

ISLAMIC MODERNITY IN MALAYSIA-RUSSIA SPACE COOPERATION: A CRITICAL DISCOURSE ANALYSIS

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Abstract

This study examines how Malaysia–Russia space cooperation is discursively constructed in government documents, media reports, official speeches, and religious guidelines associated with Malaysia's National Astronaut Programme. Employing Norman Fairclough's Critical Discourse Analysis (CDA), this research analyzes the three dimensions of discourse: text, discursive practice, and social practice. The findings reveal that the Astronaut Programme functions not merely as a scientific project but as a diplomatic instrument that constructs Malaysia's image as a modern Muslim nation capable of integrating Islamic values with scientific and technological advancement. The discourse surrounding Sheikh Muszaphar Shukor's mission to the International Space Station (ISS) repeatedly represents the astronaut as a symbol of national pride, religious identity, and scientific progress. Through lexical choices such as "Muslim astronaut," "national achievement," and "strategic partnership," the texts construct a narrative in which Islam and science are presented as mutually supportive rather than contradictory. The analysis also demonstrates that the mission served as a form of space diplomacy, strengthening bilateral relations between Malaysia and Russia while promoting a global image of Islam compatible with modern scientific development. At the level of social practice, the discourse reflects broader negotiations concerning Islamic modernity, national identity, and Malaysia's position within the international community. This study contributes to the understanding of how language constructs meaning, identity, and power relations in contemporary science diplomacy and religious discourse.

Keywords: Astronaut Program; Malaysia–Russia Relations; Critical Discourse Analysis; Space Diplomacy; Muslim Modernity; Islamic Identity

1. Introduction

In 2007, Malaysia and Russia strengthened their diplomatic relations in science and technology through a space mission. This endeavor was not merely a scientific activity but also a means of demonstrating technological capability, international partnership, and national prestige. Sheikh Muszaphar Shukor became Malaysia's first astronaut to travel into outer space aboard the Russian Soyuz spacecraft to the International Space Station (ISS). The mission was the result of strategic cooperation between Malaysia and Russia and

subsequently became a symbol of scientific achievement, diplomatic relations, and national pride.

The primary objective of this scientific mission was to conduct biotechnology and pharmaceutical experiments in a microgravity environment. What makes this mission particularly noteworthy is that, unlike most astronaut programs, it generated global discussions regarding the practice of Islamic religious obligations in outer space, including determining the direction of the qibla, prayer times, and fasting observance. These discussions emerged because Sheikh Muszaphar Shukor was a Muslim and the mission coincided with the holy month of Ramadan. As a Muslim astronaut, Sheikh Muszaphar faced the challenge of balancing his professional responsibilities with his religious obligations. Consequently, questions arose regarding how he could simultaneously maintain his professionalism and religiosity in an extraterrestrial environment.

This study argues that a contestation of meaning emerged around the figure of Sheikh Muszaphar Shukor as a social actor. Through his representation, texts produced and reproduced narratives of national identity, the ideology of Muslim modernity, and the legitimacy of Malaysia's position and influence as a Muslim nation actively engaged in global scientific and technological development. Alhattab and Jamil (2024), for example, investigated contemporary discourses on the relationship between Islam and science, arguing that religion and scientific knowledge are not contradictory entities but can coexist harmoniously in the development of modern Muslim civilization.

In the context of space exploration, Traphagan (2020) demonstrated that the relationship between religion and space exploration is not confined to Western traditions but also develops within non-Western societies, including Muslim communities. Research specifically addressing Malaysia's Astronaut Programme was conducted by Darren C. Zook (2010), who argued that the formulation of religious guidelines for Muslim astronauts was not merely a technical religious matter but was closely connected to political dynamics, national identity formation, and Malaysia's position as a contemporary modern society. Nevertheless, his study focused primarily on political and religious dimensions.

Similarly, Muratbekova (2023) demonstrated that scientific cooperation can function as an instrument of diplomacy and soft power within the framework of science diplomacy. Scientific activities, therefore, contribute not only to knowledge production but also to political influence and international relations.

Critical Discourse Analysis has predominantly been applied to political discourse, focusing on domestic issues such as political speeches, media representations, national identity, and public policy. Existing studies have also tended to emphasize philosophical and epistemological concerns or focus on international cooperation and state soft power. Accordingly, this study addresses the following research questions "How does the discourse surrounding Malaysia's Astronaut Programme reflect the relationship between language, ideology, and power in the construction of national identity, Muslim modernity, and international diplomacy?"

