Research Paper

 Publisher: University of Tehran

Cite this article as: Salehi, K., Habib Zadeh Khiyaban, S., & Sabbar, Sh. (2025). Artificial Intelligence and the Future of International Law and Power, *Journal of World Sociopolitical Studies*, *9*(4), 923-958. https://doi.org/10.22059/wsps.2025.401951.1552

Artificial Intelligence and the Future of International Law and Power*

Karim Salehi[1], Simin Habib Zadeh Khiyaban[2], Shoaib Sabbar[3]

1. Associate Professor of Law, Shahrekord Branch, Islamic Azad University, Shahrekord, Iran (Corresponding Author) (Karim.Salehi@ut.ac.ir) 0000-0002-5297-4152
2. B.A. in Public Administration, Allameh Tabataba'i University, Tehran, Iran (Simin.Habibzadeh@ut.ac.ir) 0009-0007-1707-8014
3. M.A. in International Commercial Law, Islamic Azad University, Tehran, Iran (Shoaib. sabbar@ut.ac.ir) 0009-0003-8235-8515

(Received: Jun. 06, 2025 Revised: Aug. 15, 2025 Accepted: Sep. 16, 2025)

Abstract

This study investigates the way in which public discourse on social media reflects and shapes global power dynamics surrounding AI. Leveraging a corpus of approximately 21,000 English-language posts from Platform X (2021–2025), this study utilizes a computational linguistics framework—incorporating topic modeling, sentiment analysis, emotion classification, and named entity recognition—to analyze the construction of AI, interrogating its thematic narratives and affective investments across geopolitical contexts. Findings reveal a discourse shaped by U.S.–China technological rivalry, AI militarization, and infrastructural sovereignty, with strong currents of fear, anger, and skepticism. While Western powers and corporate actors dominate the narrative space, alternative discourses from the Global South emphasize digital dependency, exclusion, and justice. The emotional intensity and thematic complexity of the discourse suggest that publics are not simply reacting to geopolitical developments, but actively construct contested imaginaries of AI's role in world order. This research contributes to a growing body of literature that recognizes public discourse as a critical site of informal geopolitics and underscores the need for more inclusive, responsive, and ethically grounded AI governance frameworks.

Keywords: Artificial Intelligence, Geopolitics, Global Governance, Public Discourse, Sentiment Analysis

---

* The authors have no affiliation with any organization with a direct or indirect financial interest in the subject matter discussed in this manuscript.

Journal of **World Sociopolitical Studies**| Vol. 9| No. 4| Autumn 2025| pp. 923-958
Web Page: https://wsps.ut.ac.ir//Email: wsps@ut.ac.ir
eISSN: 2588-3127 PrintISSN: 2588-3119

1. Introduction

Technological transformations have long redefined the architecture of global power and legal authority. From the invention of the printing press to the rise of the telegraph and satellite systems, communication technologies have not only mediated, but actively constituted the spatial and temporal contours of empire, governance, and geopolitical rivalry. Among the most influential theorists of this tradition, Harold Innis advanced the argument that technologies of communication do not merely transmit power—they generate new structures of authority by privileging particular dimensions of sovereignty and control. His foundational work on 'biases' in communication—towards time (e.g., oral and religious traditions) or space (e.g., print and digital media)—suggests that media are not neutral carriers, but forceful shapers of civilizational form (Innis, 1951). As Innis observed, empires sustained by space-biased media, such as paper and electronic communication, often emphasized expansion, bureaucratic control, and mobility, whereas those governed by time-biased media, such as oral traditions and stone inscriptions, emphasized continuity, tradition, and religious authority. In this light, the ascendance of artificial intelligence signifies not merely a technological shift, but a paradigmatic transformation in the conditions of power, governance, and international legality.

In the post-Innisian tradition, scholars such as McLuhan (1964) and Carey (1989) elaborated on how communication infrastructures become regimes of perception and control, shaping how societies imagine authority, legitimacy, and risk. McLuhan's aphorism, "the medium is the message", underscores how each technological form reconfigures human agency and institutional logic in its own image. Today, AI technologies—particularly those involving machine

learning, predictive analytics, and large language models—are not simply new tools within existing frameworks of international law or power. Rather, they function as epistemic infrastructures that generate novel ontologies of governance, identity, and global order. They increasingly mediate not only how states project power, but also how legal norms are formulated, contested, and enforced. As algorithmic decision-making becomes embedded in strategic domains such as defense, diplomacy, and resource management, the architecture of international relations itself is being reengineered through non-human logics.

This conceptual shift is echoed in emerging scholarship that treats technology not as a background variable, but as a primary actor in shaping the distribution of global authority. Scholars such as Ndzendze and Marwala (2023) have explored how AI disrupts conventional international relations theories, including realism and liberalism, by decentering state-centric models of power. Instead, AI introduces a technopolitical dynamic in which algorithmic systems influence different aspects of human life (Tomraee et al., 2022), including national strategy, international diplomacy, and the production of legal norms. From autonomous weapons to algorithmic surveillance and regulatory fragmentation, AI reconfigures the traditional balance between sovereignty and cooperation, often bypassing juridical regimes in favor of technocratic governance. As Kardumyan (2025) has argued, AI's dual-use nature intensifies both collaboration and conflict, simultaneously offering opportunities for strategic advantage and posing challenges to accountability, legal universality, and normative coherence.

Moreover, the distributional asymmetries in AI development and deployment—concentrated among a few technologically

advanced states and corporate entities—reinvigorate longstanding concerns about digital colonialism and technological dependency (Nosraty et al., 2025). Scholars such as Korkmaz (2024) and Kuźmicz (2025) have emphasized that AI power is not equitably diffused; rather, it is wielded unequally through platforms, infrastructures, and governance standards that reflect the interests of dominant actors. These disparities are not only material, but epistemic and normative: they determine who defines the problems AI should solve, who has access to its benefits, and who bears the consequences of its failures. In this context, legal orders are often reactive rather than proactive, struggling to keep pace with the epistemological opacity and institutional velocity of AI systems.

Contemporary discourses surrounding AI and global governance thus resemble what Innis described as a 'monopoly of knowledge'—a condition in which control over a particular medium or system privileges certain actors and marginalizes others (Innis, 1950). In the AI domain, such monopolies are expressed not only in access to computational power and proprietary data, but also in the ability to educate people of poor countries (Rahmatian & Sharajsharifi, 2021) and shape international norms through informal influence, standard-setting, and multilateral diplomacy. For example, as Kolade (2024) has shown, AI capabilities in cybersecurity both enhance cooperative potential and exacerbate asymmetrical vulnerabilities, particularly in the absence of universally agreed governance frameworks. In such a climate, power increasingly resides not in the capacity to enforce legal norms through coercion, but in the ability to construct and legitimate technical standards that serve as de facto law.

