, the global economy suffered a sharp drop. To clarify, the employees' working hours were contracted, many businesses were closed or reduced their operation, and as a result many employees lost their jobs. In late 2021, many countries began to reopen after the vaccination was developed. As a result the global economy began to recover, but the progress was slow and there were still unresolved problems because of the effects of the pandemic.

III.Implicated Conclusion

The cartoonist presents the issue of the decline of the global economy. Although it starts to partly recover from the impact of coronavirus pandemic, there are still many challenges to get fully recovered.



Cartoon no.5 (Coronavirus complains to a psychiatrist, *Youm7*, <u>https://tinyurl.com/2de4v298</u>)

I. Word and Image Explicature

Enrichment, reference assignment, and disambiguation lead to the conclusion that the setting is a psychiatry hospital where a psychiatrist carefully listens to a patient/COVID-19 in order to diagnose the psychological problems he has. Hence, there is a personification metaphor: "coronavirus is a mental patient". To clarify, the COVID-19 pandemic is personified and given the physical characteristics of a patient lying on a chase lounge at a psychiatry hospital to get diagnosed. The blend, using two incongruous domains, namely psychiatry treatment/coronavirus pandemic, contributes to the humor creation in cartoon no. 5. To illustrate humor results from juxtaposition of two opposing scripts (normal vs. abnormal scripts). It is normal for a psychiatrist to carefully listen to a patient having a psychological problem. What is abnormal to the cartoon viewer is to see a psychiatrist listening to a virus (a nonhuman being) that has a psychological problem. The humorous effect is reinforced by using hyperbole, e.g. the exaggerated size of coronavirus and its exaggerated facial expressions (frowned eyebrows, closed eyes, raised hand gesture, and open mouth) to indicate its extreme feeling of disappointment by people's indifference to it and dealing with it as a little cold.

II. Implicated Premises

Ahmed Khalaf, an Egyptian cartoonist, published cartoon no.5 on January 16, 2022. During that period, the Omicron variant of coronavirus severely hit the Egyptian citizens because of its rapidly spread. However, people began to neglect following the precautionary measures and dealt with the symptoms of the epidemic as if it was a common cold.

III. Implicated Conclusion

The cartoonist criticizes the Egyptian citizens who ignore the COVID-19 preventive measures and assume that the pandemic is over.



(Cartoonno.6,Coronavirus,https://www.almasryalyoum.com/caricatures/details/22220.)

I. Word and Image Explicature

Disambiguation, reference attribution, and enrichment lead to the conclusion that there is a lady who scolds her child, who has just returned from the school, for playing with the coronavirus in spite of her repeated warning of playing with it. Also, there is a visual metaphor/ personification: "the covid-19 is a school girl" in which the coronavirus is given the physical features of a girl carrying a school bag indicating that she has just come from school. It is noticed that there is a blend of two different domains, namely coronavirus pandemic/going to school. Hyperbole plays an essential role in leaving a humorous effect in the cartoon under investigation. For example, there is exaggeration in the lady's body expressions (her pointing hand towards her child indicating scolding) and her facial expressions (e.g. open wide mouth, open eyes and raised eyebrows) indicating anger with her child who disobeyed her orders. The lady's left pointing hand, using Forceville's (2011) term the "pictorial runes", determines the direction of movement and indicates that she refers to the COVID-19/his school girlfriend. Humor also results from juxtaposition of two contrasting scripts, expected vs. unexpected scripts. It is expected that the mother warns her child of playing with a naughty friend, a human being. What is unexpected here is that the lady warns the children of playing with a virus (a non-human being), something which strikes the cartoon's humorous effect.

II. Implicated Premises

Abdallah published cartoon no.5 at *Al-Masry Al-Youm* newspaper in 2021, 26 December. During the publication of the cartoon under investigation, Egypt followed a policy of co-existence with the coronavirus because the lockdown caused large economic losses. The plan of co-existence with virus aims to maintain the precautionary measures (like social distancing, wearing face masks, and avoiding crowds) to reduce both the spread of the virus and, at the same time, restarting the wheel of production and reopening government institutions (e.g. hotels, schools, factories, etc.).

III. Implicated Conclusion

A strong implicature is drawn here; Abdallah pokes fun at people hardly trying to co-exist with the coronavirus pandemic while maintaining precautionary measures.

6. Conclusion

The present study aims to analyze the American and Egyptian Coronavirus cartoons using Sperber and Wilson's (1986) relevance theory, a cognitively oriented theory of pragmatics. The researcher adopts Sperber and Wilson's (1986) relevance theory following the distinction between explicature, implicated premises and implicated conclusions. Relevance theory is also adopted because Charles Forceville (1999) holds the view that such a theory can be effectively applied not only to verbal communication but also to visual and multimodal discourse.

The present study concludes that relevance theory proves to be an effective tool in analyzing the multimodal texts as represented in COVID-19 cartoons. Another conclusion is that the cognitive context plays a vital role in the process of inferring the implicature of the Coronavirus cartoons, and our results are broadly in line with Maria del Mar Rivas-Carmona's (2014a), in which she concludes that the cognitive context plays a vital role in the process of inferring the cartoon implicature. Moreover, the present study concludes metaphor/blend that visual results from giving the represented participant unexpected attribute which result in a humorous effect in the data under investigation. Another major source of humor in the Coronavirus cartoons is blending through which a cartoonist uses a conceptual structure from two different fields. This basic finding is consistent with Abdel-Raheem's (2018) research showing that humor emerges from the blending of two different sources.

References

Abdallah, A. (2021, December 26). Coronavirus. [Cartoon]. Al-Masry Al-Youm.

https://www.almasryalyoum.com/caricatures/details/22 220.

