

Research Article

COMPARATIVE ANALYSIS OF GEOPOLITICAL THEORIES IN EXPLAINING THE BEHAVIOR OF GREAT POWERS IN THE TWENTY-FIRST CENTURY

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ABSTRACT

Geopolitics, as one of the most important branches of political geography, plays a fundamental role in explaining the behavior of great powers in the international system. Classical geopolitical theories such as McKinley's Heart of the Earth theory, Spikeman's Land Margin theory, and Mahan's Sea Power theory have provided fundamental frameworks for understanding power relations in the era of geographical competition. With the world entering the 21st century and the emergence of new powers such as China, the revival of Russia's role in the peripheral environments, the continued global influence of the United States, and the transformation of Europe's position, the importance of these theories has once again become the focus of researchers' attention. In addition, new geopolitical theories and critical approaches emphasizing technology, the global economy, cyberspace, and communication networks have opened new horizons in analyzing the behavior of great powers. This article, using a comparative approach, examines the applicability of classical and contemporary geopolitical theories to explaining the behavior of major actors in the international arena. To this end, the theoretical and conceptual foundations of geopolitics are first analyzed, then each theory is evaluated in terms of its assumptions, functions, and limitations. The behavior of the United States, China, Russia, and other major players is then analyzed within the framework of these theories. The results show that many classical concepts remain evident in global politics, but new factors such as technological power, economic dependencies, energy, and cybergopolitics indicate the need to update previous interpretations. Finally, the article emphasizes that combining traditional and modern approaches can provide a more comprehensive picture of the behavior of great powers in the modern era.

INTRODUCTION

Geopolitics, as one of the most deeply rooted branches of political geography, has consistently played a key role in analyzing the behavior of great powers and international rivalries. By examining the relationship between power, space, and geography, this field seeks to explain the dominant logic governing the decision-making of powerful states and to demonstrate how geographical position, natural resources, access to communication routes, seas, landmasses, and political and economic structures can influence a country's behavior. The importance of geopolitics in understanding global politics is such that many scholars believe that without recognizing this link between space and power, any analysis of international developments would be incomplete [2][6].

In the late 19th and early 20th centuries, theorists such as Makindar, Spikeman, and Mahan laid the foundations of modern geopolitics by presenting their fundamental theories. Makindar, emphasizing the role of the central regions of Eurasia and presenting the theory of the Earth's heart, sought to identify the origin of global power in the control of internal lands [4]. Spikeman, proposing the land-margin theory, argued that the peripheral and coastal regions of Eurasia play a more decisive role in shaping the world order [5]. Mahan also emphasized the importance of sea power and showed that countries capable of dominating sea routes can have a profound impact on the international system [3]. These theories have been the focus of international relations analysis for decades, and their influence continues to this day.

As the world enters the 21st century, the role of geopolitics has not only not diminished but, in many cases, become more nuanced. The emergence of China as an economic and maritime power, the revival of Russia's geopolitical role in its peripheral regions, the US's efforts to maintain its global position, the competition between powers over energy, and developments related to trade routes such as the Belt and Road Initiative are all examples of the continuing importance of classical geopolitical concepts [1][16][18]. At the same time, the growth of technology, globalization, economic interdependence, the expansion of cyberspace, and the increasing power of the media have also led to the emergence of new geopolitical theories that move analyses beyond the purely territorial framework [7][8][13].

In the twenty-first century, not only land, sea, and natural resources are important, but also digital data, information networks, energy flows, global supply chains, and technological competition have become key elements of geopolitics. Contemporary great powers such as the United States, China, Russia, and the European Union exhibit behaviors that can be explained by both classical theories and more recent approaches. For instance, the competition between China and the United States in the South China Sea can be analyzed from the perspective of Mahan's Sea Power Theory. In contrast, their technological rivalry calls for modern geopolitical concepts [12][19].

For this reason, analyzing the behavior of great powers in this period requires a hybrid approach—one that can combine the legacy of classical theories with contemporary findings. This article adopts such an approach and seeks to demonstrate that while traditional theories remain effective in explaining the behavior of major global actors, they are not sufficient on their own and must be complemented by new elements. The objective of this study is to examine the positions of major geopolitical theories in analyzing twenty-first-century developments and to show which aspects of great-power behavior each theory explains.

