

SPACE AND ISLAM: MEDIA REPRESENTATION OF ARAB MUSLIM ASTRONAUTS IN INTERNATIONAL ONLINE NEWS: A DISCOURSE STRUCTURE ANALYSIS

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Abstract:

Through an examination of discourse structure, this paper investigates the relationship between language and space in the context of mass media. It proposes ways in which the analysis of language can cast light on how mediation affects the depiction of individuals, locations, and events. It aims to describe the critical discourse analysis based on van Dijk's (2008) approach to highlight the macro, super, and microstructures in the selected online media and to realise how the writer has reproduced the text and how the language is utilised. The data are collected in the form of fragments of an article and the data source is the main website of CNN.com, on March 22, 2023. The findings reveal that that the use of definite terminology, sentences, certain devices and meaning are seen as a way to influence the public opinion since the writer expresses by words his beliefs in the text. The benefit of these studies is that they help you understand the structure of the text.

Key Words: Discourse Structure, Space, Critical Discourse Analysis, Van Dijk's Approach.

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1. Introduction

Linguists are usually interested in using language in the mass media for the sake of language itself, as evidence of particular grammatical structures or intonation patterns, such as, newspaper headlines have particular syntactic features that govern their grammatical peculiarity and have long captivated linguists' interest; linguists may be interested in the language use in media for the sake of language (Mardh 1980 as cited in Paniagua, Garca, Cremades, & Alegre, 2007).

Furthermore, Miller (2002) asserts that through producing meaning about the world, the media represents it in a variety of contradictory ways. As a result, what we know about society is influenced by how we are presented with information, and this knowledge determines what we do and the policies we are willing to tolerate.

The rise of online religious communities, or virtual religious spaces, has piqued the curiosity of scholars studying religion and media. Throughout the 1990s and early 2000s, scholars referred to cyber religion as a type of religion that thrived mostly in networking sites or cyberspaces (Brasher, 2004).

While the representation of Muslims and Islam in traditional media, such as newspapers, has received considerable attention (Baker et al., 2013; Richardson, 2004), there have been far fewer research on these dynamics in media platforms. This is not limited to Muslims; media platforms discourse in general is a bit of a black hole for academic inquiry.

Based on the foregoing, the study's goal is to examine how concepts, such as Islam and space are portrayed and constructed discursively in the media. Specifically, it is assumed to recognize how news media; CNN, represent Islam by employing an ideological instrument called discourse.

Many scholars use Critical Discourse Analysis (hereafter CDA) to investigate and clarify the relationship between language and society in a variety of contexts, such as media discourse (van Dijk, 1996). As a result, several models, such as van Dijk's (1993) sociocognitive model, are used to examine discourse in order to appreciate the purpose of the news media, their structure, and tactics of such discourse.

2. Literature Review

2.1 Discourse Structure Analysis

Discourse structure analysis or (DSA) is a fundamental discipline of study in examining text strains, conception, and recall. Besides, it is a highly practical and problematic discipline for non-directly involved reading specialists to comprehend and usage. This article's aim is to prepare a structured indication of this instead of fragmented topic (Hoskins, 2010).

In addition, a literature review is attempted by classifying investigation procedures into three main classifications; micro-structure procedures, macro-structure procedures, and grammars and by exploring studies that employed DSA. Based on this, van Dijk affords an approach for transitioning from the microstructure into the macrostructure of a text founded on a sequence of macro-procedures that look like the transformation procedures of transformational-generative grammar (van Dijk (1977).

The second phase of van Dijk's approach is the text's superstructure. According to him, the unifying factors of discourse are superstructures. Superstructures govern the presentation of macro-procedures because they impose limitations on the macro-propositions that result.

Van Dijk employs his analysis procedures to determine how recipient's schemata (frames) interrelate with macro-propositions and possibly superstructures, thereby influencing conception. Actually and according to Jahedi and Abdullah, (2004), society

comprises both microstructures of interactions and macrostructures of group relationships, institutions, and the political system. Numerous sentence structures in a text and discourse may impact how the receiver builds mental models of particular conditions or how these are generalised to shape categorizes.

2.2 van Dijk's Sociocognitive Approach

van Dijk's Sociocognitive Approach (SCA) to Critical Speech Studies places emphasis on mental processes involved in both the creation and reception of discourse (Van Dijk 2014 b, 2015). He contends that the cognitive interface between the mental representations of language users as people and members of society is the true mechanism by which discourses function, rather than any direct or linear relationship between discourse structures and social structures.