2. Literature Review

2.1. Space Diplomacy

Malaysia's Astronaut Programme can be understood as a form of space diplomacy because it involved technology transfer and scientific cooperation. The bilateral collaboration between Malaysia and Russia contributed significantly to the construction of Malaysia's international image and global standing.

Olsakova (2024) argues that modern science diplomacy has evolved beyond mere scientific cooperation to become a political instrument that shapes national identity, national interests, and geopolitical positioning in international relations. Similarly, Cross and Pekkanen (2023) describe space diplomacy as a new arena of international relations that brings together communication, persuasion, negotiation, and interaction among global actors in the governance of outer space. This view is supported by Polkowska (2020), who argues that space diplomacy has developed as a medium for communication and knowledge exchange among states, strengthening cooperation in science, technology, and innovation.

Islamic modernity refers to the efforts of Muslim societies to integrate Islamic values with scientific advancement, technological development, and social modernization. Houston (2025) explains that the concept of the *ummah* within Islamic organizations is constructed through discursive strategies that create collective identity and global political legitimacy.

2.3. Norman Fairclough's Critical Discourse Analysis

One of the most influential contributions to Critical Discourse Analysis (CDA) comes from Norman Fairclough 2003. He argues that language never exists independently because every text is produced, distributed, and consumed within specific social situations. Therefore, linguistic analysis must explain the relationship between linguistic structures, communicative processes, and broader social structures.

Lu and Zhou (2024) similarly argue that diplomatic speeches constitute representations of state ideology containing power relations and political interests that can be analyzed through discourse analysis. It found that lexical and syntactic strategies in diplomatic language function to strengthen a state's discursive power and shape its national image in the eyes of the international community. Fairclough views language as a non-neutral social practice. Language plays a role in constructing, maintaining, and challenging power relations within society.

Consequently, when Malaysia's Astronaut Programme is examined through Critical Discourse Analysis, attention shifts beyond the success of the space mission itself toward the ways in which government speeches, official documents, media reports, and public statements construct particular meanings concerning Malaysia–Russia bilateral relations, scientific advancement, modern Muslim identity, and Malaysia's position within the global order.

Language constructs meaning, identity, legitimacy, and power relations. To understand these processes comprehensively, Fairclough developed a three-dimensional model consisting of text analysis, discursive practice analysis, and social practice analysis.

2.3.1. Text Analysis

Text analysis focuses on the micro-level structures of discourse, including vocabulary, grammar, sentence structure, transitivity, modality, nominalization, metaphor, cohesion, and rhetorical strategies. Fairclough 1992 maintains that these linguistic elements are not merely technical features of language but social choices that shape how individuals, events, institutions, and social realities are represented. Through language, speakers and writers select particular perspectives while excluding alternative interpretations. Thus, textual analysis seeks to reveal how linguistic choices contribute to the production and reproduction of ideological meanings.

2.3.2. Discursive Practice Analysis

Discursive practice is based on the assumption that texts are never neutral as a form of social practice that is shaped by social structure, power relations and ideological process. One of the most important concepts within discursive practice is intertextuality. Fairclough 1992, adopts the view that every text is connected to other existing or previous texts. Political speeches and news reports frequently quote, reference, or challenge previously established discourses. Intertextuality demonstrates that the meaning of a text is constructed through its relationship with other texts and therefore cannot be understood in isolation.

2.3.3 Social Practice Analysis

Social practice analysis is grounded in the assumption that discourse is embedded within broader social processes and ideological struggles. Every text emerges within a specific historical and sociocultural context, and its meaning is influenced by existing institutions, political systems, economic conditions, and cultural values. Fairclough 1992 also emphasizes the importance of considering historical and institutional contexts. Social practices are shaped by broader social transformations such as globalization, technological development, political change, religious movements, and economic restructuring. Consequently, discourse analysis must examine how specific texts relate to these wider social processes. For example, diplomatic discourse cannot be understood solely as a collection of political statements; it must be analyzed within the context of international relations, geopolitical interests, national identity formation, and global power dynamics. Similarly, religious discourse must be examined in relation to social values, institutional authority, and cultural traditions.

Wodak and Meyer (2023) argue that contemporary Critical Discourse Studies increasingly focus on the interaction between discourse and social structures, particularly regarding issues of identity, ideology, and inequality. Hart (2023) further demonstrates that discourse shapes public perceptions of political legitimacy, scientific authority, and cultural identity by linking linguistic representation to wider social contexts.