In this regard, the theoretical and conceptual framework of geopolitics is first outlined; then the Heartland, Rimland, and Sea Power theories, along with neo-geopolitical approaches, are

examined and critiqued. Subsequently, the behavior of major countries such as the United States, China, and Russia is analyzed within these frameworks. Finally, based on a comparison between theories and empirical realities, conclusions are presented [11][14][17].

Theoretical and Conceptual Framework

Geopolitics, as an interdisciplinary science, emphasizes the link between geography and politics and seeks to show how a country's geographical features can affect its political, military, economic, and security behavior. This knowledge is related to physical and human geography on the one hand, and to political science, international relations, and security studies on the other. A proper understanding of the role of space and place in world politics requires an examination of the fundamental concepts of geopolitics and the theories that have been formed over the past century. This section examines key concepts and theoretical frameworks.

The Concept of Geopolitics

In its simplest definition, geopolitics is the study of the relationship between power and geography. Friedrich Ratzel first introduced the term, which was later employed by Rudolf Kjellén in its modern sense, referring to the analysis of state policies based on geographical conditions [6]. Geopolitics assumes that geography is not merely a physical backdrop but a strategic factor that can directly influence how countries make decisions. Geography includes various elements such as a country's territory, population, natural resources, the shape and location of a country, climate, the distribution of strategic regions, access to the sea, and proximity to major powers [2].

In the classical approach, geopolitics focused primarily on fixed geographical factors such as landmasses and seas. However, in more recent approaches, variable elements such as technology, the global economy, energy, and even cyberspace have been added to this framework [7][13]. As a result, geopolitics today encompasses a broader scope than in the past.

The Relationship between Political Geography and Power

Political geography is a branch of geography that examines political structures within a geographical context. By analyzing borders, states, political units, regional and global organizations, and patterns of power, this field enables a deeper understanding of state behavior. Power plays a central role in this context, as without considering the distribution and concentration of power, geography alone cannot explain actors' behavior [1][16].

In geopolitics, power derives from both geographical and non-geographical resources. Geographical resources include location and territorial assets, while non-geographical power includes knowledge, technology, economic, cultural, media, and military capabilities. The combination of these resources determines a country's geopolitical position. For example, Russia possesses vast territory and energy resources that strengthen its geopolitical standing. In contrast, Japan, despite its lack of natural resources, has become a major actor through technology and economic strength [11].

The Role of Theorization in Geopolitics

Geopolitical theories are used to explain why a country pursues a particular behavior in the international arena. Classical theories generally emphasize physical elements, whereas modern theories incorporate economic, communicational, and technological structures into the analysis.

Classical Geopolitical Theories

There are three main currents in classical geopolitical theory:

- Mahan's Sea Power Theory: Emphasizes that countries dominating seas and maritime routes achieve global power [3].
- Mackinder's Heartland Theory: Argues that control over the central parts of Eurasia can make a country the dominant global power [4].
- Spykman's Rimland Theory: States that the peripheral regions of Eurasia (the Rimland) play the most significant role in controlling the world [5].

These theories were effective in analyzing rivalries in their time, yet they remain applicable in many contexts today. The competition between Russia and the West over Ukraine exemplifies the importance of the Heartland. At the same time, the rivalry between China and the United States in the South China Sea reflects Mahan's theory [12][19].

Neo-Geopolitical Theories

Since the 1990s, geopolitics has entered a new phase. Theorists of this period argue that geopolitics is not limited to land and sea; rather, cyberspace, communication networks, media, energy, the global economy, and technology also play significant roles in global politics [7][8]. Energy, data, and technology geopolitics are examples of these emerging domains. For instance, some scholars believe that the current competition between the United States and China extends beyond maritime domains into areas such as artificial intelligence, digital infrastructure, and major technology corporations. This issue is more effectively analyzed through the concepts of modern geopolitics than through classical theories [13][18].

The Necessity of Combining Traditional and Modern Theories

The contemporary world is a combination of traditional and modern structures. Maritime routes remain important, yet digital communication lines have also gained significance. Fossil fuels still generate power, but renewable energy sources are increasingly becoming geopolitical factors. Therefore, analyzing the behavior of great powers requires integrating diverse theories [1][2][11].