While much scholarly attention has focused on the geopolitical strategies of states—particularly the rivalry between the United

States, China, and the European Union—the role of public discourse as a site of geopolitical meaning-making remains underexplored. The proliferation of digital platforms has enabled publics to articulate, contest, and reinterpret the significance of AI in ways that bypass official state narratives. Social media, in particular, functions as a dynamic arena of informal geopolitics, where actors ranging from activists to engineers to policy observers construct competing imaginaries of AI's role in world order. As Bode (2024) has argued, this discursive plurality challenges deterministic and state-centric models of analysis, calling instead for a more reflexive and decentralized understanding of how power operates in the age of AI.

It is within this intellectual context that the present study makes its intervention. While prior research has provided valuable insights into the geopolitical, legal, and ethical implications of AI, it has tended to emphasize elite actors—states, international organizations, and multinational corporations—as the primary drivers of AI governance. There has been limited systematic analysis of how public discourses reflect, resist, or reframe these elite narratives, particularly on platforms where discourse is rapidly evolving and emotionally invested. This is a critical omission, as publics are not merely passive observers, but active participants in shaping the legitimacy and social meaning of emerging technologies. Public sentiment, emotion, and framing contribute to the construction of AI as either a threat, a promise, or a contested resource, thereby influencing the political and legal environment in which AI systems are regulated.

To address this gap, the current study employs computational methods—including topic modeling, sentiment analysis, emotion classification, and named entity recognition—on a dataset of

approximately 21,000 English-language social media posts collected between 2021 and 2025. These posts engage explicitly with the intersection of artificial intelligence and global power. Rather than treating such content as noise or misinformation, this research conceptualizes public discourse as a critical site of meaning production, where symbolic, emotional, and normative dimensions of AI governance are negotiated in real time.

2. Previous Research

In their article Artificial Intelligence and Global Power Dynamics: Geopolitical Competition, Strategic Alliances, and the Future of AI Governance, Colther et al. (2025) investigated the geopolitical implications of AI through the lens of the conflict cycle model, which encompasses the stages of beliefs, conflict, response, and repercussion. The authors analyzed how AI has emerged as a strategic asset, reshaping economic, military, and governance domains, particularly in the context of global rivalries among China, the United States, and the European Union. Their analysis revealed that AI-driven competition has intensified trade restrictions, escalated military applications, and catalyzed divergent regulatory approaches, thereby reinforcing global technological asymmetries and deepening economic interdependencies. National governments and multinational corporations are responding through targeted investments, policy interventions, and enhanced security measures aimed at securing technological sovereignty. However, the study emphasized that differing governance models—market-oriented in the U.S., state-controlled in China, and ethics-centered in the EU—pose significant barriers to international coordination, fostering technological fragmentation and increasing systemic risks. The authors warned of long-term consequences

including the proliferation of AI-enabled surveillance systems, the rise of cybersecurity conflicts, and the entrenchment of digital authoritarianism. The paper concluded by calling for future research on global AI governance frameworks, trade diplomacy, and the normative challenges posed by AI development.

In his article *The Impact of Artificial Intelligence on International Relations: Are Current Paradigms Still Relevant?* Kardumyan (2025) investigated how AI is reshaping core dynamics in international relations (IR) and challenged the continued adequacy of traditional theoretical paradigms—namely realism, liberalism, neoliberalism, and constructivism—to interpret this transformation. The study analyzed AI's far-reaching influence across political, economic, and military-security domains, highlighting its role in shifting the global balance of power, intensifying technological arms races, and enabling novel forms of international cooperation. Kardumyan emphasized the dual-use nature of AI, which simultaneously fosters strategic advantages and generates significant legal, ethical, and political challenges, particularly in relation to international humanitarian law. The article paid particular attention to the changing nature of foreign policy decision-making, examining how AI integration is altering established state behaviors, policy formulation processes, and geopolitical strategies. Moreover, the author critically contrasted anthropocentric frameworks—centered on human agency—with emerging technocentric perspectives that prioritize the growing autonomy and influence of AI systems. Through this comparison, the paper questioned whether existing IR methodologies are equipped to analyze and explain the structural changes brought about by advanced technologies. Ultimately, the study called for a reassessment of IR theory in light of AI's accelerating geopolitical

impact, urging scholars to reconsider the assumptions underpinning their analyses in an increasingly algorithmic global order.

In his article *Equilibrating the Scales: Balancing and Power Relations in the Age of AI,* Kuźmicz (2025) examined the emergence of AI as a transformative force in global power dynamics and proposed a legal framework for mitigating the risks of technological domination. Grounded in the equilibrium model of balancing, the study theorized that AI-induced power asymmetries stem from control over resources and the capacity to influence events, both of which can be concentrated in the hands of dominant state or corporate actors. To address these imbalances, Kuźmicz (2025) adopted a proactive, theory-building methodology, drawing on legal doctrines, case studies, and interdisciplinary scholarship to identify mechanisms of legal counterbalancing. The paper introduced a structured approach to embedding balancing principles within legal and regulatory systems, with the aim of promoting fairness, accountability, and pluralism in AI governance. Particular emphasis was placed on the role of law in mediating access to AI technologies and constraining monopolistic or authoritarian control. By advancing a normative framework for legal balancing, the article contributed to the broader discourse on safeguarding democratic values and preventing systemic inequalities in the face of rapidly advancing AI capabilities. The findings offer practical and conceptual guidance for policymakers, legal scholars, and AI practitioners engaging with the evolving intersections of technology, law, and power.

In his chapter *Emerging Technologies and Power Asymmetry in International System,* Korkmaz (2024) examined the evolving role of AI in shaping global power relations, positioning it as a pivotal factor in the transition from a unipolar to a multipolar world order.

The author contextualized the discussion by tracing the historical shift from Cold War-era bipolarity, dominated by military and nuclear power, to the post-Cold War emergence of the United States as a hegemonic power. With the rise of new geopolitical actors and intensified technological competition, the chapter argued that AI has introduced a transformative layer to international power structures. Korkmaz explored how AI technologies are redefining conventional metrics of power—military capacity and economic strength—by creating new domains of strategic advantage in cybersecurity, digital governance, and information control. The analysis highlighted that states with advanced AI capabilities are not only enhancing their national competitiveness, but are also challenging established international norms, institutions, and diplomatic practices. This reconfiguration of global power asymmetry, driven by technological leadership, necessitates a rethinking of traditional approaches to diplomacy and conflict management. The chapter concluded that AI's role in global affairs goes beyond mere technical enhancement, signifying a foundational transformation in how power is projected and contested in the international system.

