



The Metaphorical Modeling of COVID-19 Pandemic Crisis in Infosphere

Online News Articles

Mohamed A. Al Husain, PhD
Semantics (Cognitive Semantics)
University of Basra \ College of Arts,
Department of Translation
mallami65@gmail.com

Mohamedr / الباسورد GG1234567890

Abstract

The article addresses the process of metaphorical modeling of Coronavirus (COVID-19) during COVID-19 Pandemic Crisis (CPC) by Infosphere Online News (INFON) articles and stories. It is a cognitive semantic analysis of the language of online news based on the theoretical constructs proposed by Lakoff & Johnson (1987) Conceptual Metaphor Theory. INFON articles embody a process of transferring verbalized knowledge between two active parties (News Authorship and Readership) with unequal knowledge accessibility and propensity to transfer and disseminate such knowledge. The mechanism of metaphorization is one of the key ways of verbalizing how the authorship categorizes and conceptualizes the experience of the world with COVID-19. The results unfold: the predominant COVID-19 perception in INFON discourse is "COVID-19 is an ENEMY" and the metaphorical modeling, utilized by INFON discourse, a two-edged tool: positive by objectively informing the readers about that world or negative, by manipulating their conceptualization to create an aggressive image of world, therefore circulating anxiety, fear and panic.

Key words: modeling; conceptual metaphor; COVID-19 mappings; manipulation.

النموذج المجازي أزمة جانحة كورونا في النص الاخباري على الفضاء الافتراضي المعلوماتي

م. د. محمد عبد الزهرة عريبي الحسين
جامعة البصرة / كلية الاداب / قسم الترجمة

المستخلص

يتناول البحث عملية النموذج المجازي للعالم الخارجي بوجود خطر تهديد جانحة كورونا COVID-19 بواسطة الاخبار في الفضاء المعلوماتي الافتراضي. البحث عبارة عن تحليل دلالي للغة مقالات الاخبار بالاعتماد على المباني النظرية لنظرية المجاز الذهني ل جورج لاكوف و صاموئيل جونسون. وخطاب إعلام جماهيري، تجسد المقالات الاخبارية في الفضاء المعلوماتي الافتراضي عملية نقل المعلومة بين شريكين (الكاتب و القارئ) يمتلكان فرصة وصول و ميول غير متكافئة لنشر و توزيع الاخبار. يعتبر المجاز وسيلة فعالة للكاتب للتعبير اللفظي عن المعلومة و عملية ادراكه و تصويره للعالم الخارجي بوجود خطر تهديد جانحة كورونا بصورة العدو. عكست نتائج التحليل الدلالي لمادة البحث بأن المجاز المستخدم في اخبار في الفضاء المعلوماتي الافتراضي لتصوير العالم الخارجي بوجود تهديد جانحة كورونا COVID-19 يجب النظر اليه على انه سيف ذو حدين: اداة إيجابية من خلال نقل معلومة موضوعية صحيحة لرفع مستوى وعي القارئ عن جانحة كورونا COVID-19 و سبل الوقاية او يتحول المجاز الى اداة تلاعب سلبية من خلال خلق فهم مرتبك و صورة مرعبة تبعث على الشعور القلق والخوف والذعر. كلمات دالة: التصوير المجازي ، جانحة كورونا، تعيينات المجازية ، الخوف ، التأثير .

1. Introduction

Metaphorization is a key mechanism for human cognition: it supports our representation and conceptualization of reality. It offer us a way to see things which we cant see with other things that we see: It hosts a dynamic interface between concrete and abstract representational systems of world: we perceive the abstract concepts through the features and events of the concrete concepts. The metaphorization modeling is at the core of conceptualizing and categorizing COVID-19¹ as a threat-source enemy, simply because we are unable to see it. This article seeks to identify the peculiarities of the metaphorical modeling of the concept of COVID-19 in the INFON discourse. COVID-19 outbreak took place between the end of 2019 and early 2020, in Iraq and worldwide. The research material involves a discursive sampling of electronic articles in Arabic from online news journals and portals, between 2019-2020.

Metaphorically modeled as an ENEMY, COVID-19, we believe, has become a object for negative manipulation: it could clearly evoke anxiety, fear and panic to the public. The INFON discourse could turn out a “Echo Chamber of Fear Culture” (Altheide & Michalowski, 1999).

According to the World Health Organization, COVID-19 "can be regarded as a pandemic", for it is customary to speak of an pandemic if the epidemic significantly exceeds the level of usual morbidity in a given territory to neighboring states, and sometimes many countries worldwide. From February 24 to March 1, the list of countries where COVID-19 cases have been reported has doubled in size (WHO, 2020)². A state of emergency, restrictive measures and prohibitions were introduced³ all over the world. The rapid growth raised serious concerns that the crisis is global. “[F]ear affects the markets,” says Neil Wilson, lead analyst with markets.com⁴.

