

War and Globalization in the 21st Century: Changing Actors, Changing Arenas, Changing Norms

Dr. Madhulika Mishra¹

Abstract: *The 21st century has witnessed an intensification of globalization alongside profound transformations in the nature of war. Economic interdependence, technological convergence, and dense communication networks have created unprecedented opportunities for cooperation but simultaneously generated new forms of vulnerability and conflict. This paper examines the reciprocal relationship between war and globalization in the post–Cold War and post-9/11 context, focusing on four interlinked dimensions: the changing character of warfare; the rise of non-state and networked actors; the emergence of cyber and information warfare; and the normative tensions between identity radicalism and universal human rights.*

Drawing on major theoretical perspectives in International Relations—realism, liberalism, constructivism, and critical/Marxist approaches—this analysis interprets how global structures shape contemporary conflicts and how war, in turn, conditions the trajectories of globalization. The paper argues that globalization simultaneously constrains and enables violence: it reduces incentives for interstate war among highly interdependent economies while easing the proliferation of transnational terrorism, hybrid warfare, and “wars among the people.” Simultaneously, responses to security threats—such as the global “war on terror” and the globalization of American military power—have militarized aspects of globalization and deepened inequalities in whose security receives protection. The conclusion calls for rethinking security through a human-centric and multilateral framework that can address globalized risks without reproducing cycles of militarized globalization and networked violence.

Keywords: *War; Globalization; Transnational terrorism; Cyber warfare; Human security; Global governance*

1. Introduction

The onset of the 21st century has been characterized by paradoxical and seemingly contradictory trends: historically unprecedented levels of economic and financial interconnectedness alongside persistent, often

¹ Assistant Professor, Department of Political Science, Women’s College, Samastipur (A Constituent College under Lalit Narayan Mithila University)



diffuse forms of organized violence.[2][5] Globalization has created a tightly coupled world in which capital, information, goods, and people circulate with increasing speed and ease, yet this same connectivity has simultaneously facilitated the diffusion of insecurity across borders through terrorism, civil wars with significant regional spillovers, and sophisticated cyber operations.[3][4] Rather than eliminating war as theorists of liberal peace might have anticipated, globalization has fundamentally altered its geography, its practitioners, and its underlying logics, shifting the predominant focus from classic interstate conflicts to complex constellations of state and non-state actors operating through and within global networks.[3][2]

The attacks of 11 September 2001 and the subsequent global “war on terror” became emblematic of this new security environment, linking localized grievances to transnational networks and prompting large-scale military interventions justified in global security terms.[10][4][12] Simultaneously, rapid advances in information and communication technologies (ICTs) have enabled both network-centric warfare by technologically advanced major powers and decentralized, low-cost forms of hybrid and cyber warfare by weaker state and non-state actors.[3][7][8]

The central question animating this paper extends beyond the simplistic query of whether globalization has made the world more or less peaceful. Instead, it interrogates how the dynamics of globalization and war mutually constitute each other in the 21st century, reshaping each other in recursive cycles.[1][2] This reciprocal relationship has profound implications for how we understand contemporary security challenges, the viability of liberal internationalism, and the possibilities for conflict resolution and peacebuilding in an increasingly networked world.

The paper proceeds through the following structure. First, it revisits theoretical debates on war and globalization to establish analytical frameworks for subsequent analysis.[1][11] Second, it explores how globalization has transformed the actual conduct of war through network-centric and hybrid military strategies, as well as through cyber operations and information warfare.[3][7][8] Third, it examines the specific ways in which globalization has facilitated transnational terrorism and other non-state forms of organized violence.[2][4][9] Fourth, it addresses the dual and often contradictory normative currents of identity radicalism and universal human rights that globalization has simultaneously helped to diffuse and entrench.[2][5][12] Finally, it reflects on the globalization of American military power and the challenges this particular form of militarized globalization poses for global governance, multilateralism, and human security.[13][11]

2. Theoretical perspectives on war and globalization

2.1 International Relations Theories and the Problem of War

Classical and structural realism conceptualize war as a fundamental product of an anarchic international system in which states perpetually seek survival and security under conditions of persistent uncertainty and the absence of a world government.[1][11] From this realist perspective, globalization functions primarily to modify the distribution of power among states and alter the cost–benefit calculus of warfare but does not fundamentally alter the underlying competitive logic of international relations that generates war.[1][5] Realists emphasize how global markets, military technologies, financial systems, and alliance structures are instrumentalized by great powers in pursuit of relative gains and security advantages over competitors.[1][13]