In her article *AI Technologies and International Relations: Do We Need New Analytical Frameworks?* Bode (2024) explored the evolving intersection between AI and the field of international relations (IR), critically assessing how existing conceptual frameworks are applied to this rapidly developing domain. Through a structured literature review, the author identified four core themes dominating the current scholarship: the balance of power, disinformation, governance, and ethics. Bode noted that much of this research draws upon traditional IR paradigms, suggesting a continuity in how states, power dynamics, and strategic behavior

are analyzed in the context of AI technologies. However, she also highlighted three emerging research trajectories that signal a shift within the field: the reconceptualization of technology beyond deterministic models, critical perspectives that move past the dominant narrative of an AI arms race, and analytical approaches that foreground a more diverse set of actors, including non-state and transnational entities. These emerging strands challenge established theoretical boundaries and call for a more nuanced, interdisciplinary engagement with AI as a transformative force in global affairs. Bode concluded that while traditional frameworks remain useful, there is a growing imperative to adapt or supplement them to better capture the complexity and novelty of AI's influence on international relations.

In their chapter *Generative Artificial Intelligence in the System of International Relations: Risks, Opportunities, and Regulations,* Belosludtsev and Dziuba (2024) examined the growing influence of AI—particularly generative AI—on global power relations, diplomacy, and international policymaking. Framing AI as both a transformative tool and a source of emerging geopolitical risk, the authors analyzed four central dimensions: AI's role in optimizing diplomatic engagements, influencing the formulation of foreign policy, redistributing global power structures, and introducing new strategic and ethical challenges. The chapter highlighted the absence of universally accepted regulatory frameworks for AI and raised concerns about technological disparities that could deepen international inequalities. Key issues included the lack of transparency in AI algorithms, risks to accountability, and the difficulty of achieving coordinated global governance due to conflicting national priorities. The authors argued that while AI presents significant

opportunities for more effective and strategic international engagement, it simultaneously introduces vulnerabilities in terms of ethical integrity, algorithmic opacity, and geopolitical competition. They concluded by advocating for the development of international norms and legal instruments grounded in ethical principles to ensure responsible and equitable AI governance. Their analysis called for sustained global cooperation to mitigate risks and to institutionalize standards that support transparency, fairness, and mutual security in the evolving AI order.

In their article *AI, International Relations & Religion,* Chatzivasileiou et al. (2024) examined the complex interplay between AI, diplomacy, and religious frameworks—particularly within the context of Christianity. The study envisioned a future in which human-machine collaboration enhances diplomatic decision-making and fosters peaceful coexistence. Central to their argument is the notion of AI as a potential independent arbiter capable of identifying cultural and political barriers, thereby facilitating the resolution of long-standing geopolitical conflicts through algorithmically derived common ground. While acknowledging the transformative potential of AI in conflict resolution, peacebuilding, and diplomacy, the authors remained cautious about the uncertainties of these outcomes and the risks of over-reliance on seemingly infallible AI entities. The article delved into AI's influence on ethical norms, religious authority, and humanitarian action, emphasizing the tensions between technological autonomy and traditional religious or cultural values. Furthermore, it addressed the importance of cultural sensitivity in algorithmic design and warned of the dangers posed by algorithmic bias and lack of inclusivity. The authors concluded by advocating for collaborative,

cross-sectoral efforts to develop ethical standards and governance mechanisms that ensure that AI technologies serve as inclusive tools for diplomacy and human development, rather than reinforcing structural inequities or undermining religious and cultural institutions.

In her article *Artificial Intelligence and Global Security: Strengthening International Cooperation and Diplomatic Relations,* Kolade (2024) investigated the dual impact of AI on global security, emphasizing both its operational advantages and the geopolitical and ethical challenges it introduces. Utilizing a mixed-methods approach, the study explored how AI can serve as a catalyst for enhanced diplomatic engagement and multilateral cooperation, particularly through improvements in cybersecurity and threat detection. Empirical data highlighted a modest increase in AI-driven cybersecurity efficacy—detection rates improved from 86% in 2021 to 88.25% in 2023, while mitigation rates rose from 80.75% to 83.75%. However, these gains were tempered by a concurrent rise in AI-enabled cyberattacks, which grew from 11.25 to 16.25 incidents over the same period, reflecting the technology's double-edged nature. The analysis identified fragmented global AI governance and rising geopolitical tensions as key barriers to effective collaboration, stressing the need for comprehensive international frameworks grounded in ethical principles. Kolade argued that promoting transparency, accountability, and cross-border cooperation in AI development and deployment is essential to mitigating risks and advancing global stability. The article concluded that ethical AI governance must underpin future diplomatic and security architectures to ensure AI serves as a force for collective security rather than conflict escalation.

In their book *Artificial Intelligence and International Relations*

Theories, Ndzendze and Marwala (2023) provided a comprehensive and theory-driven examination of the transformative implications of AI for the field of international relations (IR). Through a systematic analysis of nine theoretical paradigms—including realism, liberalism, feminism, postcolonial theory, and green theory—the authors investigated the ways in which AI technologies challenge, reinforce, or reshape foundational assumptions about power, conflict, cooperation, and global governance. The book employed a multi-temporal framework, addressing AI's historical evolution, contemporary impacts, and future trajectories in shaping international systems and actor behavior. Drawing on original datasets and empirically grounded case studies, the authors illustrated how AI influences both state and non-state actors, disrupts traditional diplomatic practices, and reconfigures ethical and normative debates within IR. A notable contribution of the work is its emphasis on the epistemological and ontological implications of AI in global politics, especially how algorithms, automation, and machine learning complicate notions of agency, accountability, and authority. By bridging theoretical discourse with technological realities, the book offered a forward-looking lens on the dynamic and often under-theorized nexus between AI and international political thought. It ultimately served as both a critique and extension of established IR theories in light of AI's accelerating influence.

In their chapter Questions of Power over (and Control of) Social, Political, Economic, and Cultural Dimensions of Artificial Intelligence in Public Relations and Strategic Communication, Kruckeberg and Vujnovic (2024) offered a forward-looking normative analysis of how AI is expected to

reshape public relations (PR) and strategic communication by the year 2050. While acknowledging the speculative nature of long-term projections, the authors emphasized AI's inevitable and disruptive role across multiple domains of global society—including social relations, economic systems, political institutions, and cultural practices. The chapter positioned PR professionals at the intersection of these transformations, arguing that their roles must evolve to meet the moral, ethical, and strategic demands of an AI-driven future. The authors explored the tension between increasing machine autonomy and the enduring value of human intuition, highlighting that, despite AI's growing sophistication, human-centered judgment and ethical reasoning will remain indispensable in strategic communication. They also raised critical concerns about power and control in relation to AI, urging practitioners to reflect on who governs these technologies and whose interests they serve. Ultimately, the chapter called for a recalibration of PR strategies to maximize AI's benefits, while mitigating its risks, emphasizing the need for deliberate, ethically grounded approaches to AI integration in communication practices.