2. Theoretical Background

Reports of an epidemic fall within the scope of “Crisis and Emergency Risks Communication” (CERC) (see Reynolds & Seeger, 2007; Lwin, Lu, Sheldenkar, Schulz, 2018). CERC is a “focused process for exchanging information about various types of crises, emergency and risk causes,

preventive measures and remedies (Reynolds, Galdo & Sokler, Lynn.2002: 5). Online website started to embrace a role in CERC to inform and educate and sometimes to manipulate through disseminationg news articles.

2.2. Infosphere Online News Discourse

The term "infosphere" refers to a space which involves the collection, processing, production, distribution, and consumption of information. The virtual infosphere is gigantic informational network infrastructure, exchanging information objects (Floridi, 2003; 2014). Today, public pages and forums, social networks sites, blogs, news portals, etc. are connecting people over the globe, circulating information flux and judgments over the digital sphere. Sadly, however, a growing industry of mass media news may take it as a venue to misinform rather than to inform, spreading fake news (Guess, Nyhan & Reifler, 2018). Readers confronted with such orientation may engage passively, tolerating and consuming uncertainty: readers simply read and share the headlines without reflecting on the objectives and content truth of what they are exposed to. This behavior is usually referred to as the "Echo Chamber Effect" (Sasahara, K. Et al., 2019; Choi, & et al, 2020). The overflow of information mostly makes it hard for the readers to make objective judgments.

News messages can be perceived through the prism of who sends what to whom for what purpose, where the production, dissemination of messages are governed by individual, institutional, cultural and ideological background. (van Dijk, 1989). Since INFON messages inhere all of the elements that normally constitute a discourse, this allows us to call infosphere news articles as *INFON discourse*.

Manipulation is a process of achieving an impact on individuals via communicating information for them to commit unconsciously to beliefs, opinions, intentions, states of mind or behavioral changes, contrary to their own (Fairclough, 1994). The manipulative venue of INFON discourse will be viewed through the prism of the cognitive semantics, specifically through the construct of the Conceptual Metaphor Theory (Lakoff, 1987).

2.3. Metaphor as a conceptual modeling device

In modern cognitive semantic, it is customary to define a metaphor as a mental operation, a way of cognizing, conceptualizing, categorizing, evaluating and explaining the world by analogy. The principles of similarity, analogy and comparison are basic for the formation of a metaphor, e.g., “Love is a Journey”.

Metaphor allows to comprehend a certain area of reality in terms of conceptual structures, using the experience gained in other areas, often more specific or accessible to carriers. This is because metaphor is based on the establishment of associative connections, similarities and differences between the phenomena of the world, creating on this basis new personal meanings representing the subjective attitude of the individual to the world, his vision, his interpretation of a certain fragment of reality (Kövecses, 2010).

Metaphors and metonyms are the results of applying this scheme to obtain conceptual via mappings (Lakoff, 1993; Sadock, 1993). Modeling is a reduced reproduction or schema of a phenomenon. Linguistically, a model in its most general sense could be defined as a generalized schema of constructing meanings. A common understanding of metaphor is that refers to the processes of building synthetic models based on significant structural similarities between two domains, source and target (Charteris-Black, 2006). Metaphorical conceptualization is built according to the following scheme: dynamic mappings of transferred information, from the Source Domain to the Target Domain to come up with innovatively emergent conceptual structures (see Figure. 1).

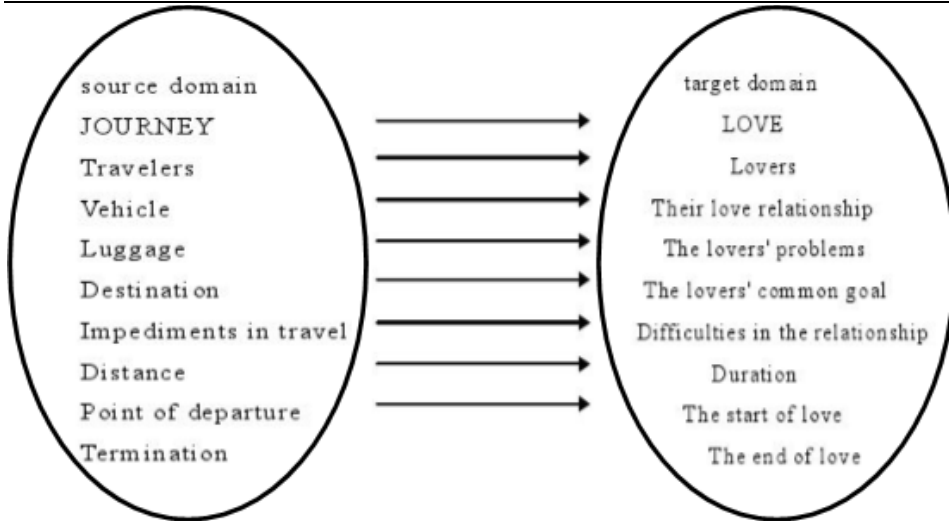


Figure (1): Cross-domain mapping in LOVE IS A JOURNEY (Lakoff, 1993)