Liberal theories of international relations, by contrast, highlight the pacifying effects of economic interdependence, international institutions, and democratic forms of governance.[1][11] According to liberal institutionalism, dense trade and financial links raise the opportunity costs of war for interdependent economies, while international regimes and international organizations enhance transparency, reduce uncertainty, and provide mechanisms for peaceful dispute resolution. These factors can substantially reduce the incidence of interstate conflict among liberal democratic states.[5][11] However, liberal approaches simultaneously acknowledge that globalization produces both “winners” and “losers,” and that uneven development patterns can foster resentment, instability, and intra-state conflicts that are less constrained by the logic of economic interdependence.[2][5]

Constructivist perspectives in International Relations underscore how globalization transforms identities, norms, and political discourses, thereby fundamentally reshaping the meanings and justifications of war.[1][11] Global media systems, transnational advocacy networks, and evolving international legal norms diffuse ideas such as human rights, humanitarian intervention, and the “responsibility to protect,” which can both constrain and simultaneously legitimize the use of military force.[2][11] Conversely, the global circulation of ideas and information also facilitates the rapid spread of counter-norms and identity-based politics that may underpin radicalization processes and violent mobilization.[2][12]

Finally, Marxist and critical approaches interpret war and globalization as deeply intertwined expressions of capitalist expansion, imperialism, and the extraction of surplus value.[1][13] From this vantage point, global markets, international financial institutions, multinational corporations, and military power collectively sustain hierarchical structures between the capitalist core and the exploited periphery. Wars

frequently serve to secure access to natural resources, new markets, and strategic geopolitical spaces under the guise of security interests or humanitarian concerns.[5][13] These approaches foreground the mechanisms through which militarized globalization deepens structural inequalities and externalizes violence onto marginalized and dependent populations in the global South.[5][13]

2.2 Conceptualizing Globalization and the Changing Nature of Contemporary War

Globalization is frequently defined as a multifaceted set of processes that increase the density, speed, and geographic scope of cross-border flows of goods, capital, information, and people, fundamentally enabled by technological innovations and deliberate political choices.[2][5] It is explicitly multidimensional in character, encompassing economic, political, cultural, technological, and security dimensions that do not necessarily evolve in lockstep or reinforce each other.[2][5] Contemporary warfare, in parallel fashion, has shifted dramatically from predominantly interstate conflicts to a complex and heterogeneous mix of civil wars, transnational insurgencies, asymmetric conflicts, and low-intensity conflicts where fundamental distinctions between combatants and non-combatants, war and organized crime, local and global scales become fundamentally blurred and contested.[3][6]

Analysts and strategic theorists have described contemporary conflicts as “new wars,” “network wars,” or “wars among the people,” placing emphasis on their fragmented authority structures, identity-based mobilization logics, and deep embeddedness in global economic and communication networks.[3][7][6] Globalization has significantly lowered the barriers for non-state actors to acquire weapons, obtain financing, and gain international visibility, while simultaneously enabling technologically advanced states to project coercive force globally through precision strike capabilities, comprehensive surveillance systems, and increasingly sophisticated cyber capabilities.[3][2] The relationship between war and globalization is therefore fundamentally dialectical: globalization both constrains traditional interstate war in important ways and simultaneously opens up new modalities and technologies of organized violence.[1][2]

3. Globalization and the transformation of warfare

3.1 Network-Centric and Hybrid Warfare

One of the most salient and consequential changes in 21st-century military practice is the emergence and refinement of network-centric warfare, a strategic and operational concept developed throughout the 1990s and subsequently adopted by advanced militaries globally, most prominently the United States military.[3][8] Network-centric warfare fundamentally links sensors, decision-makers, and targeting systems through integrated information networks to achieve unprecedented shared situational awareness,

accelerated speed of command decision cycles, and enhanced precision of military effects.[3][8] This approach relies heavily on satellite communications infrastructure, real-time data processing systems, secure encrypted networks, and information dominance. All of these technological systems are themselves products of and active contributors to broader processes of technological globalization.[3][8]