- Anwar, M. (2021, October 11). Post-pandemic world economy. [Cartoon]. *Al-Masry Al-Youm.* <u>https://www.almasryalyoum.com/caricatures/details/24</u> <u>976</u>.
- Abdel-Raheem, A. (2018). Multimodal humour: Integrating blending model, relevance theory, and incongruity theory. *Multimodal Communication*, 7(1), 1-19.
- Clark, B. (2013). Relevance theory. Cambridge University Press.
- Cole, J. (2021, 10 December). Covid is 'behind us' now. [Cartoon]. Cagle Cartoons. <u>https://www.cagle.com/john-cole/2021/12/covid-is-behind-us-now</u>.
- Fauconnier, G. & Turner, M. (2002). *The way we think: Conceptual blending and the mind's hidden complexities*. Basic Books.
- Forceville, C. (1999). Educating the eye? Kress and Van Leeuwen's reading images: the grammar of visual design (1996). *Language and Literature*, 8(2), 163-78.
- ----- (2005). Addressing an audience: Time, place, and genre in Peter van Straaten's calendar cartoons. *Humor: International Journal of Humor Research 18*(3), 247-278.
- Grice, H. (1989). Studies in the way of words. Harvard University Press.
- Grundy, P. (2000). Doing pragmatics. Oxford University Press.
- Hands, P. (2021, December 7). Blame our economic woes on the unvaccinated. Tribune content agency. [Cartoon]. Tribune Content Agency. <u>https://tribunecontentagency.com/article/20211207edp</u> <u>hc-a-tif/</u>.

Khalaf, A. (2022, January 16). Coronavirus complains to a psychiatrist. [Cartoon]. *Youm7*. <u>https://tinyurl.com/2de4v298</u>

Mey, J. (1993). Pragmatics: An introduction. Blackwell.

- Rivas-Carmona, M. (2014). Cartooning for gender equality: A multimodal expression of humor and vindication. *Research on Humanities and Social Sciences.* 4(24), 8-19.
- ----- (2014a). Claiming women's rights through cartoons: The demand for a work-life balance. In A. Macarro and A. Penuelas (eds.). *New insights into gender discursive practices: Language, gender and identity construction.* Publicacions de la Universitat de Valencia, 127-155.
- Sanz, M. (2013). Relevance theory and political advertising: A case study. *The European Journal of Humour Research*, *1*(2), 10-23.
- Sheneman, D. (2022, Jan. 27). COVID is over. [Cartoon]. *The Week*. <u>https://theweek.com/political-satire/1009480/covid-is-over</u>
- Silveira, J. & Ibanos, A. (2014). Inferences in advertisements: Exemplifying with relevance theory. *Linuagem(Dis)curso, 14*(3), 531-543.
- Sperber, D. &Wilson, D. (1986/1995). *Relevance: Communication and cognition*. Blackwell.
- Suls, J. (1972). A two-stage model for the appreciation of jokes and cartoons: An information processing analysis. In: J. Goldstein & P. McGhee (Eds.), *The psychology of humor* (pp. 81-100). Academic Press.
- Wilson, D. (2016). Relevance theory. In Y. Huang (Ed.), *The Oxford handbook of pragmatics*. Oxford University Press.
- Wilson. D. & Sperber, D. (2004). Relevance theory. In L. Horn & G. Ward (Eds.), *The handbook of pragmatics* (pp.607-632). Blackwell.

ملخص

بعد حصول غالبية المواطنين المصريين والأمريكيين على التطعيمات ضد جائحة فيروس كورونا، بدأت معظم المؤسسات العامة والخاصة، مثل المدارس والمصانع وغيرها، في كلا المجتمعين في إعادة فتح أبوابها لصالح الاقتصاد. وعلى الرغم من أن الأشخاص الملقحين وغير الملقحين كانوا في حاجة ماسة إلى اتباع السلوكيات الوقائية الإضافية المطلوبة للسيطرة على الوباء، إلا أن الكثير من الناس بدأوا في التعايش ا بشكل طبيعي دون اتباع الإجراءات الاحترازية. ولذلك يختار الباحث الرسوم الكاريكاتيرية من المواقع الأمريكية والمصرية لتغطية هذه الفترة من مواجهة الجائحة. ويهدف الباحث إلى دراسة الرسالة المشفرة من قبل رسامي الكاريكاتير، وكيفية فك شفرتها من قبل قارئ الكارتون، والاستراتيجيات المتبعة في عملية فك التشفير هذه في البيانات قيد البحث. تشتمل بيانات الدراسة على ستة رسوم كاريكاتورية مختارة بشكل مقصود على الإنترنت (ثلاثة رسوم كاريكاتورية مصرية ثلاثة رسوم كاريكاتورية أمريكية). يستخدم الباحث رؤى من نظرية الصلة ل(دان سبيربر و ديدري ولسون)وهي نظرية تداولية معرفية لتحليل التفسيرات والمعاني المتضمنة والاستتتاجات الضمنية للرسوم الكاريكاتيرية المختارة. خلصت الدراسة الحالية إلى أن نظرية الملاءمة أثبتت أنها أداة فعالة في تحليل النصوص متعددة الوسائط كما هي ممثلة في رسوم كاريكاتورية كوفيد-١٩. الاستنتاج الآخر هو أن السياق المعرفي(البيئة المعرفية) يلعب دورًا حيويًا في عملية استنتاج المغزي الضمني للرسوم الكاريكاتورية لفيروس كورونا.

كلمات مفتاحية: رسوم كاريكاتيرية مصرية، رسوم كاريكاتيرية أمريكية، نظرية الصلة، كوفيد-١٩