The theoretical assumption here is that INFON discourse resorted to metaphorically modeling to assign a referential identity to COVID-19 due to its microcosmic nature. Modelling COVID-19 as ENEMY and human encounters with it as a BATTLES resulted in the actualization of emergent conceptual structures, a rather aggressive perception of the world. Indeed, the semantic associative mappings of conceptual field (battle, weaponry, victory, casualties, conspiracies, etc.), may result in such aggressiveness of worldview, accelerating negative responses such as anxiety, fear and panic.

3. Analysis: COVID-19 in Arabic INFON Discourse

This article deals with the representation of COVID-19 as the object of metaphorical modeling in modern INFON discourse. Metaphorical modeling signals the entire iconic environment and covers a multi-level system of embedded representations which allow greater semantic accessibility and dynamic conceptual structures, via verbal and/or imagistic conceptual metaphor (Lakoff, 1987).

The pragmatism of the discursive analysis of language units from INFON discourse stands out as a methodology for establishing sign-triggered conceptualisations in a communicative process: signs are formed by a person,

to a person for a purpose. The pragmatic manipulative potential of metaphors, exerted on the recipient's consciousness, is associated with the assessments of the underlying source of metaphorical mappings. The dominant metaphorical analogies put forward by language use in INFON discourse is that

(COVID-19 as an ENEMY at our doors which has declared WAR against us to destroy our lives, therefore it is necessary to take actions in this BATTLE).

Imagistic Metaphor as a modeling device is a very simple, yet highly novel and suggestive source of conceptualisation. To exemplify, it is worth to mention the controversial news article which has been recently published in Jyllands-Posten. The Danish Jyllands-Posten newspaper modelled COVID-19 via an imagistic metaphor (illustrated in Fig. 2): a cartoon of the Chinese flag (*on the left*) with its stars replaced by COVID-19 particles⁵ (*on the right*). This modeling surged diplomatic rage in China due to the compressed conceptualization of that symbolic representation. China is modeled as a CONTAINER of COVID-19, with loss-end interpretations of whether the enemy is the virus itself or China. These are very likely interpretations at a higher level, due to SOURCE-TARGET and PATH metaphors.

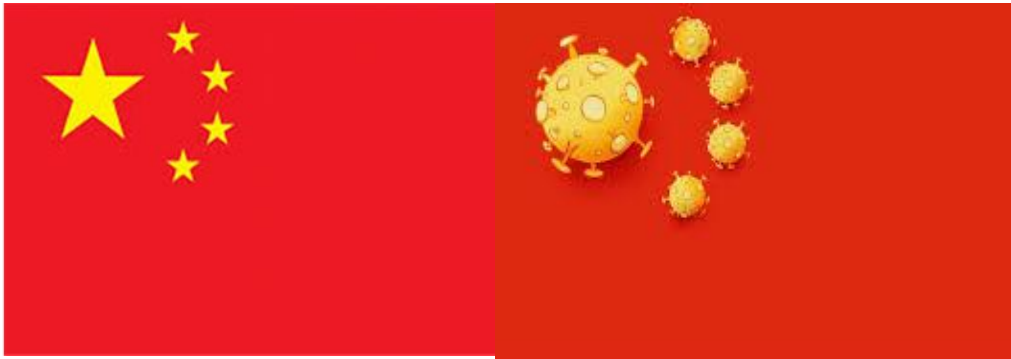


Figure (2): Adopted from the Danish newspaper Jyllands-Posten. China as, CONTAINER, is SOURCE of infection whose threat takes a specific trajectory from PATH to TARGET. Such conceptualisation of animated enemy derives from the mappings: China flag the big star emitting small stars and big COVID-19 particle emitting small particles (see Figure 3). Now, the question is "Who is the ENEMY?"

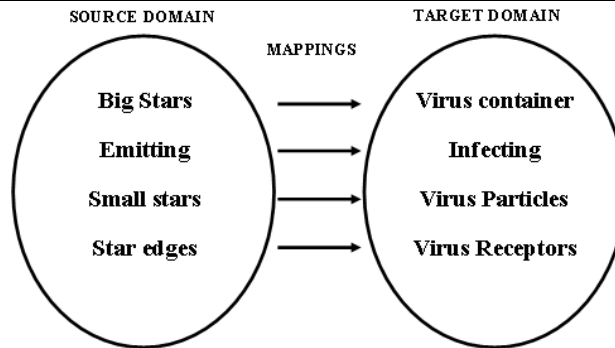


Figure (3): Conceptual Metaphore mappings

3.1. War against Enemy

The war metaphor is a recurrent theme to create the image of the viruses (enemy) in the recipient's mind: intruder, harmful, dangerous, etc. agent, (Marc, 2006), that needs to be defeated immediately. The president of the United States, Donald Trump, explicitly stated his worldview of the virus as the world enemy as in (1):

1 ترامب: فيروس كورونا عدو للعالم ويجب التغلب عليه⁶

Trans: "Trump: Coronavirus is an enemy of the world and must be defeated"
COVID-19 as the WORLD ENEMY is a universal metaphorical structure that can be found in across-linguistical and across cultural contexts .