Simultaneously, state and non-state actors without comparable technological and financial resources have developed and refined hybrid warfare strategies that strategically mix conventional military operations, irregular tactics including guerrilla warfare, cyber operations, sophisticated propaganda campaigns, and the deliberate blending of military and civilian spaces.[7][6] Hybrid warfare actors and organizations exploit globalization's extensive communication infrastructures and digitally mediated media ecologies to shape dominant narratives, mobilize support among target populations, and erode enemy cohesion, frequently accomplishing these objectives at remarkably low cost.[7][6] Recent and ongoing conflicts in Iraq, Afghanistan, Ukraine, and the military campaigns of organizations such as ISIS have comprehensively demonstrated how hybrid warfare strategies leverage global networks for transnational recruitment, illicit financing, and coordinated information operations.[7][12]

In both network-centric and hybrid warfare contexts, information and control of information flows become central domains of conflict, with competing actors striving to control data flows, manage imagery and visual narratives, and shape perceptions of reality among relevant audiences.[3][7] Global media systems and social media platforms dramatically amplify the strategic and political value of symbolic military acts, whether precision air strikes against high-value targets or spectacular terrorist attacks, effectively converting local tactical events into global spectacles that can simultaneously legitimate, delegitimize, or prolong wars.[10][7]

3.2 Cyber Warfare and the Digital Battlespace

Cyber warfare represents a particularly significant domain where globalization and contemporary war intersect with profound consequences.[3][8] The global diffusion of digital infrastructures, cloud-based computing services, and deeply interconnected control systems has created an entirely new battlespace in which state and non-state actors can conduct sophisticated espionage operations, execute sabotage attacks, and coordinate information operations without crossing traditional physical borders or leaving conventional military signatures.[3][8] Militaries worldwide now institutionally treat cyberspace as a distinct operational domain equivalent to land, sea, air, and space, integrating offensive and defensive cyber capabilities into military doctrine and operational planning.[3][8]

Cyber operations can target critical national infrastructures including power grids and electrical systems, financial networks and banking infrastructure, and communications networks, with the capacity to disrupt entire societies and economies far removed from traditional military frontlines.[3][8] Because digital attribution remains technically difficult and contested, and because international legal thresholds for what constitutes an “armed attack” worthy of military response remain ambiguous and disputed, cyber warfare occupies a strategic grey zone that substantially complicates deterrence theory and application of international humanitarian law.[3][5] Furthermore, the deeply globalized nature of digital supply chains, multinational software development ecosystems, and interdependent information technology infrastructure means that vulnerabilities identified in one geographic region can have cascading and unpredictable effects elsewhere, progressively eroding clear boundaries between war and peace, between civilian and military targets.[3][8]

4. Globalization, terrorism, and non-state violence

4.1 Transnational Terrorism in the Global Age

Globalization has profoundly shaped and continues to reshape the evolution of transnational terrorism throughout the 21st century.[2][4] On one hand, dramatically increased cross-border flows of people through migration networks and tourism, flows of finance through both formal and informal channels, and flows of goods through global supply chains have provided terrorist organizations with substantially expanded opportunities to move operatives across borders, launder money through financial systems, and acquire necessary materials and technologies.[4][9] The global reach of contemporary media systems and digital platforms has amplified the political and psychological impact of terrorist attacks, enabling relatively small organized groups to project their messages, grievances, and propaganda to worldwide audiences at minimal operational cost.[4][9]

Conversely, economic and political dimensions of globalization have contributed substantially to grievances and resentments that some segments of populations interpret through radical ideological frameworks, including perceived cultural threats to traditional identities, economic marginalization and relative deprivation, and opposition to foreign military interventions in Muslim-majority regions.[2][12] Policy analyses and empirical research suggest that globalization has facilitated the spread of two contradictory and opposed normative frameworks: identity radicalism and exclusionary nationalism, which underpin many contemporary terrorist movements, and simultaneously the protection of individual human rights and humanitarian law, which constrains state responses and shapes international counter-terrorism regimes and policies.[2][5] This fundamental normative duality creates profound policy dilemmas for



liberal democratic states that seek simultaneously to combat terrorism effectively while upholding civil liberties and international legal norms.[2][12]