Mackinder's Heartland Theory

Mackinder's Heartland Theory is one of the most fundamental and influential classical geopolitical theories, widely used to analyze the nature of great power competition. Halford Mackinder introduced this theory in 1904 in an article titled "The Geographical Pivot of History" and later expanded it in his book [4]. Based on an examination of the geographical, historical, and political characteristics of Eurasia, he argued that the central region of this continent—namely the interior parts of Russia, Central Asia, and surrounding areas—holds immense strategic importance. Any power that can dominate this region can influence other parts of the world.

Core Assumptions of the Heartland Theory

Mackinder divides the world into three main parts:

1. The Heartland
2. The Inner Crescent
3. The Outer Crescent

The Heartland refers to a region that, historically and geographically, has been extremely difficult for maritime powers to penetrate. Natural barriers such as ice, deserts, and vast distances have kept it beyond the easy reach of naval powers. According to him, this region possesses three essential characteristics:

1. Vast territorial expanse
2. High potential population
3. Significant natural resources, including energy, metals, and agricultural land

Mackinder believed that these three characteristics enable the power controlling the Heartland to build a strong army and a powerful economy. In his view, control of the Heartland was equivalent to control of the world. He famously stated:

"Who rules Eastern Europe commands the Heartland; who rules the Heartland commands the World-Island; and who rules the World-Island commands the world" [4].

Critiques and Limitations of the Theory

Although Mackinder's theory had a profound impact on global politics and the strategies of great powers, it has also faced several criticisms and limitations.

First, Mackinder underestimated the role of maritime powers and the importance of trade routes. Powers such as Britain and the United States in the twentieth century demonstrated that control of the seas can play a decisive role in shaping the global order—an idea also emphasized by Mahan [3].

Second, Mackinder did not account for advancements in transportation technology. With the development of railways, aircraft, and air forces, the geographical advantage of the Heartland diminished, and the possibility of penetrating and attacking this region increased [11].

Another critique is that Mackinder did not anticipate the importance of non-state actors, the

global economy, supply chains, and the role of media, as these factors either did not exist or had limited influence in his time. Consequently, his theory is primarily analyzed within the framework of hard power and requires supplementation to explain the contemporary world [8][13].

Nevertheless, it should be emphasized that these limitations do not diminish the value of the theory. On the contrary, a significant portion of great power behavior in regions such as Central Asia, the Caucasus, Eastern Europe, and Afghanistan can still be analyzed through this framework.

Applications of the Heartland Theory in the Twenty-First Century

Despite major transformations in the international system, the Heartland Theory remains relevant in many contemporary rivalries.

One of the most significant examples is the competition between Russia and the West over Ukraine. Geographically, Ukraine is located in a key المنطقة between Europe and the Heartland. Russian control over this region could threaten Western security and hinder NATO expansion. From Mackinder's perspective, controlling this area is crucial for any power seeking global dominance [17][20].

Another example is the importance of Central Asia. This region, which includes countries such as Kazakhstan, Uzbekistan, and Turkmenistan, is strategically important for energy, security, and communication routes. Through the Belt and Road Initiative, China seeks to expand its influence in this region and integrate it into its economic network [18]. This action demonstrates that the Heartland still retains geopolitical value.

Russian analysts also explicitly refer to Mackinder's concepts in their military and security assessments. Russia's policies in the Caucasus, Central Asia, and the northern Arctic regions reflect its efforts to strengthen control over areas surrounding the Heartland [14][16].

Even the great power competition in the Arctic can be examined from the perspective of Makin's theory. The increased access to resources and new routes in this region have strengthened its strategic position, and Russia has played a prominent role as the dominant land power in this area [1].

Despite being more than a century old, Mackinder's Heartland Theory remains an important analytical tool in geopolitics. Although it has been criticized and must be updated in light of contemporary international developments, it still explains a significant part of global competition in regions such as Eurasia, Ukraine, Central Asia, Russia, and the Arctic. Combining Mackinder's perspective with more recent theories can provide a clearer picture of the twenty-first-century geopolitical landscape.

Spykman's Rimland Theory

Spykman's Rimland Theory is one of the most important classical geopolitical theories, developed in response to Mackinder's Heartland Theory. Nicholas Spykman, a professor of international relations at Yale University, believed that Mackinder had overemphasized the role of the central regions of Eurasia and underestimated the importance of peripheral areas. In his 1944 book *The Geography of the Peace*, Spykman presented his well-known theory of the strategic importance of the Rimland [5].