In his article *AI, Great Power Competition & National Security,* Schmidt (2022) analyzed how recent advancements in AI are reshaping both global commercial competition and the international security landscape. He emphasized that foreign-controlled digital platforms pose strategic risks to democratic societies, particularly the United States, due to their open digital ecosystems and insufficient cybersecurity infrastructure. Schmidt argued that AI is not only amplifying existing national security threats, but also transforming how states exert influence and coercion, thus complicating deterrence dynamics and crisis stability. In the military domain, AI was presented as a disruptive force, capable of enhancing cyber operations, conventional warfare,

and nuclear command and control systems, with potentially destabilizing effects. The article warned that this increasing unpredictability in security relationships among rival states could raise the risk of escalation in future conflicts. Despite the intensifying rivalry between the United States and China, Schmidt called for a dual approach: selective technological decoupling to protect critical assets, alongside continued bilateral cooperation in mutually beneficial domains. He concluded by urging the development of a coherent national AI strategy for the coming decade, one that maintains U.S. leadership in technological innovation, while safeguarding national security and democratic values.

In his article *Artificial Intelligence, International Competition, and the Balance of Power,* Horowitz (2018) examined the transformative yet uncertain role of AI in reshaping international competition and military power. He argued that AI, particularly in its advanced narrow applications, functions more like a foundational 'enabling' technology—comparable to electricity or the combustion engine—rather than a discrete weapon system. This characterization highlights the broad, cross-sectoral implications of AI, while also underscoring the difficulty in evaluating its long-term impact due to the early stage of its development and adoption. Horowitz explored how organizational choices and doctrinal innovation will be critical in shaping how AI influences national security. He considered two divergent trajectories: one in which rapid private-sector innovation leads to widespread diffusion of military AI capabilities, thereby reducing first-mover advantages; and another in which the translation of commercial AI into military contexts proves difficult, preserving or even amplifying early advantages for technologically advanced powers like the United States and China. The article concluded with a critical assessment

of U.S. military discourse, noting a disconnect between strategic rhetoric and actual investment levels in AI development. Horowitz emphasized the need for adaptive policy and institutional reform to align national defense priorities with the evolving AI landscape, especially in the face of rapid global technological change.

3. Method

This study employed a computational social science approach to analyze public discourse on the relationship between AI and global power relations. The dataset consisted of 21,486 English-language posts gathered from Platform X, which is known for hosting a wide range of user-generated content on serious issues. Data were collected between January 2021 and March 2025 through a combination of keyword filtering, platform-specific scraping tools, and manual validation. Posts were retained only if they directly addressed themes related to geopolitics, state actors, governance, sovereignty, militarization, or global inequality in the context of AI. Each entry was annotated with metadata including timestamp, platform source, regional origin (when available), and the presence of topical keywords or hashtags. Posts that were purely technical, promotional, or unrelated to AI's societal and political dimensions were excluded during the sampling phase.

The corpus underwent extensive preprocessing prior to analysis. All posts were cleaned and normalized using standard natural language processing (NLP) techniques. This included lowercasing, tokenization, stopword removal, punctuation stripping, and lemmatization using the spaCy library (version 3.5.0). Posts containing fewer than 25 meaningful tokens were discarded to ensure semantic richness. The cleaned corpus comprised approximately 8.9 million tokens. Following preprocessing, Latent

Dirichlet Allocation (LDA) (Jelodar et al., 2019) was used to extract latent thematic structures across the dataset. A seven-topic solution was selected based on coherence score optimization and human interpretability. Each post was assigned probabilistic scores for topic membership, enabling both discrete and proportional topic classification.

In addition to topic modeling, the study incorporated sentiment and emotion analysis to evaluate the affective orientation of the discourse. Sentiment polarity was calculated using the VADER sentiment analysis tool, which is well-suited for short, informal texts such as social media posts. This produced compound sentiment scores ranging from –1 (most negative) to +1 (most positive). Emotion classification was performed using a BERT-based transformer model fine-tuned on emotion-labeled corpora. Posts were categorized into seven primary emotional classes: fear, anger, anticipation, trust, sadness/disgust, joy/optimism, and surprise. Named Entity Recognition (NER) was conducted using the en_core_web_lgmodel from spaCy to identify state actors, organizations, and geopolitical terms. Geo-locational analysis was based on available metadata and contextual inferences from user-generated content. Together, these computational methods provided a multidimensional perspective on how AI is discursively positioned within global power imaginaries.

4. Findings

4. 1. Descriptive Overview

The dataset used in this study comprised 21,486 English-language posts collected from Platform X, covering the period from January 2021 to March 2025. These posts were drawn from publicly

accessible user-generated content. All posts were manually filtered to ensure that they pertained to the thematic intersection of artificial intelligence and global power dynamics. The sampling method emphasized relevance to geopolitical, strategic, and normative discourses rather than mere mention of artificial intelligence in isolation.

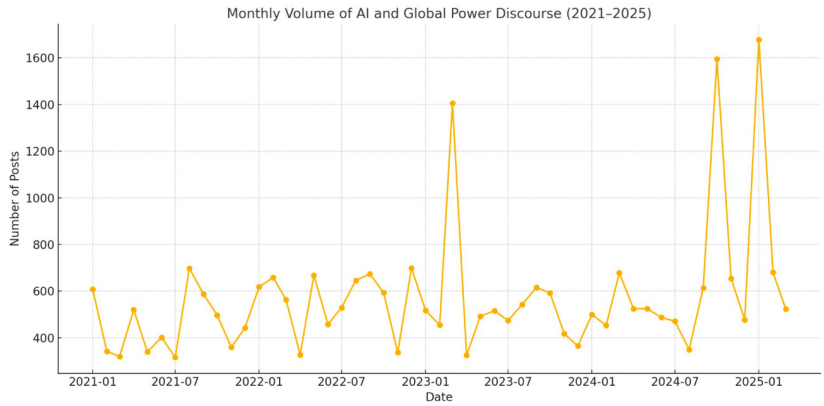
Each post was annotated with metadata fields including publication timestamp, user region (when available), platform source, and presence of keywords related to national actors, power structures, and technology policy. Some posts consisted of concise commentary or reactions, while others reflected more in-depth discussions and arguments about policy, governance, or international rivalry.

All textual data underwent a rigorous preprocessing pipeline. This included language filtering (to confirm English-only content), tokenization, lowercasing, stopword removal, punctuation stripping, and lemmatization. Posts containing fewer than 25 meaningful tokens were excluded to avoid low-content or noise-dominated entries. The cleaned corpus consisted of approximately 8.9 million tokens.