Empirical research examining the quantitative relationship between trade openness, foreign direct investment flows, and measured incidents of transnational terrorism has produced nuanced and sometimes contradictory findings.[4][9] Some rigorous research concludes that trade and investment flows do not directly increase measured terrorist attacks and that higher levels of economic development and deeper integration with wealthy trading partners can correlate with fewer terrorist incidents, even as globalization heightens certain specific vulnerabilities and creates new targets.[4][9] This evidence suggests that the link between globalization and terrorism is substantially mediated by domestic political institutions, patterns of inequality, and specific historical and political contexts rather than being mechanically positive or uniformly negative.[4][9]

4.2 Non-State Armed Groups and Networked Conflict

Beyond terrorism specifically, globalization has substantially facilitated the emergence and proliferation of a wide spectrum of non-state armed groups operating in networked environments, including transnational insurgencies, regional militias, private military companies, and transnational criminal organizations.[2][5] These diverse actors exploit porous state borders, diasporic communities spread across multiple countries, and global illicit markets in weapons, narcotics, and natural resources to finance and sustain their military and political activities.[2][5] In many contemporary conflicts, particularly those in sub-Saharan Africa and the Middle East, war economies are deeply embedded within transnational trade and financial networks that link localized violence directly to global demand for resources, commodities, and illicit goods.[5][13]

Non-state armed groups also strategically utilize global communication technologies and social media platforms to coordinate military actions, disseminate propaganda and counter-narratives, and negotiate with external state and non-state supporters and patrons.[7][12] The distinction between local and global conflict becomes deliberately blurred as localized struggles are reframed in transnational ideological terms—such as global jihad—and as external state actors, multinational corporations, and diaspora communities become enmeshed in and benefit from local conflict dynamics.[2][13] This networked environment substantially complicates conflict resolution processes and peacemaking, as effective bargaining requires engaging with fragmented and heterogeneous coalitions of actors possessing divergent and sometimes incompatible interests and maintaining transnational linkages.[11][5]

5. Normative tensions: identity radicalism and human rights

Globalization represents far more than flows of markets and technologies; it fundamentally functions as a carrier and vehicle of norms, values, political ideologies, and constructed identities.[2][11] One influential strand of scholarship argues that globalization has facilitated and accelerated the spread of cosmopolitan norms emphasizing universal human rights, international humanitarian law, and the legal protection of civilians in conflict.[2][11] These evolving norms underpin significant institutional developments including the establishment of the International Criminal Court, the formulation of the “responsibility to protect” doctrine, and growing international attention to human security frameworks that prioritize individual wellbeing over narrow state security.[2][11]

Simultaneously, globalization has intensified identity politics and identity-based radicalism in many geographic and social contexts.[2][12] As global norms—frequently perceived by local populations as essentially Western and culturally imperialist—penetrate local societies and challenge traditional institutions, they can provoke significant backlash from groups that feel culturally and religiously threatened in fundamental ways.[2][12] Empirical policy analysis suggests that globalization has substantially eased the transnational spread of identity-based radical ideologies, particularly when combined with weak state capacity, widespread perceptions of external domination, and pronounced socio-economic exclusion and marginalization.[2][12] These ideologies sometimes manifest in explicitly violent forms, including ethno-nationalist insurgencies, religious fundamentalist movements, and jihadist organizations, which frame their struggles as necessary resistance against a homogenizing global order perceived as threatening to cultural and religious survival.[2][12]

This fundamental tension between universal human-rights norms and identity-based radicalism is starkly reflected in contemporary debates over humanitarian intervention, counter-terrorism operations, and international migration policy.[2][11] States frequently invoke human rights principles and humanitarian concerns to justify military interventions or economic sanctions against adversaries, yet such actions are often viewed by affected populations as selective, strategically instrumental, or fundamentally neo-imperial in character, thereby fuelling further resentment and generating new grievances that feed conflict cycles.[13][11] Conversely, efforts by liberal states to accommodate specific identity-based claims and cultural preservation can clash with universal human rights norms when they entail restrictive gender practices, intolerance toward religious minorities, or exclusionary nationalism.[2][12] Globalization thus produces a contested and deeply conflicted normative terrain in which contemporary wars are fought not



merely over territory, resources, or strategic advantage but fundamentally over the meaning and content of rights, culture, authenticity, and political legitimacy.[2][11]