Further, van Dijk stresses that his proposed framework is not a method; it does not outline a specific process for conducting discourse analysis (Van Dijk 2014a). He claims that applicants in communicative conditions must metaphorically "read" each other's minds for an effective interaction. To comprehend actions, including communicative actions, actors' intentions must be "ascribed" to their observed behaviours (Van Dijk 2012b).

2.3 Representation of Muslim Astronauts in Mass Media

According to Fathan (2018), news texts can disclose abuses of power, dominance, and injustice done and generated inappropriately. The journalist's judgement is used to present facts in the media. The journalist's judgement is impacted by the journalist's perspective in expressing an event. As a result, facts may appear otherwise because it is dependent on the understanding and qualities of each journalist.

The topic of space travel is making a comeback in Arab media outlets, starting with the Emirates News Agency, which reported that the Emirati astronaut Hazzaa Al-Mansoori was the first Arab to be appointed to the key post of increment lead for an International Space Station expedition. This sparked renewed interest in space travel among Arab audiences. Along with Al-Mansoori, the pioneering journey will also include Sultan Al-Neyadi, who will make history as the first Arab astronaut to embark on a long-duration spaceflight.

Al-Marri, who also adds that, we are happy to see Sultan and Hazzaa work together to undertake studies that will extend our knowledge of space and comprehension of life in microgravity, according to the same network that it opens the door for other Arab astronauts to take part in space research (Emirati astronaut marks another milestone, 2023).

More details about the mission to the orbit presented by Waldek (2032) who adds that during the EVA, NASA astronauts Al Neyadi and Stephen Bowen will retrieve a Radio Frequency Group (RFG) unit that is scheduled for return to Earth. Additionally, they will prepare the International Space Station for a future spacewalk during which sophisticated solar arrays will be installed.

3. Method

This study employs a descriptive qualitative research and CDA as the main approaches of analysis founded on van Dijk's (2008) approach. A CDA can discover matters such as ideology, identity and gender and how these matters are redirected in certain texts. This may start an investigation of using discourse and moving on to describing and explaining the discourse. Thus, the analysis may continue to analyse texts, targeting

ideologies and conventions essential to the usage of discourse, and linking these to diverse perspectives, experiences and views (Clark 1995 as cited in Paltridge, 2012).

The data are obtained as written text from CNN, an online news network. The explanation process is implemented in order to comprehend the data and reveal its meanings as the primary component of the analysis. To emphasize the macrostructure, superstructure, and microstructure of the selected online media, the CDA-recommended van Dijk model for text structure was inserted.

The findings of the study are anticipated to be of fundamental importance as an academic contribution to the study of online news media. In addition, it is anticipated that the study's findings will be useful for information and comparison of the CDA study on mass media with numerous issues in the context of online media coverage.

4. Analysis and Discussion

This study discusses three topics in its findings and discussion: macro structure (thematic), superstructure (schematic), and micro structure.

4.1 Macrostructure (Thematic)

In this section, the main topic in this article will be discussed concerning the latest development of the crew to the international space station. The topic entitled

“Astronaut Sultan Alneyadi sees 16 sunsets daily on the space station. How will he observe Ramadan?” (Wattles, 2023).

The selective rubric section is presenting by composing two sentences, the first is statement and the second is in the question form. The writer shows us how the structure of discourse is formed and the use of terminology reflects this type of text.

Besides, the writer presents two other sub-titles for more focus on other information that are not relevant to the main one. The first sub-title entitled “Religion in space: A history” in which the writer makes a connection between the history of spaceflight and religions, specifically two religions, Islam and Judaism.

Furthermore, another sub-title is mentioned “ Observing Yom Kippur in orbit”. In this respect, the writer focuses on Jewish rituals, rabbis and Yom Kippur in general and in orbit in specific. Two sections and deep details about Jewish ceremonies which are nor relevant to the main topic or the opening section or even the main title of this article.

4.2 Superstructure (Schematic)

Based on this analysis of news discourse, it is packaged starting from the introduction, the introductory section of this article, the body or the content of the article and the conclusion which is the closing section of it. In the opening paragraph, the writer gives the audience the most important information of the latest news story in a very clear manner indicating the direct link between Islam and Judaism by mentioning the most important rituals of these two religions; Ramadan and Yom Kippur as we can notice below:

“**CNN** — For centuries, a setting sun has signaled the end of fasting rituals on holidays such as Ramadan and Yom Kippur, a cue to tuck into a delicious meal after a full day of abstaining from food and drink. But what if the sun’s clockwork were to suddenly change, as it does for astronauts riding aboard the International Space Station? The orbiting laboratory whips around the Earth at about 17,000 miles per hour (27,600 kilometers per hour), giving passengers 16 sunrises and sunsets each day”. (Wattles, 2023).