Key Concepts of the Rimland Theory

Spykman divides the world into three main regions:

1. The Heartland
2. The Rimland (or marginal regions)
3. The outer or offshore regions

The Rimland consists of areas surrounding the Heartland that have access to the Eurasian landmass and to the open seas. This region includes Western Europe, the Middle East, South Asia, Southeast Asia, and East Asia. Spykman argued that it is not the Heartland but the Rimland that determines real global power.

He famously stated:

“Who controls the Rimland rules Eurasia; and who rules Eurasia controls the destinies of the world” [5].

According to Spykman, the Rimland represents the intersection of land and sea, making it an extremely strategic region. These areas play a central role in terms of population, economy, and trade, and many of the world’s major maritime and land routes pass through them. In fact, control over these regions is vital for any power seeking global dominance.

Power-Generating Factors in Spykman’s Theory

Spykman points to several factors underlying the strategic importance of the Rimland:

Geographical Connectivity

These regions, on the one hand, share political borders with land powers such as Russia and China, and, on the other hand, are connected to major bodies of water, including the Indian Ocean, the South China Sea, the Mediterranean, and the Pacific Ocean. This dual connectivity gives the Rimland exceptional importance [6].

Concentration of Population and Economy

A large portion of the world’s population resides in Rimland regions. In addition, many major economies, including Europe, China, India, and Japan, are located in these areas. This means that control over these regions amounts to control over a significant share of the world’s human and economic resources [2].

Trade and Energy Routes

The main global transportation routes, shipping lanes, and energy transmission lines pass through these regions. Straits such as Malacca, Hormuz, Bab el-Mandeb, and the Bosphorus are all located within this zone. Any disruption in these areas would have a direct impact on the global economic system [11][12].

Military and Security Significance

From Spykman's perspective, the Rimland is the region where geopolitical competition among great powers is concentrated. The world wars, Cold War rivalries, and even many crises of the twenty-first century have taken place in these areas.

Application of the Theory in Contemporary Global Politics

Although Spykman's theory was proposed more than 70 years ago, it still helps explain many contemporary developments. For example, the Indo-Pacific region, now recognized as the center of competition between the United States and China, constitutes a major part of the Rimland. The extensive presence of U.S. naval forces in this region and China's expanding maritime influence in the South China Sea underscore the geopolitical importance of this area [1][18].

Another example is the Middle East. This region is of particular importance for energy, oil, and gas transit routes, as well as for its strategic location. The competition among the United States, Russia, China, Europe, and regional powers in this area can be analyzed within the framework of the Rimland Theory [14][19].

The crises in Afghanistan and Pakistan also fall within this framework. This region plays an important role in Eurasian security due to its territorial connectivity, trade routes, and geopolitical position. For this reason, great powers have consistently been interested in maintaining a presence in this region [17][20].

The South China Sea region, one of the world's most important trade routes, is also a prime example of the importance of the Spike Man theory. Control of this region can have a profound impact on the global economy and is therefore a major focus of competition between China and the United States [12][18].

Spykman's Rimland Theory, with its emphasis on the peripheral regions of Eurasia, provides an important analytical framework for understanding the political, economic, and military competition among great powers. Although some criticisms have been raised against this theory, the geopolitical realities of the twenty-first century show that many global rivalries are concentrated in these very regions. Therefore, Spykman's theory retains significant analytical validity and, alongside other theories, can be used to analyze the policies of great powers.

Mahan's Sea Power Theory

Alfred Thayer Mahan's Sea Power Theory is one of the most influential classical geopolitical theories, shaping the military and maritime strategies of great powers, particularly the United States. Mahan, a U.S. naval officer and a professor at the Naval War College, presented his ideas in 1890 in his well-known book *The Influence of Sea Power upon History* [3]. He believed that the global power of nations is determined not only by territorial size or internal resources, but by their ability to dominate the seas and maritime routes.

Key Concepts of Sea Power Theory

Mahan believed that world history was shaped by countries that could build powerful navies. He defined naval power as a set of capabilities that included the following:

Favorable Geographical Position

Countries with access to open seas and located along major maritime routes are more likely to achieve global power. In Mahan's view, countries such as Britain, the United States, and Japan are clear examples of this type of position [3].