The temporal distribution of the posts revealed key patterns in the volume of public discourse surrounding artificial intelligence and its relation to global power. As shown in the figure below, engagement levels were not uniform over time. While baseline activity remained relatively steady throughout most of the period, distinct spikes were evident during three specific intervals: March 2023, October 2024, and January 2025. These surges coincided with significant geopolitical or policy-related events, such as the announcement of expanded U.S. export restrictions on AI-relevant semiconductors, multilateral treaty negotiations on AI governance

within the United Nations framework, and an international incident involving the use of autonomous military systems (see Figure 1).

Figure 1. Monthly Volume of AI and Global Power Discourse (2021–2025)



Source: Authors

Further exploratory analysis indicated that approximately 17.4% of all posts contained hashtags or explicit keywords referencing geopolitical actors such as 'China', 'United States', 'Russia', 'European Union', and 'India'. Moreover, around 24% of posts used terminology associated with global governance, technological sovereignty, or militarization—suggesting that Platform X has become a significant site for public engagement and informal theorizing on the strategic dimensions of AI.

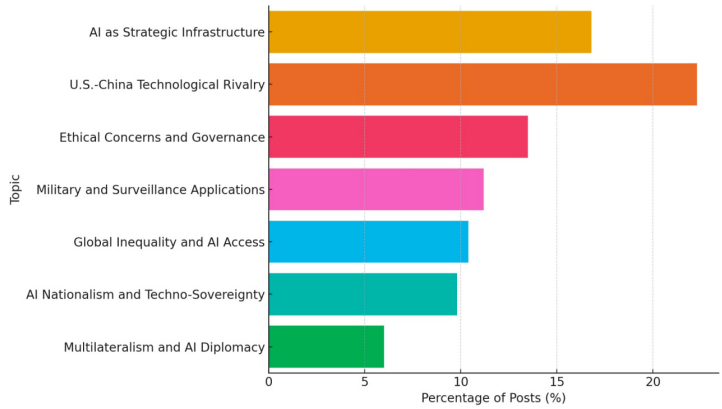
4. 2. Thematic Clustering via Topic Modeling

To identify the latent themes in the dataset, unsupervised topic modeling was conducted using the Latent Dirichlet Allocation (LDA) algorithm. This approach enabled the extraction of coherent

topics based on term co-occurrence patterns across the corpus. After preprocessing and vectorization, a seven-topic solution was found to provide optimal thematic resolution based on coherence score optimization. The extracted topics revealed how users conceptualize the intersection of artificial intelligence and global power relations through distinct rhetorical and thematic lenses.

Figure 2 illustrates the distribution of these seven topics as a percentage of the total corpus. The largest share of discourse, accounting for 22.3% of posts, focused on U.S.–China technological rivalry. This was followed by themes centered on AI as strategic infrastructure (16.8%), ethical concerns and governance (13.5%), military and surveillance applications (11.2%), global inequality and AI access (10.4%), AI nationalism and techno-sovereignty (9.8%), and multilateralism in AI diplomacy (6.0%). These proportions suggest that geopolitical competition, national sovereignty, and governance ethics are the dominant public frames for interpreting the global significance of AI technologies.

Figure 2. Distribution of Topics in AI and Global Power Discourse. Thematic Shares Were Derived from LDA Topic Modeling Applied to Over 21,000 English-language Posts



Source: Authors

The most prevalent theme, U.S.–China technological rivalry, was heavily marked by conflict-oriented language. Posts in this category often used metaphors of war, containment, and strategic dominance. Key terms included 'AI arms race', 'semiconductor sanctions', 'Cold War 2.0', and 'technological decoupling'. The language deployed framed the AI race as an existential contest not just for economic advantage, but for geopolitical supremacy and ideological influence. This narrative often carried undertones of zero-sum logic, portraying innovation as a battlefield with global stakes.

The second most prominent cluster focused on the idea of AI as strategic infrastructure. Posts in this category discussed artificial intelligence not merely as a set of tools or applications, but as a foundational component of a nation's power base. Terms such as 'digital backbone', 'infrastructure of control', 'state capacity', and 'public investment' featured prominently. The framing often aligned AI with traditional state assets such as electricity, railways, or telecommunications systems, emphasizing its integration into long-term state planning and sovereignty discourses. These posts generally reflected a pragmatic rather than alarmist tone, although there were notable concerns about dependency on foreign platforms and supply chains.

Ethical concerns and governance formed the third largest thematic group. Discussions in this area revolved around transparency, algorithmic bias, global ethical standards, and the regulation of private and public sector actors. Posters frequently referenced multilateral initiatives and institutions, such as the OECD, UNESCO, and the European Commission's AI Act. Although moral and legalistic in tone, this cluster also reflected geopolitical concerns, particularly around the risks of regulatory divergence and the imposition of one region's standards globally.

Military and surveillance applications emerged as a distinct cluster with clear discursive boundaries. Posts in this theme often expressed concern about the use of AI in autonomous weapons, facial recognition technologies, predictive policing, and cyber warfare. Specific events—such as drone strikes, the use of AI in border security, or reports on biometric surveillance in authoritarian regimes—served as anchors for debate. Sentiment in this group was overwhelmingly negative, with users frequently invoking dystopian language, referencing Orwellian futures, or citing ethical red lines being crossed by military-industrial initiatives.

The theme of global inequality and AI access captured critiques of systemic technological exclusion and data colonialism. These posts drew attention to the fact that the benefits and control of AI are disproportionately concentrated in a small number of countries and firms. Users argued that the Global South is being rendered both a passive subject of AI's impacts and a source of raw digital labor or data extraction. The tone of these posts ranged from critical academic reflection to activist advocacy, often citing examples from African or Southeast Asian contexts, where imported AI systems had caused harm or failed to reflect local realities.

Another thematically distinct group involved discourses of AI nationalism and techno-sovereignty. Posts in this category articulated a strong alignment between national identity and technological self-determination. Slogans such as 'make AI national again' and references to 'digital independence' or 'patriotic development' characterized this rhetoric. While present across several geopolitical regions, it was particularly pronounced in discussions from India, Turkey, Brazil, and Eastern Europe.

These narratives often reflected concerns about digital colonization and were marked by a desire for indigenous innovation pathways.

The smallest but notably distinct theme addressed multilateralism and AI diplomacy. Posts in this category were relatively optimistic in tone and focused on the need for global coordination mechanisms, treaty-based governance, and universal ethical standards. Rather than advocating for a nationalistic or confrontational approach, users in this cluster called for shared responsibility, capacity building, and inclusive dialogue. Although comprising only six% of the total discourse, these posts reflected a strategic imagination in which artificial intelligence is treated as a global public good requiring cooperative management.