6. The globalization of American military power

A particularly influential and consequential dynamic throughout the early 21st century has been the progressive globalization of American military power and the institutionalization of permanent American military presence.[13][3] The United States maintains an extensive worldwide network of military bases and facilities, forward-deployed military forces, and unparalleled global power-projection capabilities, enabling military interventions across regions spanning the Balkans, Middle East, Africa, and Asia-Pacific.[3][13] Strategic analyses of American militarism argue that US foreign policy strategy has combined elements of liberal internationalism—promoting democracy and human rights—with hegemonic power politics designed to maintain American strategic superiority, employing military force to reshape global orders under the stated banners of counter-terrorism, democracy promotion, and regional stability.[13][11]

The wars in Afghanistan and Iraq, launched in the immediate aftermath of the 11 September 2001 attacks and justified within the framework of the global “war on terror,” exemplify how military campaigns can be publicly framed as necessary responses to global security threats and yet simultaneously produce far-reaching and often destabilizing consequences for globalization itself.[10][13][12] These protracted interventions fundamentally reshaped regional political orders, generated massive-scale population displacement and refugee crises, and sparked enduring international debates over the legality and moral legitimacy of preventive war doctrines and regime change operations.[10][13] These wars also substantially influenced global public opinion and international perceptions, contributing to widespread scepticism and reduced confidence in American leadership while raising fundamental questions about the compatibility of liberal democratic norms with controversial counter-terrorism practices including indefinite detention, targeted killing programs, and mass surveillance operations.[10][13][11]

Furthermore, American military innovation in network-centric warfare, precision-strike operations, and information dominance has established templates and strategic models that other military powers actively seek to emulate or develop countermeasures against.[3][8] The progressive normalization of remote warfare technologies—particularly unmanned aerial vehicles and drone strikes—and the deployment of special operations forces across multiple theatres has arguably lowered domestic American political costs for military action while simultaneously dispersing and dispersing organized violence across an expanding archipelago of conflict zones.[3][13] In this broader sense, American military globalization represents both



a driver and symptomatic expression of a militarized form of globalization that selectively secures certain cross-border flows—energy resources, international trade, digital data—while simultaneously exacerbating security vulnerabilities and generating new insecurities for civilian populations inhabiting or proximate to conflict areas.[5][13]

7. War, globalization, and conflict resolution

Globalization has not only transformed the character and conduct of war; it has profoundly reshaped both the possibilities and actual practices of conflict resolution and peace making.[11][5] Transnational institutions, including the United Nations system and regional organizations such as the African Union and European Union, along with networks of international non-governmental organizations and professional mediators, now occupy prominent institutional roles in peace processes, humanitarian interventions, and post-conflict reconstruction and state-building efforts.[11][5] These transnational actors bring material resources, technical expertise, and normative frameworks that can support negotiated settlements, institutional reforms, and democratic transitions, though they must simultaneously navigate complex local–global interfaces and confront persistent legitimacy challenges.[11][5]

Conflict resolution scholars emphasize that global economic and political interdependence can generate both powerful incentives and pressures for negotiated peace.[11][2] States and non-state actors embedded in global markets, international financial systems, and multilateral regimes may face substantial costs from protracted conflict, including economic sanctions, loss of foreign investment, international isolation, and reputational damage, all of which can encourage pragmatic compromise and negotiated settlement.[5][11] Simultaneously, external involvement in local conflicts can entrench and perpetuate conflict dynamics if external state patrons fuel proxy wars or if peace processes are perceived as externally imposed and insensitive to local power relations, community grievances, and legitimate aspirations for self-determination.[5][13]

8. Conclusions

This paper has argued that war and globalization in the 21st century are deeply and reciprocally intertwined, with globalization simultaneously reshaping the fundamental character of war while being reshaped by the consequences and dynamics of contemporary conflicts.[1][2] Globalization has encouraged the rise of network-centric and hybrid forms of warfare, expanded the scope and significance of cyber conflict as a domain of strategic competition, and fundamentally enabled the proliferation of transnational terrorism and diverse non-state armed groups, all of which strategically operate through and against the infrastructure of

global networks.[3][7][4][8][9] At a normative and ideological level, globalization has simultaneously diffused both cosmopolitan human-rights norms and identity-based radicalisms, generating significant tensions that are actively played out in contemporary struggles over humanitarian intervention, counter-terrorism operations, and cultural recognition.[2][12][11]