3.2. Container Metaphor

The CONTAINER metaphor is a universal metaphor based on the projection of spatial relationships onto non-spatial domains. The concept of a container was first introduced by M. Johnson (1987). In his opinion, this figurative scheme is involved in the processing of human experience and is understood subconsciously (Lakoff (1993; Lakoff and Nunez, 2000: 30)

In 2,3 & 4, the scenario depicts China and Iran as containers of the COVID-19, therefore, it becomes safer to be isolated from such containers as a defensive measure. In 2, Iraq embraces such measure by closing "Mandeli border crossing", as an alert to the virus outbreak (see 3). The open doors, it suggests, could lead to Iraqi cities becoming containers (بؤر جديدة لفيروس كورونا)

/new foci for the COVID-19, themselves, and a source of threat to self and others, /تحذير من تحول مدن العراق الى بؤر جديدة لفيروس كورونا are turning into new foci for the Coronavirus

2 العراق يغلق منفذ مندلي الحدودي مع إيران خوفا من انتشار "كورونا"⁷

Trans: "Iraq closes Mandali border crossing with Iran, fearing the spread of Corona"

3 استنفار في بغداد للوقاية من تفشي فيروس كورونا⁸

Trans: "Alert in Baghdad to prevent the Coronavirus outbreak"

4 بعد الصين وإيران .. تحذير من تحول مدن العراق الى بؤر جديدة لفيروس كورونا⁹

Trans: "Ira cities turning into new foci for the Coronavirus"

The spreading of COVID-19 assumes a trajectory path moving from source to the destination: (X moves from A to B).

3.3. Path metaphor

The metaphor of the PATH implies a plurality of movements from source to target. The order in such movement plurality determines its implementation, building a series of metonyms. COVID-19 has a path whose trajectory destination is Iraq as 5 suggests. However, metonymic mappings are also very likely, primarily of the "part-whole" type. Metonymy relates to the underlying procedure of reducing the whole to its part: it involves profiling of one or another element "Diyala governorate" of a conceptualized area, and focusing attention on it along de-profiling the familiar elements (Iraq) due to contiguity/proximity. The primes the path of enemy threat: the weak link front of the battleground. Such contiguity of the interpreted phenomena in reality arises from some real (temporary, spatial, causal, etc.) connections between them, Diyala governorate and Iraq.

5 آخر إحصائية من وزارة الصحة: كورونا يصل إلى ديالى¹⁰

Trans: "...: Corona arrives at Diyala"

Continuity is a vivid mental image representation of the journey metaphor by transferring the structure of well-known events and activities (e.g., moving along a path). In (6), the proximity, reinforced by the lexical items "continue" "مستمرة باتخاذ سلسلة", asserts the continuous movement of the journey trajectory between source-destination points.

6 حكومة إقليم كردستان مستمرة باتخاذ سلسلة قرارات جديدة ضد "كورونا"¹¹

Trans: "continues to take a series of new decisions against "Corona"

In the example above, in their path of war engagement against (Corona)virus, the Kurdistan Regional Government kept taking series of measures to win the war. Such metaphorical mapping gives a dynamic image of continuity of actions during the war to stop the spreading of the virus. The syncretic locative meaning of the preposition 'against', assumes attached and well as detached proximity whose spatial semantic contents suggest two conceptual structures, confrontation and opposition as prototypical. The connections between the opposing parties are fundamentally important. Measures and precautions are required in case of any *preconceived* forms of fight (battles).

3.4. Battle Metaphor

A metaphorical representation of patients in a battle against fatal diseases via expressions such as "dying after a 'long battle with cancer'" have become common, yet controversial (Marc, 2006; Semino, Demjén, Demmen, et al, 2017). A form of battle is a characteristic of the cold war, a geopolitical political, ideological and diplomatic war, or hot war, military war. Micro-macro war opposition as metaphorical modeling applies to many examples.

The scale of the military operations, combat and missions against COVID-19 extends to humanity, in (7), which makes it a hard battle to engage in (see 8) and indeed needs to finish with. The battle extended intercontinentally to Europe, Africa, South America North America and Australia wrote the BBC online¹². Now, Europe is actually in a battle, (see 8).