5. Sentiment and Emotions

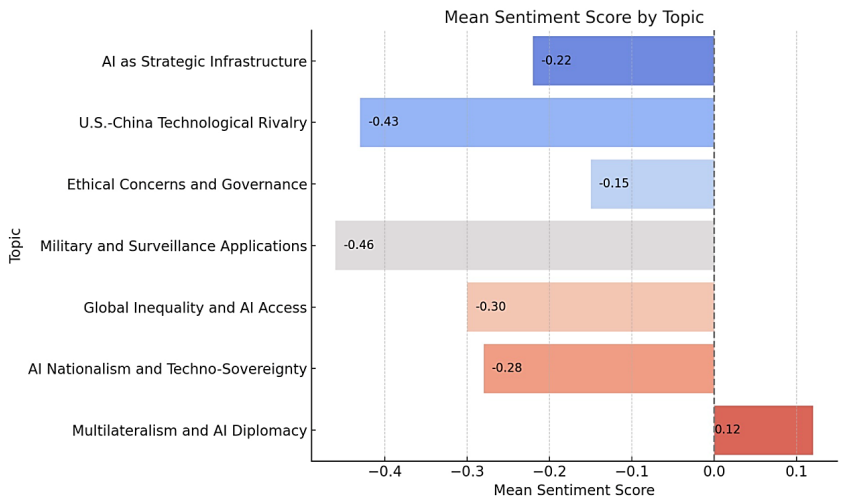
To better understand the affective dimensions of public discourse on artificial intelligence and global power, this study employed a two-layered analytic framework. First, sentiment polarity was assessed using the VADER (Valence Aware Dictionary and sEntiment Reasoner) tool, which is optimized for short, informal, and socially-oriented texts. VADER provides a compound sentiment score for each text, ranging from –1 (most negative) to +1 (most positive). Second, a fine-tuned BERT model was applied for emotion classification, assigning each post to one or more of seven emotional categories. This hybrid approach allowed for both a scalar evaluation of sentiment and a categorical analysis of emotional tone.

The overall sentiment across the 21,486 posts revealed a distinct tilt toward negativity. The mean compound sentiment score across the corpus was –0.31 (SD = 0.14), suggesting that the dominant

framing of AI in relation to power is pessimistic or critical. Disaggregation of these scores by thematic topic revealed important differences in how users emotionally engage with various aspects of the discourse.

As shown in the Figure 3, the themes with the most negative sentiment were 'military and surveillance applications' (–0.46) and 'U.S.–China technological rivalry' (–0.43). These themes were characterized by alarmist or adversarial language, frequent references to coercive state behavior, and concerns about escalation or conflict. Discussions of military AI frequently included terms such as 'killer drones', 'automated warfare', 'lethal autonomy', and 'authoritarian surveillance'. The posts in this category commonly framed these developments as irreversible threats to democratic norms, human rights, and global stability.

Figure 3. Mean Sentiment Score by Topic. Negative Sentiment Was Most Concentrated in Militarized and Conflict-oriented Themes, Particularly Those Involving Strategic Rivalry and Surveillance



Source: Authors

Interestingly, while all topics except one exhibited negative sentiment on average, the degree of negativity varied considerably. Posts related to "global inequality and AI access" (–0.30), "AI nationalism and techno-sovereignty" (–0.28), and "AI as strategic infrastructure" (–0.22) showed moderately negative sentiment, reflecting concern rather than panic. These discussions often voiced skepticism about the concentration of AI capabilities in a small number of states or corporations and expressed concern about technological dependence or exclusion. However, they did not generally depict AI as an existential threat.

Conversely, "multilateralism and AI diplomacy" was the only category with a positive mean sentiment score (+0.12). Posts within this theme emphasized potential for international cooperation, convergence on ethical standards, and collaborative research efforts. These posts frequently cited forums such as the UN's AI for Good Global Summit or the OECD's AI principles. Sentiment in this cluster reflected a cautious optimism about the feasibility of constructing inclusive, multilateral frameworks for AI governance.

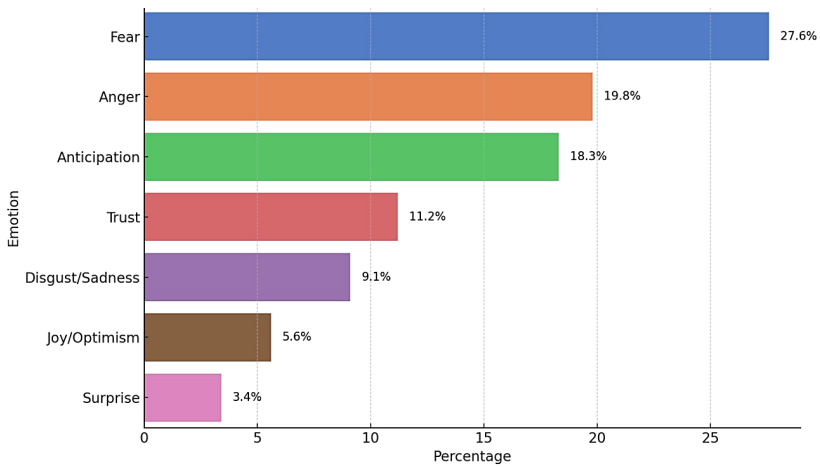
Thematic sentiment was also temporally dynamic. Notably, during key geopolitical events such as the March 2023 announcement of U.S. semiconductor export controls or the January 2025 autonomous weapons incident, sentiment across multiple themes became temporarily more negative, indicating a reactive affective response to real-world stimuli. This underscores the volatility and responsiveness of public attitudes toward AI in moments of perceived geopolitical escalation.

Complementary to sentiment scores, emotion classification (see Figure 4) offered a categorical lens into the psychological landscape of the discourse. The most prevalent emotion was fear, which appeared in 27.6% of the investigated posts. This emotion

was especially salient in discussions involving state surveillance, AI militarization, or the potential for human obsolescence. Posts categorized as fearful often included references to historical analogies, dystopian futures, and the erosion of individual autonomy. Language used in these posts invoked terms such as 'control grid', 'Skynet scenario', and 'algorithmic authoritarianism'.

Anger, the second most common emotion at 19.8%, frequently overlapped with posts critiquing geopolitical inequality, digital imperialism, or the lack of meaningful regulatory oversight. This emotion was often directed at perceived bad actors—state governments deploying unethical AI tools, tech companies profiting from surveillance, or institutions failing to impose meaningful constraints on dangerous technologies. The rhetoric in angry posts included words such as 'sellout', tech oligarchy', 'puppet regimes', and 'extraction without consent'.