In the above section, there are many details about fasting which is one of the obligatory rituals in the Islamic religion. In this section, a question is asked about how to deal with Muslim astronauts while they are thousands of kilometers away from earth. This

section may raise another question inside our brains of do the teachings of earth apply to them or not.

The next paragraph represents the body of this article which expresses some information about the hero of this article “Sultan Alneyadi” who is Muslim astronaut traveled to space to be the first from the united arab emirates with a long mission to the international space station. Moreover, information about Muslims festivals is also indicated, such as Eid al-Fitr and Eid al-Adha, such as :

“During his stay, Muslims on Earth will observe the month of Ramadan — a time of fasting, prayer and reflection that runs from the evening of March 22 to April 21. There will also be two Muslim festivals — Eid al-Fitr, which marks the end of Ramadan, and Eid al-Adha, a celebration of the annual pilgrimage that Muslims make to Mecca, the holy land in Saudi Arabia, that begins June 28” (Wattles, 2023)

With a deep look to Sultan, the writer decides to add the opinion of the only Muslim astronaut on board the capsule in a conference held remotely from inside the spacecraft, where he gave his opinion about fasting Ramadan in this place and time, such as:

“Six months is a long duration for a mission, which is a great responsibility, Alneyadi told reporters during a January news conference” (Wattles, 2023).

With more emphasis on the relationship between space and religion, the writer adds something about the provisions of fasting through the astronaut to give information about the Islamic religion and the provisions of breaking the fast in some cases, including travel or endangering the lives of others, which represents his situation aboard the spacecraft as one of the crew members of the mission, such as:

“Fasting is not compulsory if you’re feeling not well. So in that regard — anything that can jeopardize the mission or maybe put the crew member at risk — we’re actually allowed to eat sufficient food to prevent any escalation of lack of food or nutrition or hydration” (Wattles, 2023)

With more concentration on history, many previous missions to space and timing are mentioned with its relation to some religious rituals. The starting point is from the mission of NASA’s Apollo 8 in 1968 and how the crew is directly related to bible, such as:

“During NASA’s Apollo 8 mission in 1968, the astronauts conducted a reading of Genesis, the first book of the Bible, on their way to orbit the moon” (Wattles, 2023)

The second mission was in 2007 with special guidelines from the Islamic national Fatwa to postpone the fasting of Muslim astronauts crew on board. In a movement to another religious rituals, the writer mentions jewish astronauts that are also related to religious customs, such as missions in 2003, 2021 and 2007 who postpone all their jewish festivals due to their existence in the space, as mentioned below:

“In 2007, Malaysian astronaut Sheikh Muszaphar Shukor became the first practicing Muslim to stay on the International Space Station, and the Islamic National Fatwa Council of Malaysia issued special guidelines specifically to guide his and other future Muslim astronauts’ practices” (Wattles, 2023)

“But Israeli astronaut Ilan Ramon did attempt it in 2003, when he flew aboard a Space Shuttle Columbia mission and, in keeping with advice from “leading rabbinical experts, he observed Shabbat in accordance with Cape Canaveral, Florida, time, the place from which he had launched”. (Wattles, 2023)

“He question of how to celebrate Jewish holidays in orbit again arose when Jared Isaacman, a billionaire who funded a spaceflight for himself and three crewmates in 2021, climbed aboard a SpaceX Crew Dragon and became the first space tourist to fly to orbit from

US soil. At the time, he told CNN that, although he is Jewish, he didn't plan to observe Yom Kippur, which began at sundown the day of his launch in 2021" (Wattles, 2023)

"On the other hand, Rabbi Dovid Heber, writing for kosher certification organization Star-K in 2007, simply said that "ideally, one should not travel to outer space." But, "if one must go," there are a number of different options that would satisfy the religious requirements" .(Wattles, 2023)

In the closing section, still there is no matching between the title, opening section and the rest of this article. The closing section suggests that the Jewish is the chosen religion that can keep pace with all circumstances. In other words, the writer emphasis the idea that Judaism is the religion of flexibility of its rituals and there are no formal directives that apply to everyone, as highlighted below:

"I think one of the most beautiful things about Judaism — how it's able to be relevant, and to adapt to all sorts of changing technologies and industry and discoveries" (Wattles, 2023)

4.3 Microstructure

4.3.1 Semantic

The semantic analysis includes background, details and presupposition. In this text, the audience will be brought to information that represents a background or a flashback about the previous spaceflights for religious astronauts and individuals from both Islam and Judaism , such as:

"He's one of fewer than a dozen Muslim astronauts who have traveled to space, and at the end of his mission in about five months, he will have been the first astronaut from the United Arab Emirates to complete a long-duration stay on the floating laboratory" (Wattles, 2023)

Besides, details are mentioned by the news writer that are backed from many authorities about the festivals of two religions as mentioned above. Moreover, presupposition is also found in the title of the article through the form of question that implies the religion of the only Arabic astronaut in this mission who is Muslim as we can see below:

"How will he observe Ramadan?" (Wattles, 2023).