7 كورونا: معركة البشر الكبرى¹³

Trans: "Corona: The Great Battle of Humanity"

8 مخاوف إسرائيلية.. المعركة ضد كورونا صعبة وتحتاج وقتاً¹⁴

Trans: "Israeli fears ... The battle against Corona is difficult and needs time"

9 أوروبا في معركة ضد فيروس كورونا - قراءة في الصحافة العالمية¹⁵

Trans: "Europe in a battle against the Corona Virus"

Australia sarcastically has a by-product fierce intracontinental battle to buy toilet paper in (10). Interestingly evident, it is very logical to imagine the volume of irrational fear the Australian citizens experience due to COVID-19 threat, that their priorities of consumption tendency have gone mad. It is logical to fight for food and medication and preventive hygiene equipment

10 معركة شرسة في أستراليا على ورق المراض بسبب كورونا¹⁶

Trans: "A fierce battle in Australia on toilet paper because of Corona"

The battle has more than one front wide open (see 12), where the leaders, "we"/Xi Jinping metonymically refers to the collective plurality of the state offices, officials, etc. The troops are the people as the Chinese ambassador suggests in (13), to reap victory (11).

11 تغيير المسار - شي جين بينغ يقود الحرب ضد الفيروس نحو النصر¹⁷

Changing course - Xi Jinping leads the war against the virus toward victory

12 الحصاد - كورونا.. معركة على أكثر من جبهة¹⁸

Harvest - Corona ... a battle on more than one front

13 سفير الصين: نقود معركة شعبية لمواجهة كورونا¹⁹

Chinese Ambassador: we lead a popular battle against Corona

Supplies are not of the least concern for the sustainability of the battle to embrace victory. Inter-national support necessitates making allies in the war and sometimes sending medical supplies to allies is a strategic action, to Italy in the case as in (14), to help them win the battle along the hot front there. The same that Qatar has done to help Iran in her fight against the outbreak in 15.

14 إمدادات طبية إلى إيطاليا لمساعدتها في المعركة ضد كورونا²⁰

Medical supplies to Italy to help her in the battle against Corona

15 إرسالها مساعدات طبية عاجلة إلى إيران، دعماً لها في مكافحة فيروس كورونا

Qatar announced on Friday that it was sending urgent medical aid to Iran, in support of it, in the fight against the Corona Virus

In a state of war, various weaponry is a must. Against COVID-19 medical preventive measures, travel restrictions, isolation, antiviral therapies medical

expense copayments waivers, etc. are possible weapons but sure verified remedy is not an available option so far.

3.5. Weapon metaphor

Weaponary metaphor as a subset of the WAR, THREAT, BATTLE is used for constructing the meanings of utility and defense (Cochran-Smith, 2006). It is a common expression in health-related topics, e.g., treatment represents the armor and weapon of patients.

As we are in a state of war with COVID-19; what is our weapon? So, the first intuitive thing to do about conquering a microbial cosmic enemy is to get expertise in the form of query seeking information, i.e., what is the strongest weapon that we have/can to defeat COVID-19? (see 16). One answer was "sterilisation" as in (17), or coordinating international efforts (18), quarantine, etc.

16 ما هو أقوى سلاح نملكه ضد تفشي فيروس كورونا²¹
Trans: "What is the powerful weapon we have against ...Coronavirus?"

17 التعقيم.. سلاح ضد كورونا²²
Trans: "Sterilization .. a weapon against corona"

18 تنسيق الجهود الدولية سلاح فعال ضد كورونا²³
Coordinating international efforts is an effective weapon against Corona

19 الحجر الصحي... سلاح المملكة المتحدة الحقيقي الوحيد ضد كورونا²⁴
Trans: Quarantine ... The only real UK weapon against Corona
Ironically, the enemy itself becomes the new weapon to win internal political battles (20) or weapon in the hands of other enemies as in (21).

20 فيروس "كورونا".. سلاح مستجد للفوز بمعارك سياسية²⁵
Trans: "Coronavirus ... a new weapon to win political battles"

21 روحاني يرفض تحول كورونا لـ«سلاح» في يد أعداء إيران²⁶
Trans: "Rouhani ...corona as a "weapon" in the hands of Iran's enemies

The world's battle against a fierce rival, COVID-19, also suggests contingency plans, e.g., retreat, truce and ceasefire options as well as possible defeat and casualties.

3.6. Battle Casualties: Victims of COVID-19

The generic concept of “victim” is defined as an individual who has suffered harm, damage, or loss: death is a possible end scenario. “WE ARE VICTIMS” metaphor represents the affected public. Using the metaphorical modeling, news messages prime risks of having casualties. Humans are the most significant casualty of the CPC. Human casualties of war are synonyms with negative connotations – hits, casualty and prey, etc.