Figure 4. Distribution of Emotion Classifications in the Corpus



Source: Authors

Anticipation, appearing in 18.3% of the analyzed posts, functioned as a hybrid emotion: it often conveyed both hope and anxiety. Anticipatory posts discussed both beneficial future scenarios, such as AI-accelerated development or international standards, and feared outcomes such as AI-driven job loss or deepening geopolitical instability. Trust, which accounted for 11.2% of the emotional profile, appeared almost exclusively in posts referencing international cooperation, shared principles, or transparent regulatory proposals. This emotion was frequently concomitant with references to international organizations such as the UN, the UNESCO, or specific regional regulatory initiatives such as the EU AI Act.

Emotions such as sadness, disgust (combined at 9.1%), and joy or optimism (5.6%) were relatively rare. When present, disgust and sadness were often connected to violations of rights—particularly in posts referencing surveillance in autocratic regimes or the misuse of biometric data. Joy or optimism was concentrated in a small number of posts celebrating breakthroughs in AI research or praising inclusive global initiatives.

The least common emotion was surprise (3.4%), typically linked to breaking news or unexpected developments, such as newly leaked surveillance programs or the unanticipated failure of international AI negotiations.

6. Named Entity Recognition and Geo-Locational Analysis

To understand which geopolitical actors and institutional entities dominate public discourse on artificial intelligence and global power, Named Entity Recognition (NER) and geo-locational

analysis were conducted across the dataset. NER is a natural language processing (NLP) technique that identifies and classifies proper nouns in text into predefined categories such as person, organization, location, and geopolitical entity. In this study, spaCy's large English language model (en_core_web_lg) was used for entity recognition, with additional post-processing scripts to consolidate synonyms and aliases (e.g., 'U.S.' and 'United States' were treated as equivalent).

Across the 21,486 posts, over 51,000 named entities were extracted, with approximately 64% classified as geopolitical or organizational references. The most frequently mentioned nation-states were China (appearing in 48.9% of posts), the United States (42.1%), the European Union (18.6%), Russia (11.7%), and India (9.4%). These figures suggest that global discourse on AI and power is largely framed through the lens of a few dominant geopolitical players. In particular, China and the United States emerged not merely as frequently cited actors, but as symbolic poles in a broader narrative of technological confrontation.

China was most commonly referenced in association with terms such as 'surveillance state', 'digital authoritarianism', and 'civilizational AI model'. A significant portion of posts framed China as both a technological innovator and a potential global norm-setter in domains such as facial recognition, social credit systems, and AI-enabled governance. Some posts praised China's strategic investment and long-term vision, while others warned of hegemonic ambitions and the exportation of illiberal governance models.

The United States, on the other hand, was often linked to discussions of private-sector innovation (e.g., OpenAI, Google DeepMind), export controls, and ideological competition. The U.S.

was frequently cited as a counterbalance to China's rise (most prominently, DeepSeek), but also criticized for its fragmented regulatory environment and reliance on corporate actors for AI leadership. References to American policy were especially common during periods of legislative activity or diplomatic statements related to AI governance or semiconductor sanctions.

The European Union was consistently positioned as a normative actor. Posts referencing the EU typically discussed regulatory initiatives, including the AI Act and GDPR-compliant frameworks. While less dominant in overall frequency, the EU was portrayed as a potential mediator in the global struggle between U.S. and Chinese AI models, offering a "third way" that emphasizes rights-based governance, transparency, and ethical pluralism.

Russia and India were mentioned less frequently, but were thematically significant. Russia appeared mostly in the context of cyberwarfare, autonomous military capabilities, and surveillance exports. India was often referenced in discussions of emerging AI hubs, digital sovereignty, and South-South cooperation. In some posts, India was framed as a potential bridge between the Global North and South in AI norm-building processes.

Beyond state actors, NER revealed a high density of references to non-state organizations. The most frequently mentioned included OpenAI, Google DeepMind, Microsoft, UNESCO, the United Nations, and the World Economic Forum. These entities were associated with both technical innovation and governance discourse. Notably, OpenAI was discussed in polarizing terms—viewed by some as a pioneer in open science and by others as a vehicle for the monopolization of foundational models. References to UNESCO and the UN often appeared in posts advocating for global AI treaties, inclusive forums, and ethical AI frameworks.

To complement NER, geo-locational data were extracted from metadata tags (where available) and inferred from user profiles, regional hashtags, or platform-specific geotags. This subset included 4,702 posts (approximately 21.9% of the dataset) with verifiable regional attribution. The spatial distribution of these posts enabled comparative analysis of regional discursive patterns.

In North American posts, discussions tended to focus on private sector leadership, regulatory gaps, and AI's impact on labor markets. Sentiment analysis indicated high levels of concern about the monopolistic tendencies of tech giants and the inadequacy of federal oversight. Posts from Western Europe emphasized data protection, algorithmic accountability, and multilateral cooperation, often referencing EU law and human rights frameworks.

Southeast Asian and African users emphasized issues of technological dependency, data extractivism, and exclusion from AI innovation hubs. Posts in this region often framed AI as a new vector of neocolonialism, criticizing both Chinese and Western actors for treating the Global South as a data resource without representation in global rule-making bodies. Examples included critiques of surveillance infrastructure imported from abroad, biased datasets that excluded regional languages, and the absence of African stakeholders in AI ethics summits.

In the limited number of China-based posts (sourced through translation or re-shared summaries), the tone was markedly different. Many of these posts framed AI development as a civilizational project rather than a market-driven or purely technological one. There was a strong undercurrent of national pride, with references to AI as a cornerstone of strategic independence and modernization. At the same time, some users

expressed concern over domestic surveillance and the potential societal costs of hyper-centralized AI governance.

Interestingly, some users across Latin America and South Asia framed AI governance not in terms of East–West rivalry, but as a North–South justice issue. This alternative geopolitical framing challenged the binary narrative and emphasized the importance of equitable access to AI benefits, representation in standard-setting bodies, and support for localized innovation ecosystems.

7. Conclusion

This study has demonstrated that artificial intelligence is not merely a technical domain or strategic asset—it is a catalyst for reconfiguring the symbolic, legal, and geopolitical architecture of global order. Through a computational analysis of over 21,000 social media posts, we have shown that public discourse surrounding AI is not passive commentary but an active site of geopolitical meaning-making. Publics across geopolitical regions are constructing, contesting, and emotionally investing in divergent imaginaries of AI's role in global power relations. This reframes the analytic lens of AI governance: rather than focusing exclusively on elite actors and formal institutions, attention must also be paid to the affective and discursive formations generated by publics, which increasingly shape the legitimacy and trajectory of technological governance.

The findings of this study challenge three persistent assumptions in both international relations and AI governance literature. First, the assumption that power in the age of AI is exercised only through material capabilities—such as compute resources, data

access, or military AI—is inadequate. Instead, as Harold Innis argued in his theory of communication monopolies, control over the narratives and frames, through which technology is perceived can be equally, if not more, decisive in shaping geopolitical outcomes. The public framing of AI—as an existential threat, a strategic infrastructure, a tool of surveillance, or an emancipatory promise—conditions not only public sentiment, but also the perceived legitimacy of state and corporate actions. Consequently, power in the AI age is as much discursive and symbolic as it is infrastructural.