Economic and Commercial Structure

The existence of extensive trade networks and reliance on maritime commerce are important factors in the formation of sea power. Mahan believed that international trade requires maritime security, which can only be ensured by a strong navy [6].

Naval Military Power

The core of Mahan's theory is dominance at sea through a powerful fleet. He emphasized that countries capable of controlling maritime routes will directly influence the flow of goods, energy, and global wealth.

Seafaring Population and Maritime Culture

Mahan also paid attention to culture and believed that countries with a deeply rooted maritime culture have a greater chance of developing sea power. Britain, for him, was a prime example of such a country [3].

The Importance of the Seas in Political and Economic Equations

Mahan argued that, unlike land, the seas cannot be fully occupied but can be controlled. Control of the seas means dominance over the vital routes of global trade. In his view, countries that can maintain maritime lines of communication will be able to overcome their rivals. He cited the historical example of Britain, which, despite its limited territory, managed to build the largest empire in the world through its powerful navy [3].

The importance of Mahan's ideas became evident during the First and Second World Wars. The competition among great powers during this period demonstrated that control of the seas and maritime routes is vital for securing resources and transporting forces [14]. Even after the Cold War, this perspective has persisted, and many countries, including the United States, China, India, and Japan, have formulated their maritime strategies based on Mahan's principles [1][18].

Reflection of Mahan's Theory in Contemporary Global Competition

In the twenty-first century, Mahan's Sea Power Theory remains highly applicable in analyzing geopolitical rivalries, particularly between the United States and China.



U.S.–China Competition in the South China Sea

The South China Sea is one of the world's most important maritime routes. A significant volume of global trade, oil, and gas passes through this route. In recent years, China has sought to exert greater control over this region by constructing artificial islands, strengthening its naval fleet, and expanding its military presence. This behavior by China closely reflects what Mahan described as a state's effort to dominate the seas [12][18].

In response, the United States, invoking the principle of freedom of navigation, has increased its military presence in the region. These tensions demonstrate that Sea Power Theory remains relevant and that competition in this region reflects Mahan's ideas [1].

The Role of the Indian Ocean in Global Politics

The Indian Ocean lies along the energy transport route from the Persian Gulf to Asia and has therefore become increasingly important geopolitically. India, China, Iran, the United States, and even Europe have recognized the importance of this region. China is trying to strengthen its maritime presence in the region by investing in ports in Pakistan, Sri Lanka, and Bangladesh, which analysts see as an example of Mahan-type competition [16][19].

Russia's Return to the Seas

Russia has also attempted to restore its maritime position in recent years by strengthening its Northern Fleet and its presence in the Mediterranean Sea. Understanding Russia's behavior in this area can also be analyzed using Mahan's theory, as Russia seeks to increase its control over sea routes and key ports [14].

Mahan's Sea Power Theory is one of the main pillars of classical geopolitics and, despite more than a century having passed, continues to have broad applicability in analyzing global competition. By emphasizing the strategic role of the seas, trade routes, and naval fleets, Mahan provided a framework that still shapes the policies of great powers. The rivalry between the United States and China, the importance of the Indian Ocean, the role of strategic ports, and states' efforts to control energy routes all demonstrate that Mahan's ideas remain alive and should be used alongside modern theories to analyze today's world.

Neo-Geopolitical Theories and Critical Geopolitics

Developments in global politics since the end of the Cold War, particularly since the beginning of the twenty-first century, have led to the emergence of a new generation of geopolitical theories. While classical theories emphasized fixed geographical elements such as landmasses, seas, borders, and natural resources, neo-geopolitical theories focus on dynamic variables such as technology, the global economy, information, energy, the environment, and international networks. These theories seek to demonstrate how today's global space has shifted from a place-based to a network-based framework [7][8].

Geopolitics in the Age of Globalization

Globalization is one of the most important forces shaping modern geopolitics. The expansion of economic interactions, the growth of global trade, the emergence of multinational corporations, and the development of financial networks have increased interdependence among countries. This has shifted the concept of power from being purely military toward economic and technological power [2][13].

Under these conditions, national security is no longer dependent solely on geographical borders; vulnerabilities may arise through non-territorial pathways such as cyberattacks, disruptions in global supply chains, or media warfare. For this reason, new geopolitical theories place special emphasis on soft power, economic power, and informational power [12][13].