A human casualty in the war against COVID-19, victims of war, could be mass victim, i.e., “أرقام قياسية/records of corona victims” (see 22), or calculated in numbers (thousands, hundreds, etc) as in (23)

22 أرقام قياسية لضحايا كورونا في أوروبا²⁷

Trans: “European records of corona victims”

23 ضحايا كورونا..الاف الاصابات والوفيات في العالم²⁸

Trans: “The last toll of the victims of Corona...thousands of injuries and deaths in the world”

The victims could include high-rank personnel as in (24), or a newly-born baby. However, the mass death toll is the latest world count. We are losing the war, seriously.

24 كورونا تقتل عضو في مجلس تشخيص مصلحة النظام في ايران²⁹

Corona kills a member of the Expediency Council in Iran

25 ولد مصاباً.. رضيع بريطاني أحدث ضحايا كورونا³⁰

An infected boy: a new-born British boy is Corona's latest victim

24 آخر حصيلة بضحايا كورونا..الاف الاصابات والوفيات في العالم³¹

The last toll of the victims of Corona .. thousands of injuries and deaths in the

Euphemisms are “expressions used in place of words or phrases that otherwise might be considered harsh or unpleasant” (Allan & Burridge, 1991). Euphemism is usually understood as emotionally neutral words or expressions used instead of words synonymous with them and expressions that seem to the speaker indecent, rude or tactless. Dysphemism, on the other hand, involves a negative connotation of meaning and denotes the concept in

a harsher and rough form (Ibid). The perception of COVID-19 as an enemy and battle rival can be euphemized or dysphemized.

Interestingly though, there are instances where victims are euphemized or dysphemized. For instance, the expression "losses" possibly comes to express sincere sympathy. The Islamic concept "Martyrs" (see 24) was used to signal the Islamic holy concept of war sacrifices against the virus. Others call them "the dead", "the deceased" or "the corpus" (see 26).

25 ³² اتحاد علماء مسلمين في كردستان يفتي باعتبار ضحايا كورونا "شهداء"

.. Scholars ... issues a fatwa ... **victims of Corona as martyrs**

26 ³³ اعتقال مصوراً نشر صور تكديس جثث وفيات فايروس كورونا في قم

.. photographer arrest .. published pictures of Coronavirus corpses in Qom

3.7. Truce and Ceasefire

A truce is a contingency plan in wars. It could be military or political, e.g., هل «هدنة كورونا» السياسية / Will the political "Corona Truce" succeed?, military in Afghan situation, اقترح وزير الدفاع الأفغاني على حركة طالبان هدنة من أجل التفريغ / The Afghan defense minister proposed a truce for the Taliban fight against the Corona epidemic, economical, الهدنة التجارية بين واشنطن / The trade truce between Washington and Beijing is threatened by Corona or ecological, كورونا يمنح الأرض هدنة و ٢٥% تراجع لثاني أكسيد الكربون / Corona gives the earth a truce and a 25% decrease in carbon dioxide

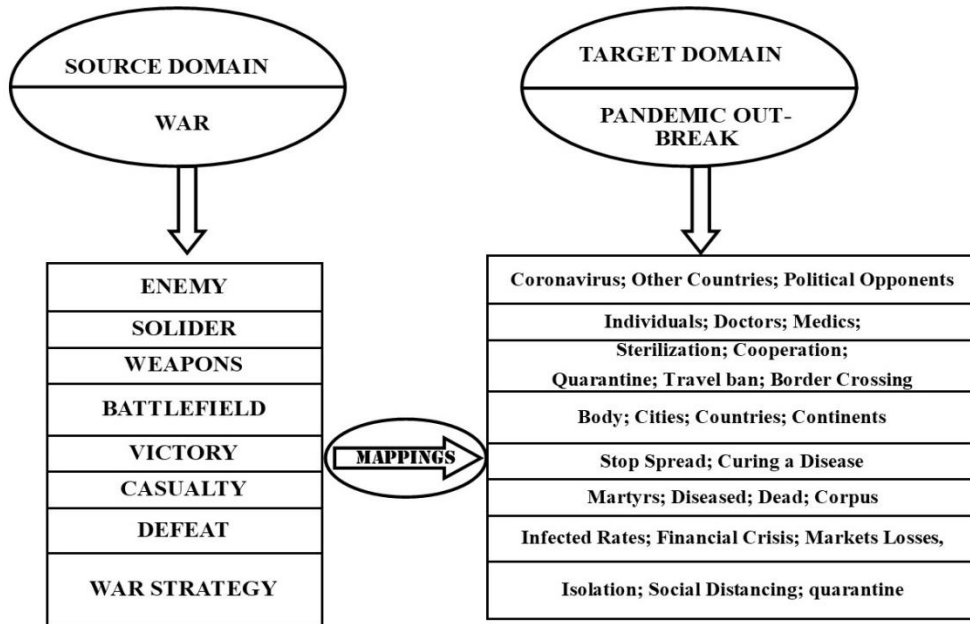


Figure (4): the overall metaphorical mappings of COVID-19

So far, in the light of the above cognitive semantic discursive analyses of INFON news articles, the overall dynamic image of the event of COVID-19 outbreak as a battle against the vicious enemy has become complete, as illustrated in Figure (4).