4.3.2 Syntax

As a matter of fact, cohesion is a syntactic element that employed in discourse analysis to highlight the connection between two sentences, paragraphs or clauses. So different sets of ideas become aligned to support the main idea. Using conjunctive tools in this article is varied from one section to another. And is utilized in the lead to make a link between two rituals in Islam and Judaism, such as:

"For centuries, a setting sun has signaled the end of fasting rituals on holidays such as Ramadan and Yom Kippur, a cue to tuck into a delicious meal after a full day of abstaining from food and drink" (Wattles, 2023).

In the same milieu, another "and" is employed in the second theme in this article in a sign to the historical link between religion, ceremonials and space as we can notice below:

"Astronauts and religious leaders have attempted to imbue extraterrestrial pursuits with spiritual significance from the earliest days of spaceflight" (Wattles, 2023).

Or; as alternative connection is also inserted when we want to make a choice between two things or ideas. In this text, the writer employs the astronaut's speech to reach the idea of the possibility of his fasting according to any international time referring to the flexibility and the ability to choose in the teachings of Islam as we can note below:

“Alneyadi also told reporters during a news conference in Dubai in February that he could fast according to Greenwich Mean Time, or Coordinated Universal Time, which is used as the official time zone on the space station” (Wattles, 2023).

In the sense of exception, *but* is introduced as a conjunction tool to express that Jewish religion permits postponing religious sermons in a sign to the flexibility of Judaism in many conditions and one of them is travelling to space as illustrated below:

“Rabbi Dovid Heber,Star-K in 2007, simply said that ideally, one should not travel to outer space.” But, “if one must go, there are a number of different options that would satisfy the religious requirements” (Wattles, 2023).

The rest of the content includes active sentences to strengthen the role of subjects and objects as active characters who have the responsibility to make the event related to space, religion, time and sermons.

4.3.3 Stylistics

This section deals with the choice of words based on this text. Various proper names are introduced in this article to spotlight the religious astronauts who travel to space throughout history to make that link between their work and the flexibility of their religions.

Moreover, many abstract nouns are mentioned, such as Ramadan, fasting, Yom Kippur, orbit, Passover, Hanukkah, sun’s clockwork, Eid al-Fitr, Eid al-Adha and annual pilgrimage to refer to the religious sermons which are coincided with space flights and had Muslims or Jewish astronauts on board. Gerunds, such as abstaining, orbiting, floating, reading, landing, traveling and changing are also employed in this text for many reasons. They are employed as subjects and objects referring to actions are coincided with astronauts in their historical mission to space.

4.3.4 Rhetoric

This section utilizes graphics and metaphors as elements in the rhetorical argument. Graphic represents the type of writing in any text. The writer starts all the authorizes mentioned in the article with a capital letter as well as the all the letters in the beginning of sentences and paragraphs. Many dates are underlined in this text for more emphasis on timing, such as arrival at the space station, Ramadan and January, A 2002 responsum, crewmates in 2021, and Star-K in 2007, . they actually refer to the dates of spaceflights through history. By clicking on these underlined dates, they will take you to another page that is loaded with more details.

Furthermore, the writer underlines important details about the link between religion and space, such as “attempted to imbue extraterrestrial pursuits with spiritual significance” (Wattles, 2023). The headline is printed with 24 font size, black, bolded and located in the top centre of the page. The rest text is printed with 13.5 font size.

In metaphor, the writer describes the spaceflights in two ways according to the selected authorizes in this text, such as:

“As Alneyadi explained, as an astronaut he fits the definition of a “traveler,” excusing him from attempting to observe Ramadan at the same time as Earth-bound Muslims” (Wattles, 2023).

In the above extract, the writer employs the word “traveler” to resemble the astronaut’s life to travel, indicating that the teachings of fasting do not apply to him.

5. Conclusions

The approach to discourse analysis founded on the van Dijk model contributes to the advancement of discourse analysis with respect to both the linguistic and media aspects of discourse.

The three text structures investigated by van Dijk's CDA approach in this study generated three structures. First of all, the macrostructures or theme in this study is around the connection between the archives of space travel and religions, precisely Islam and Judaism by giving many examples and this is actually not related with the rest content of the text.