Geopolitics of Technology and Cyberspace

One of the most important domains of neo-geopolitics is cyberspace. With the expansion of the internet, artificial intelligence, satellites, and digital networks, many geopolitical rivalries have moved into the non-physical domain. Countries such as the United States and China are now engaged in a multi-layered competition in the field of technology. This competition includes control over global data, the construction of digital infrastructures, the development of fifth-generation telecommunications networks, and the production of advanced semiconductors [18][19].

Cyber geopolitics is based on the principle that any country seeking global influence must control the flow of information, data, and virtual space. Cyberattacks against critical national infrastructures are examples of this type of competition. This dimension was absent in traditional geopolitical theories but has now become a central element of power [7].

Energy Geopolitics in the Contemporary World

Energy is one of the most important elements of modern geopolitics. Although oil and gas continue to play central roles, renewable energy, nuclear energy, and energy storage technologies have also become part of geopolitical competition. Countries such as China and those in Europe are attempting to diversify their energy sources to reduce dependence on unstable regions, such as the Middle East [1][14].

In contrast, countries rich in energy resources, such as Russia, the Persian Gulf states, and Iran, continue to play significant roles in power dynamics. The war in Ukraine and its impact on the European energy market is a clear example of the geopolitical role of energy in global politics [17][20].

Climate and Environmental Geopolitics

In recent years, climate change has also become a geopolitical factor. The melting of Arctic ice has opened new maritime routes, prompting countries such as Russia, Canada, and the United States to increase their presence in this region. Competition over new energy resources and mineral reserves in the Arctic has also intensified [11].

Environmental issues such as climate-induced migration, water scarcity, and environmental degradation have created new security challenges that states cannot ignore. These issues

demonstrate that geopolitics is no longer limited to conflict and competition but also includes international cooperation [8].

Network Geopolitics

One of the key concepts in modern theories is network geopolitics. In this approach, countries are analyzed not only based on their geographical position but also on their place within global networks, such as financial, energy supply, transportation, technological, and information networks [7].

Within this framework, a country like Singapore, despite its limited size, holds significant geopolitical importance due to its control over major transportation routes and its advanced infrastructure. Similarly, countries such as the United States and China, which possess the ability to create and control global technological networks, are at the center of contemporary competition [18].

Critical Geopolitics

Critical geopolitics is an approach that emerged in the 1990s and seeks to analyze geopolitics not merely as an objective reality, but as a set of political discourses. This theory holds that great powers, by producing political, media, and cultural discourses, present a particular image of the world and, on that basis, justify their foreign policies [8].

For example, the competition between the United States and China is not only a military or economic rivalry, but also a discursive one. Both countries attempt to present themselves as legitimate and responsible powers while portraying the other as a threat to the global order. Critical geopolitics analyzes these discourses and demonstrates how policies are shaped through narratives [12].

Neo-geopolitical theories indicate that the structure of global power has changed. While classical theories remain important, an accurate analysis of today's world requires incorporating new elements such as technology, energy, global networks, and cyberspace. The combination of these approaches provides a more comprehensive picture of twenty-first-century rivalries. It shows that geopolitics in the modern era has become more multilayered, complex, and network-oriented than in the past.

Behavior of Great Powers in the Twenty-First Century

The behavior of great powers in the twenty-first century combines traditional patterns based on geography with new ones based on technology, the global economy, information, and communication networks. Although classical geopolitical theories still apply in many areas, today's powers operate in a far more complex environment. This section examines the behavior of four principal actors—the United States, China, Russia, and the European Union—and demonstrates how each interacts with both classical and modern geopolitical theories.

The United States

Since the end of the Second World War, the United States has been one of the most important global powers. Its geographical position, extensive access to the Pacific and Atlantic Oceans,

large economy, advanced technology, and unparalleled military power have made it a decisive actor [11][16]. The geopolitical behavior of the United States in the twenty-first century can be analyzed from several perspectives:

Maintaining Maritime Dominance

The United States continues to seek control over maritime routes based on the principles of Mahan's theory. Its extensive military presence in the Pacific, Persian, Mediterranean, and Indian Oceans indicates that it still considers sea power the most important tool for maintaining global order [3][1].

Containing China

One of the main thrusts of US foreign policy is to contain China's growing power. Washington has sought to contain the expansion of Chinese influence by forging alliances such as the AUKUS Treaty, strengthening cooperation with Japan and Australia, and maintaining a presence in the South China Sea. [18][19] This behavior is consistent with Spikeman's theory of the importance of the land border and sea lanes.