2.4. Islam and Science: A Theoretical Perspective

According to Seyyed Hossein Nasr (2006), the Islamic worldview does not separate scientific knowledge from spiritual values. Nasr argues that classical Islamic civilization developed science within a framework of *tawhid* (the unity of God), where the study of nature was considered a means of understanding divine wisdom. Consequently, scientific activities were not regarded as secular enterprises detached from religion but as intellectual endeavors connected to ethical and spiritual responsibilities. From the perspective of social practice, the astronaut mission can be interpreted as part of Malaysia's effort to construct an image of **Islamic modernity**, demonstrating that Islamic values are compatible with scientific advancement, technological innovation, and global participation. At the same time, the mission reflected broader geopolitical and diplomatic interests. Malaysia–Russia cooperation in the space sector was frequently represented through expressions such as *strategic partnership*, *scientific cooperation*, *technology transfer*, and *international collaboration*. These discursive choices contributed to the construction of a narrative portraying Malaysia as an active participant in global scientific networks and international diplomacy. Thus, the astronaut mission functioned not only as a scientific project but also as a form of **space diplomacy** and **soft power**, enhancing Malaysia's international visibility and prestige.

3. Research Methodology

This study adopts a qualitative research design employing Norman Fairclough's Critical Discourse Analysis (CDA) as its primary analytical framework. Fairclough's framework provides a comprehensive approach for understanding how these elements are articulated and legitimized through language. It is considered appropriate because the study seeks to explore how language constructs meanings, identities, and power relations within the discourse surrounding Malaysia's National Astronaut Programme.

Cresswell (2018) contributed qualitative research foundation which present CDA is conducted inquiry relevant to attention phenomenon within the particular context. He informs the process of collecting data, data analysis and validation as primary instrument for interpreting the textual data. The researcher demonstrates how lexical choices, grammatical structure, evaluation and representation.

Data were collected through document analysis, official government documents, policy statements, speeches, media reports, press releases, and religious guidelines related to Malaysia's National Astronaut Programme and the 2007 mission of Sheikh Muszaphar Shukor to the International Space Station (ISS). These texts were selected because they represent major sites through which narratives concerning scientific achievement, Islamic identity, and international cooperation were communicated to both domestic and global audiences. The analysis was conducted following Fairclough's three-dimensional model of discourse. The first dimension, textual analysis, focused on the linguistic features of the selected texts. The second dimension, discursive practice analysis, examined how the texts were produced, circulated, and interpreted. This stage explored the institutional contexts in which the texts emerged and the communicative purposes they served. Government statements, media reports, and religious guidelines were analyzed not merely as isolated texts but as interconnected discursive practices. Particular attention was paid to intertextuality and interdiscursivity, as many texts incorporated elements of scientific discourse, diplomatic discourse, religious discourse, and nationalist narratives simultaneously.

The third dimension, social practice analysis, situated the discourse within broader social, political, and cultural contexts. At this level, the study explored how the astronaut mission reflected larger issues concerning Islamic modernity, science diplomacy, and nation-building. The analysis examined how Malaysia positioned itself as a technologically advanced Muslim nation capable of participating in global scientific initiatives while maintaining its religious identity.

4. Findings and Discussion

4.1 Constructing the Muslim Astronaut: Between Science and Religious Identity

Being a moslem and going to into space is a great responsibility because I represent both country and my religion

Being a Muslim should never stop anyone from exploring science or going into space

I hope my mission will inspire young Muslim to pursue science while remaining faithful to their religious values (Shekh Muszaphar Sukhor)

One of the most prominent findings emerging from the corpus concerns the recurring representation of Sheikh Muszaphar Shukor as *Malaysia's first Muslim astronaut*. At first glance, this expression appears to be a simple descriptive phrase. However, from Fairclough's

perspective, lexical choices are never neutral because they reflect particular ideological positions and social interests (Fairclough, 2003). The consistent inclusion of the adjective *Muslim* before *astronaut* reveals an important discursive strategy. Rather than emphasizing only professional competence or scientific expertise, the discourse foregrounds religious identity as an integral component of the astronaut's public image.

Following Brooke (2014), scientific development acquires particular meaning through the social, cultural, political and religious context.

This representation is significant because it transforms Sheikh Muszaphar from an individual scientific actor into a symbolic figure embodying broader cultural and political aspirations. The discourse does not merely communicate that a Malaysian citizen traveled to space; instead, it repeatedly highlights that a Muslim successfully participated in one of the most technologically sophisticated domains of human achievement. Through this linguistic construction, scientific accomplishment becomes intertwined with religious identity.