4. Conclusion

The study allowed us to identify the specifics and the functions of conceptual metaphors and metaphorical modeling used in crisis risks discourse. Although the use of metaphors supports the conceptualization and verbalization of a worldview of the CPC, metaphorical modeling may have unexpected malfunctioning and serious side effects. Using military metaphorical structures with “WE ARE IN A WAR”, “X IS OUR ENEMY, etc. in a non military context imposes an aggressive image of the reconstructed world. This metaphorical modeling may stimulate anxiety, fear, panic and possibly prompts irrational actions. Such intentional conduct, we



firmly believe, invests more in spreading horror of risks than in building awareness of such them.

5. Bibliography

- Allan, K & Burrige, K. (1991). Euphemism and Dysphemism. Oxford University Press.
- Altheide, D., & Michalowski, R. (1999). "Fear in the News: A Discourse of Control". *The Sociological Quarterly*, 40, 3, pp.475-503.
- Bernstein, P. (1996). Against the gods: the remarkable story of risk. New York : John Wiley & Sons,
- Charteris-Black, J.(2006). "Britain as a container: immigration metaphors in the 2005 election campaign". *Discourse & Society* : Vol. 17, 5, pp. 563-581
- Choi, D., Chun, S., Oh, H. *et al* (2020). "Rumor Propagation is Amplified by Echo Chambers in Social Media". *Science Reprort*, 10, 310.
- Cochran-Smith, M. (2006). "Metaphors We Live And Die? By". *Ch. In Policy, Practice, and Politics in Teacher Education: Editorials From the Journal of Teacher Education*. SAGE Publications, pp. 56-62.
- Floridi, L. (2003). "On the Intrinsic Value of Information Objects and the Infosphere." *Ethics and Information Technology*. No. 4. pp. 287–304
- Floridi, L. (2014), The fourth revolution: how the infosphere is shaping human reality. Oxford: Oxford University Press.
- Garrett, R., Dustin C., & Emily K.. (2013). "A Turn toward Avoidance? Selective Exposure to Online Political Information, 2004–2008." *Political Behavior*, 35, 1, pp.113–34
- Giddens E. (1990).The Consequences of Modernity. Cambridge, Polity Press.
- Guess, A. Nyhan, B. & Reifler, J. (2018). Selective exposure to misinformation: Evidence from the consumption of fake news during the 2016 us presidential campaign. *European. Research Council*.
- Johnson M. (1987)The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason. Chicago: Chicago University Press.
- Karlsson, N, George L, & Duane S. (2009). "The Ostrich Effect: Selective Attention to Information". *Journal of Risk and Uncertainty* 38, 2, 95–115.
- Kövecses, Z. (2010). Metaphor. A Practical Introduction. Oxford University press, Inc,
- Lakoff, G (1987). "Image Metaphors, Metaphor and Symbolic Activity". *Cognition*, 2:3, 219-222.
- Lakoff, G. (1993). "The Contemporary Theory of Metaphor". In A. Ortony (Ed.), *Metaphor and Thought*. New York, NY: Cambridge University Press, pp. 202-251.
- Lakoff, G., & Núñez, R. (2000). Where mathematics comes from: How the embodied mind brings mathematics into being. Basic Books.



- McCarthy-Jones S** (2019). "The Autonomous Mind: The Right to Freedom of Thought in the Twenty-First Century". *Frontiers in Artificial Intelligence, Vol.2*
- Marc N**, (2006) War Metaphors: How President's Use the Language of War to Sell Policy. Oxford, Ohio: Miami University.
- Marij A**. Hillen, Caitlin M. Gutheil, Tania D. Strout, Ellen M.A. Smets, Paul K.J. Han, (2017). "Tolerance of uncertainty: Conceptual analysis, integrative model, and implications for healthcare". *Social Science & Medicine, Vol. 180, pp. 62-75*.
- Reynolds B**, G. , Hunter, J. & Sokler, L. (2002). Crisis and Emergency Risk Communication. In Freimuth Vicki F. & et al (Ed). Centers for Disease Control and Prevention: Atlanta.
- Reynolds, B.**, & Seeger, M. (2007). "Crisis and Emergency Risk Communication as an Integrative Model". *Journal of Health Communication, 10(1), 43-55*. <https://doi.org/10.1080/10810730590904571>.
- Sadock, J**. (1993). Figurative Speech and Linguistics. In: Ortony, A. Metaphor and Thought. Second Edition: Cambridge University Press, pp. 42 – 58.
- Semino E**, Demjén Z, Demmen J, et al. (2017). "The online use of Violence and Journey metaphors by patients with cancer, as compared with health professionals: a mixed methods study" *BMJ Supportive & Palliative Care* ;7:60-66.
- Sasahara, K.** et al. (2019). On the Inevitability of Online Echo Chambers. arXiv:1905.03919 [cs.CY].
- Simon, H**. (1955) "A Behavioral Model of Rational Choice". *The Quarterly Journal of Economics, 69, pp.99-118*.