Second, the study complicates the widespread binary framing of global AI competition as a Cold War–like contest between the United States and China. While this dyadic logic dominated the largest thematic cluster in the dataset, it coexists with and is increasingly challenged by counter-narratives from the Global South. Posts from Latin America, Africa, and South Asia foregrounded issues of digital dependency, technological exclusion, and the moral economy of data extraction. These perspectives disrupt the East–West rivalry paradigm and introduce a justice-based framing of AI governance, one that emphasizes epistemic inclusion and structural redress. These emergent narratives are not peripheral; they reflect growing geopolitical assertions from non-Western actors demanding voice and agency in the shaping of AI norms.

Third, the study calls for a rethinking of law's role in governing emerging technologies. As several scholars have observed, legal systems have historically functioned as tools of mediation between power and legitimacy. In the AI era, however, law risks being eclipsed by technical standards and private governance mechanisms developed by multinational corporations and

technocratic bodies. The findings show that public discourse exhibits deep skepticism toward unregulated AI, especially in the context of military applications and surveillance. This public anxiety suggests that legal institutions must not only catch up to technological change, but must also reassert their normative authority against algorithmic governance. Law must once again become a site of contestation over values, rights, and the legitimate exercise of technological power.

Emotion and sentiment analysis further underscore the high-stakes political and psychological terrain of AI governance. Dominant emotions—particularly fear and anger—are not merely expressive; they are diagnostic of public perceptions of risk, exclusion, and democratic erosion. The prevalence of fear around surveillance and militarization indicates that publics perceive AI not simply as a tool, but as a system capable of subverting civil liberties and destabilizing global security. Conversely, the presence of trust and anticipation—particularly in discussions about multilateral governance—points to a latent but actionable appetite for inclusive and ethically grounded cooperation. These affective dynamics should be understood not as background noise, but as key inputs in any sustainable framework of AI legitimacy.

References

Belosludtsev, A., & Dziuba, E. (2024). Generative Artificial Intelligence in the System of International Relations: Risks, Opportunities, and Regulations. In R. Bolgov et al. (Eds.), *Proceedings of Topical Issues in International Political Geography (TIPG 2023)* (pp. 187–200). Springer. https://doi.org/10.1007/978-3-031-70886-2_16

Bode, I. (2024). AI Technologies and International Relations: Do We Need New Analytical Frameworks? *The RUSI Journal, 169*(5), 66–74. https://doi.org/10.1080/03071847.2024.2392394

Carey, J. W. (1989). *Communication as Culture: Essays on Media and Society*. Unwin Hyman

Chatzivasileiou, D., Psomiadi, A., Efthymiou-Egleton, T. W., & Kassar, L. (2024). AI, International Relations & Religion. *Journal of Politics and Ethics in New Technologies and AI, 3*(1), e37109. https://doi.org/10.12681/jpentai.37109

Colther, C., Doussoulin, J. P., & Tontini, G. (2025). *Artificial Intelligence and Global Power Dynamics: Geopolitical Competition, Strategic Alliances, and the Future of AI Governance*. SSRN. https://doi.org/10.2139/ssrn.5251303

Horowitz, M. C. (2018). Artificial Intelligence, International Competition, and the Balance of Power. *Texas National Security Review, 1*(3), 36-57. http://hdl.handle.net/2152/65638

Innis, H. A. (1950). *Empire and Communications*. Oxford University Press.

Innis, H. A. (1951). *The Bias of Communication*. University of Toronto Press.

Jelodar, H., Wang, Y., Yuan, C., Jiang, X., Li, Y., Zhao, L., & Liu, M. (2019). Latent Dirichlet Allocation (LDA) and Topic Modeling: Models, Applications, a Survey. *Multimedia Tools and Applications, 78*(11), 15169–15211. https://doi.org/10.1007/s11042-018-6894-4

Kardumyan, V. (2025). The Impact of Artificial Intelligence on International Relations: Are Current Paradigms Still Relevant? *YSU Journal of International Affairs, 1*(1), 116–135. https://doi.org/10.46991/jia.2025.1.1.116

Kolade, T. M. (2024). *Artificial Intelligence and Global Security: Strengthening International Cooperation and Diplomatic Relations*. SSRN. https://doi.org/10.2139/ssrn.4998408

Korkmaz, S. C. (2024). Emerging Technologies and Power Asymmetry in International System: An Analysis Over Artificial Intelligence. In U. Kose & M. U. Demirezen (Eds.), *Artificial intelligence: Technical and Societal Advancements* (1st ed., pp. 1–16). CRC Press. https://doi.org/10.1201/9781003483571

Kruckeberg, D., & Vujnovic, M. (2024). Questions of Power Over (and control of) Social, Political, Economic, and Cultural Dimensions of Artificial Intelligence in Public Relations and Strategic Communication. In A. V. Laskin & K. Freberg (Eds.), *Public Relations and Strategic Communication in 2050: Trends Shaping the Future of the Profession* (1st ed., pp. 1–14). Routledge. https://doi.org/10.4324/

Kuźmicz, M. M. (2025). Equilibrating the Scales: Balancing and Power Relations in the Age of AI. *AI & Society*. https://doi.org/10.1007/s00146-025-02300-2

McLuhan, M. (1964). *Understanding Media: The Extensions of Man.* McGraw-Hill.

Ndzendze, B., & Marwala, T. (2023). *Artificial Intelligence and International Relations Theories*. Palgrave Macmillan. https://doi.org/10.1007/978-3-031-11917-0

Nosraty, N., Soroori Sarabi, A., Arsalani, A., Toosi, R., & Sharajsharifi, M. (2025). Artificial Intelligence for Disaster Risk Management in the Beauty Industry. *International Journal of Advanced Multidisciplinary Research and Studies, 5*(3), 1076-1086. https://doi.org/10.62225/2583049X.2025.5.3.4422

Rahmatian, F., & Sharajsharifi, M. (2021). Artificial Intelligence in MBA Education: Perceptions, Ethics, and Readiness among Iranian Graduates. *Socio-Spatial Studies*, *5*(1), 31-42. https://doi.org/10.22034/soc.2021.223600

Schmidt, E. (2022). AI, Great Power Competition & National Security. *Daedalus*, *151*(2), 288–298. https://doi.org/10.1162/daed_a_01916

Tomraee, S., Hosseini, S. H., & Toosi, R. (2022). Doctors for AI? A Systematic Review. *Socio-Spatial Studies*, *6*(1), 13-26. https://doi.org/10.22034/soc.2022.219431