The significance of this representation becomes even more apparent when considered within wider debates concerning the relationship between Islam and modernity. For decades, modernization theories frequently assumed that scientific progress and religious commitment existed in tension with one another. Yet the discourse surrounding Malaysia's National Astronaut Programme appears to challenge such assumptions. Throughout government speeches, media reports, and institutional publications, Islam is not presented as a limitation to scientific advancement. On the contrary, religious identity becomes a source of legitimacy and pride.

The repeated portrayal of Sheikh Muszaphar as a practicing Muslim who simultaneously conducts scientific experiments in a microgravity environment communicates a powerful message about the compatibility of faith and science. The astronaut is therefore constructed as living evidence that participation in global scientific endeavors does not require the abandonment of religious commitments. In this sense, the discourse contributes to what many contemporary scholars describe as Islamic modernity, a framework in which religious values and technological progress coexist rather than conflict.

From a textual perspective, this ideological position is reinforced through recurring expressions such as *scientific achievement*, *national pride*, *Islamic values*, and *global cooperation*. These lexical patterns create semantic associations linking Islam with progress, innovation, and international engagement. The resulting discourse positions Malaysia as a nation capable of embracing technological advancement while maintaining its Islamic identity.

4.2. Scientific Achievement as a Narrative of National Progress

I will be representing Malaysia to go to space...I will be conducting several experiments in space my priority is conducting experiment.

The Malaysian Astronaut Program represents a historic milestone that demonstrates the nation's scientific excellence while upholding Islamic values.

I hope to be the eyes and ears of all the Malaysian people (Shekh Muszaphar Shukor 2007)

Beyond the representation of Sheikh Muszaphar himself, the findings reveal that the astronaut mission was consistently framed as a national accomplishment rather than an individual success. Official speeches and media reports repeatedly employed expressions such as *national achievement*, *national development*, *technological advancement*, and *Malaysia's scientific capability*. Such linguistic choices contribute to the construction of a collective

narrative in which the mission symbolizes the aspirations and achievements of the nation as a whole.

Fairclough argues that discourse plays an important role in constructing social identities and collective meanings. The analysis further demonstrates that agency is carefully distributed within the texts. Statements frequently position Malaysia as the active actor responsible for success. Phrases such as *Malaysia successfully sent its first astronaut into space* foreground the nation itself as the principal agent of achievement. Through these grammatical structures, national capability and governmental effectiveness are emphasized. Consequently, the astronaut mission becomes more than a scientific event. It evolves into a symbolic narrative of modernization, national ambition, and international recognition, identity, national prestige.

4.3 The Discursive Production of Malaysia–Russia Space Diplomacy

Malaysia and Russia share a long history engagement..We established the Russia-Malaysia Business Council (Anwar Ibrahim di Eastern Economic Forum) express my deepest appreciation to excellency for your warm welcome and your kind words about my country (vladimir Putin 2007)
This autumn a Malaysia Astronout is due to travel to the international Space Station (Vladimir Putin 2007)

The analysis of discursive practices reveals that the meaning of the astronaut mission was not produced by a single institution. Rather, it emerged through the interaction of governmental agencies, media organizations, scientific institutions, and religious authorities. Each institution contributed specific perspectives, yet together they produced a remarkably coherent narrative emphasizing cooperation, progress, and mutual benefit.

A particularly notable feature of the corpus is the repeated use of diplomatic expressions such as *strategic partnership*, *scientific cooperation*, *technology transfer*, and *international collaboration*. These terms appear consistently across official documents and media reports, suggesting a coordinated effort to frame Malaysia–Russia relations in positive and constructive terms.

From Fairclough's perspective, such repetition is significant because discourse becomes powerful through circulation and normalization. The more frequently particular expressions appear across different texts, the more natural and unquestioned they become. Over time, diplomatic cooperation comes to be perceived as an obvious and beneficial reality rather than a politically constructed narrative.

The findings therefore indicate that the astronaut mission functioned as a form of space diplomacy. Although the mission involved scientific objectives, it simultaneously served diplomatic purposes by strengthening bilateral relations between Malaysia and Russia. Through the language of partnership and cooperation, the mission was transformed into a symbol of international friendship and scientific collaboration.