The dramatic globalization of American military power illustrates concretely how war itself can become a globalized phenomenon, progressively shaping economic, political, and normative orders while simultaneously embedding security vulnerabilities and new forms of insecurity within the very processes and institutions ostensibly designed to stabilize and integrate the global system.[3][13] Yet globalization simultaneously offers significant resources and mechanisms for mitigating and resolving conflicts through the development of multilateral institutions, the growth of transnational advocacy networks, and economic interdependence that raises the costs of protracted violence for participant states.[5][11] Comprehensively addressing the multifaceted challenges of war in a globalized age therefore necessitates moving deliberately beyond state-centric and narrowly military conceptions of security toward genuinely human-centric and globally coordinated approaches that directly tackle underlying structural inequalities, governance deficits, and the necessity of regulating global flows of capital, weapons, and information that connect and implicate distant theatres of conflict.[2][11]

Future research should investigate: (1) the effectiveness of emerging international norms and institutions in constraining conflict escalation in an era of cyber warfare; (2) the specific mechanisms through which economic interdependence reduces or alternatively intensifies conflict in particular geographic and sectoral contexts; (3) the role of transnational civil society in conflict resolution processes; and (4) the long-term sustainability of human security frameworks in confronting globalized security threats. Policymakers must simultaneously invest in multilateral institutions, address the root causes of grievance and radicalization, regulate illicit global flows, and develop inclusive governance frameworks that can accommodate legitimate identity concerns while protecting universal human rights and the security of vulnerable populations across the interconnected global system.

References

1. JNU thesis. *War and Globalization: Context and Theory*. Available at: <http://etd.lib.jnu.ac.in/TH15847.pdf>
2. Geneva Centre for Security Policy. *The Impact of Globalization on the Changing Nature of War* (Policy Brief No. 24). Available at: <https://www.files.ethz.ch/isn/92740/Brief-24.pdf>



3. Army War College. *Globalization and the Nature of War*. Available at: <https://press.armywarcollege.edu/cgi/viewcontent.cgi?article=1801&context=monographs>
4. Pieterse, J. N. "Globalization at War." *International Journal of Peace Studies*. Available at: https://www3.gmu.edu/programs/icar/ijps/vol7_2/Pieterse.htm
5. Rickli, J.-M. *Globalization, Armed Conflicts and Security*. Available at: <https://www.files.ethz.ch/isn/137879/ricerche.04-Globalization.pdf>
6. Górniewicz, M. "Wars in the Later 21st Century." *Security and Defence Quarterly*. Available at: <https://securityanddefence.pl/pdf-112930-45166?filename=45166.pdf>
7. Nodus Labs. "Network Centric Hybrid Warfare and the Dynamics of War." Available at: <https://noduslabs.com/research/network-centric-warfare-practice-non-destruction/>
8. Scientific and Practical Cyber Security Journal (SPCSJ). "Network-Centric Warfare and Its Impact on the Present." 8(3): 53–64. Available at: https://journal.scsa.ge/wp-content/uploads/2024/11/0034_modern-network-wars.pdf
9. Master's thesis. *The Effect of Globalization on Terrorism*. University of New Haven. Available at: <https://digitalcommons.newhaven.edu/cgi/viewcontent.cgi?article=1180&context=mastersthesis>
10. University of New Haven. "Discussing the Global Security and Terrorism Dilemma." Available at: <https://dergipark.org.tr/en/download/article-file/1410832>
11. Tidwell, A., & Lerche, C. "Globalization and Conflict Resolution." *International Journal of Peace Studies*, 9(1). Available at: https://www3.gmu.edu/programs/icar/ijps/vol9_1/Tidwell&Lerche_91IJPS.pdf
12. Mirza, D., & Verdier, T. *International Trade, Security, and Transnational Terrorism*. World Bank Policy Research Working Paper 4093. Available at: <https://documents1.worldbank.org/curated/en/806491468314983788/pdf/wps4093.pdf>
13. Annals Fondazione Luigi Einaudi. "The Globalization of American War in the 21st Century: Militarism and Imperial Renaissance or Decline?" Available at: <https://www.annalsfondazione.luigieinaudi.it/browse/the-globalization-of-american-war-in-the-21st-century-militarism-and-imperial-renaissance-or-decline>

Publisher's Note: *The views and opinions expressed in this article are solely those of the author(s) and do not necessarily reflect those of the publisher, editors, or the editorial board.*