van Dijk T . (1989). Tongue. Cognition. Communication. M., Progress,

Electronic reference:

<https://www.who.int/docs/default-source/Coronaviruse/situation-reports/20200224-sitrep-35-covid-19.pdf>

<https://www.governor.wa.gov/news-media/inslee-issues-covid-19-emergency-proclamation>

<https://markets.businessinsider.com/news/stocks/markets-trading-on-fear-stocks-tumble-Coronavirus-pandemic-panic-2020-2-1028944783>

<https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---28-february-2020>.

Margins

¹ This term is used interchangeably with its contracted from “Corona”, especially in English translations of Arabic texts.

² <https://www.who.int/docs/default-source/Coronaviruse/situation-reports/20200224-sitrep-35-covid-19.pdf>

³ <https://www.governor.wa.gov/news-media/inslee-issues-covid-19-emergency-proclamation>

⁴ <https://markets.businessinsider.com/news/stocks/markets-trading-on-fear-stocks-tumble-Coronavirus-pandemic-panic-2020-2-1028944783>

⁵ <https://ekstrabladet.dk/nyheder/samfund/kina-kraever-undskyldning-efter-tegning-i-dansk-avis/7978111>

⁶ ترامب: فيروس كورونا عدو للعالم ويجب التغلب عليه في 12/3/2020 <https://www.youm7.com/story/2020/3/12/> أسرع وقت

⁷ <https://www.elwatannews.com/news/details/4621640>

⁸ <https://glgamesh.com/132603--.html>

⁹ <https://glgamesh.com/132604--.html>

¹⁰ / آخر إحصائية من وزارة الصحة: كورونا يصل إلى ديارى <https://www.nasnews.com/>

¹¹ <https://www.nasnews.com/> كومة إقليم كردستان تتخذ سلسلة قرارات

¹² <https://www.bbc.com/news/world-europe-51638095>

¹³ <https://annabaa.org/arabic/health/22341>

¹⁴ <https://arabi21.com/story/1252125> مخاوف إسرائيل.. المعركة ضد كورونا صعبة وتحتاج وقتاً

¹⁵ <https://www.france24.com/ar/20200309> أوروبا في معركة ضد فيروس كورونا-20200309

¹⁶ <https://www.alarabiya.net/ar/last-page/2020/03/07/> معركة شرسة في أستراليا على ورق المرحاض / بسبب كورونا

¹⁷ <https://arabic.cgtn.com/n/BfJAA-cA-CcA/DEefEA/index.html>

¹⁸ <http://mahewar.org/y.asp?yid=3791298>

¹⁹ <https://akhbarelyom.com/news/newdetails/3014047/1/> سفير الصين: نقود معركة شعبية لمواجهة كورونا

²⁰ <https://nabd.com/s/70088892> إمدادات طبية إلى إيطاليا لمساعدتها في المعركة ضد كورونا-

²¹ <https://arabic.cnn.com/health/video/2020/03/14/v86264-epidemic-curve-social-distancing>

²² <https://www.alittihad.ae/wejhatarticle/105677> التعقيم.. سلاح ضد كورونا

²³ <https://www.alittihad.ae/article/16037/2020> تنسيق الجهود الدولية سلاح فعال ضد كورونا

²⁴ <https://www.independentarabia.com/node/93841/> الحجر الصحي... سلاح المملكة المتحدة الحقيقي

²⁵ الوحيد ضد كورونا

²⁶ <http://www.newhub.org/AR/AL/512346>

²⁷ <https://aawsat.com/home/article/2150526/> روحاني يرفض تحول كورونا لـ«سلاح» في يد أعداء إيران

²⁸ <https://www.aljazeera.net/news/politics/2020/3/14/> أرقام قياسية لضحايا كورونا في أوروبا

²⁹ <https://glgamesh.com/133396--130-5-.html>

³⁰ <https://glgamesh.com/132371--.html>

³¹ <https://www.alarabiya.net/ar/arab-and-world/2020/03/14/> رضيع بريطاني أحدث ضحايا كورونا

³² <https://glgamesh.com/133396--130-5-.html>

³³ <https://baghdadtoday.news/ar/news/112098/>

³⁴ www.inp.plus/news/92099