4.4 Islamic Modernity as a Social Practice

At the level of social practice, perhaps the most important finding concerns the construction of Islamic modernity. The astronaut mission occurred within a broader social

context in which Muslim societies continue to negotiate questions concerning religion, science, globalization, and technological development.

The discourse analyzed in this study consistently rejects the assumption that scientific advancement requires secularization. Instead, religion and science are represented as mutually supportive domains. This position becomes particularly visible in discussions concerning prayer, fasting, and determining the direction of the qibla in outer space. Rather than presenting these issues as obstacles, official religious guidelines portray them as opportunities to demonstrate the flexibility and adaptability of Islamic teachings.

As a result, the astronaut mission becomes a symbolic arena in which contemporary Islamic identity is reimagined. Islam is represented not as a tradition confined to the past but as a dynamic framework capable of engaging with the challenges of modern scientific life. The discourse therefore constructs a vision of modernity that is neither entirely Western nor entirely secular. Instead, it reflects a distinctly Malaysian interpretation of modernization grounded in both technological progress and religious commitment.

From Fairclough's perspective, this discourse performs an ideological function. It legitimizes a particular vision of national development by presenting scientific achievement and Islamic identity as complementary rather than contradictory. Through this process, Malaysia is positioned as a model of a modern Muslim nation actively participating in global scientific and diplomatic networks while remaining committed to its religious values.

5. Conclusion

This study set out to examine how the discourse surrounding Malaysia's National Astronaut Programme constructed meanings related to Islam, science, national identity, and Malaysia–Russia diplomatic relations through the framework of Norman Fairclough's Critical Discourse Analysis. By analyzing official government documents, media reports, public statements, and religious guidelines associated with Sheikh Muszaphar Shukor's mission to the International Space Station (ISS), the study demonstrates that the astronaut programme functioned as more than a scientific and technological initiative. Viewed through Fairclough's theoretical framework, the findings confirm that language operates as a form of social practice through which identities, ideologies, and power relations are constructed and legitimized. The discourse surrounding Malaysia's National Astronaut Programme illustrates how language can transform a scientific mission into a narrative of national achievement, Islamic modernity, and international cooperation. Ultimately, the study demonstrates that discourse functions as a mediating force connecting religion, science, diplomacy, and national identity in contemporary society.

References

- Alhattab, A., & Jamil, M. (2024). Islam and science in contemporary Muslim discourse: Reassessing the harmony paradigm. *Journal of Islamic Thought and Civilization*, 14(2), 45–61.
- Brooke, J. H. (2014). *Science and religion: Some historical perspectives*. Cambridge University Press.
- Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Cross, M. K. D., & Pekkanen, S. M. (2023). Science diplomacy and international cooperation in the twenty-first century. *Global Policy*, 14(3), 412–426.
- Fairclough, N. (1992). *Discourse and social change*. Polity Press.

- Fairclough, N. (2003). *Analysing discourse: Textual analysis for social research*. Routledge.
- Hart, C. (2023). *Critical discourse studies and cognitive linguistics*. Bloomsbury.
- Houston, K. (2025). Writing and sustaining the Ummah: Reflection, alterity and strategic framing in the official discourse of the Organization of Islamic Cooperation. *Politics*, 45(4), 550–571.
- Lu, Y., & Zhou, X. (2024). A critical discourse analysis of Chinese diplomatic speeches on Chinese-US relations. *Humanities and Social Sciences Communications*, 11, 1674.
- Muratbekova, A. (2023). Science diplomacy and international scientific cooperation in contemporary international relations. *Journal of International Studies*, 16(2), 55–72.
- Nasr, S. H. (2006). *Science and civilization in Islam*. Islamic Texts Society.
- Olsakova, D. (2024). Science diplomacy and soft power in contemporary international relations. *International Politics Review*, 12(1), 88–105.
- Polkowska, M. (2020). Space diplomacy: Future perspective. *Humanities and Social Sciences*, 27(3), 121–128.
- Richardson, J. E. (2020). *Analysing newspapers: An approach from critical discourse analysis* (2nd ed.). Palgrave Macmillan.
- Traphagan, J. W. (2020). Religion and human space exploration: An anthropological perspective. *Anthropology and Humanism*, 45(2), 156–173.
- Wodak, R., & Meyer, M. (2023). *Methods of critical discourse studies* (4th ed.). SAGE Publications.
- Zook, D. C. (2010). Technology, Islam, and national identity: The Malaysian space programme and the politics of modernity. *Asian Studies Review*, 34(2), 165–180.