Second, the superstructure or scheme is about the introduction which is opened with the mentioning of the most important rituals of these two religions, Ramadan and Yom Kippur; the body which presents some Islamic details about the main character of this text; Sultan Alneyadi who is compared with other non-Muslim astronauts in relation to their religious rituals and the closing section which reveals that there is no correlation between the article's title, introduction, and body. In fact, the writer indicates the topic in the question form to demonstrate another one which is about the Islamic obligatory rituals.

Third and finally, the microstructure includes semantic, syntactic, stylistic and rhetoric analysis. Regarding the semantic analysis, it promotes flashback about earlier spaceflights for religious astronauts and people of both Islam and Judaism. In syntactic terms, The material contains active sentences to highlight the function of subjects and objects as active characters who are responsible for making the event. In the stylistic analysis, this article highlights proper nouns to refer to the religious astronauts who have been to space to show the flexibility of their religions. In rhetoric analysis, all the authorizations mentioned in the article begin with a capital letter, as do all the letters at the start of sentences and paragraphs to highlight the most important events in this article.

References:

- Paniagua, J., Garcia, G., Cremades, P., & Alegre, E. (2007). Critical discourse analysis of media texts. UNIVERSITAT DE VALÈNCIA
- Baker, P., Gabrielatos, C., & McEnery, T. (2013). *Discourse analysis and media attitudes: The representation of Islam in the British press*. Cambridge University Press.
- Brasher, B. E. (2004). Give me that online religion. New Brunswick: Rutgers University Press.
- Emirati astronaut Hazzaa Al-Mansoori marks another milestone on Arab space mission. (2023, May, 20). <https://www.arabnews.com/node/2279591/middle-east>
- Fathan, D. (2018). Analisis wacana kritis berita “kematian terduga teroris Siyono” di Harian Solopos. Al-Balagh: Jurnal Dakwah Dan Komunikasi, 3(1), 45–72.
- Gartner, B. (2007). “How does an islamic astronaut face mecca in orbit?” Christian science monitor. <https://bit.ly/2L8hRAm>
- Ghareeb E (ed.) (1983) Split vision: The portrayal of Arabs in the American news media. Washington, DC: American-Arab Affairs Council.
- Hoskins, S. (2010). Discourse structure analysis: An introduction to procedures and implications for instruction. <http://dx.doi.org/10.1080/19388078509557846>
- Jahedi, M., & Abdullah, F. (2004). "An overview of focal approaches of critical discourse analysis," Int. J. of Edu. & Lit. Stud., vol. 2, no. 4, pp. 29-36
- Kim S-H, Han M, Choi D-H, et al. (2012) Attribute agenda setting, priming and the media's influence on how to think about a controversial issue. International Communication Gazette 74(1): 43–59
- Paltridge, P. (2012). Discourse analysis An introduction. Bloomsbury academic
- Richardson, J. (2004). (Mis) Representing islam. *(Mis) Representing islam*, 1-286.
- van Dijk, T. (1977). Semantic macro-structure and knowledge frames in discourse comprehension. In M. A. Just & R. A. Carpenter (Eds.), *Cognitive processes in comprehension*. Hillsdale, NJ: Erlbaum.
- van Dijk TA (1993) Principles of critical discourse analysis. *Discourse and Society* 4(2): 249–283
- van Dijk, T. A. (2014a). *Discourse and knowledge: A sociocognitive approach*. Cambridge: CUP
- van Dijk, T. A. (2014b). Discourse-cognition-society: Current state and prospects of the socio-cognitive approach to discourse. In C. Hart & P. Cap (Eds.), *Contemporary critical discourse studies* (pp. 121–146). London: Bloomsbury
- van Dijk, T. A. (2015a). Critical discourse studies: A sociocognitive approach. In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse studies* (pp. 62–85). London: Sage.
- van Dijk, T. A. (2012b). Discourse and knowledge. In J. Gee (Ed.), *The Routledge handbook of discourse analysis* (pp. 587–603). Abingdon: Routledge.
- Waldek, S. (2023). Sultan Al Neyadi to perform 1st spacewalk by an Arab astronaut this month. <https://www.space.com/sultan-al-neyadi-first-spacewalk-arab-astronaut>
- Wattles, J. (2023). Astronaut Sultan Alneyadi sees 16 sunsets daily on the space station. How will he observe Ramadan?. <file:///E:/cda%20data/How%20Muslim%20astronauts%20observe%20Ramadan%20in%20space%20%20CNN.html>