Role of Technology and Cyberspace

In addition to military power, the United States has significant technological superiority. Control over major technology companies such as Google, Apple, and Microsoft plays an important role in U.S. geopolitical competition. The technological rivalry between the United States and China is one of the main arenas of competition in the twenty-first century [13][18].

Utilization of Soft Power

U.S. soft power—which includes media, cinema, universities, and culture—has a major impact on shaping the global order. Theorists such as Joseph Nye have elaborated on this concept [13].

China

China is the world's most important rising power, and many analysts believe it is on a path to becoming the United States' primary rival. China's geopolitical behavior is a combination of land-based, maritime, economic, and technological elements.

Development of Naval Power

By strengthening its naval fleet, China seeks to become a major maritime power. This behavior is directly aligned with Mahan's principles [3][18].

The Belt and Road Initiative

The Belt and Road Initiative, which includes a network of railways, ports, energy lines, and trade routes, represents China's most significant effort to expand its geopolitical influence

across different regions of the world. This initiative covers a large portion of the Rimland as described in Spykman's theory [5][1].

Competition in the Technological Domain

China is trying to strengthen its position in the global digital economy by developing companies such as Huawei, Alibaba, and Tencent. The technology battle between Washington and Beijing is one of the most important arenas of modern geopolitics [13][19].

China's Role in Energy and the Global Economy

China is the world's largest energy importer, and this demand has driven it to expand its influence in regions such as the Middle East, Central Asia, and Africa. This trend is consistent with the concepts of energy geopolitics [14].

Russia

Due to its vast territory, energy resources, and unique geopolitical position, Russia remains one of the major actors in the international system.

Return to the Heartland

Russia's policies in Ukraine, the Caucasus, and Central Asia indicate that it continues to emphasize the importance of the Heartland. From Mackinder's perspective, Russia seeks to maintain control over its surrounding regions [4][17][20].

Role of Energy

Russia is one of the world's largest exporters of oil and gas. It uses energy as a geopolitical tool to influence European and Asian countries. The European energy crisis following the Ukraine war is a clear example of this [14][17].

Maritime Presence

In addition to its land power, Russia is seeking to strengthen its naval presence in key regions, including the Mediterranean, Black, and Arctic seas. This is also consistent with Mahan's theory [3][11].

Competition with the West

Russia positions itself against NATO and the West. This competition is not only military but also economic, informational, and cyber. Russian cyberattacks against Western infrastructure are part of this rivalry [7][12].

The European Union

The European Union primarily appears as an economic power, but it also plays a significant geopolitical role. Principles of soft power, economics, and multilateral cooperation shape Europe's behavior in the international arena.

Economic Role

The European Union is one of the largest economies in the world and exercises its geopolitical influence through economic tools such as trade agreements and sanctions [11].

Energy Dependence

Due to its reliance on imported energy, particularly from Russia, Europe is vulnerable to geopolitical developments. The energy crisis following the Ukraine war highlighted this issue [17][20].

Security Policies

Europe seeks to play a more active role in global issues such as the environment, trade, and security. However, the lack of a unified military force has limited its hard power relative to that of the United States and China [14].

Role in Peripheral Regions

Europe maintains economic and political presence in important regions such as the Balkans, the Caucasus, and the Middle East. This presence can be analyzed within the framework of Spykman's theory [5].

Emerging Powers

In addition to the four main powers, other countries are increasing their roles in global geopolitics. Countries such as India, Turkey, Iran, Brazil, and Saudi Arabia are examples of regional powers whose geopolitical behavior has global implications.

India

India is one of the most important emerging powers in Asia and seeks to strengthen its role in the Indian Ocean and South Asia [1].

Turkey

With its unique geopolitical position at the crossroads of Europe, Asia, and the Middle East, Turkey is gaining regional influence [14].

Iran

Due to its energy resources, location in the Persian Gulf, and regional influence, Iran is an important geopolitical actor [17].

Saudi Arabia and the United Arab Emirates

These countries, particularly in energy and global investment, play significant roles [14]. The behavior of great powers in the twenty-first century represents a combination of classical and modern geopolitical principles. Some behaviors, such as the maritime competition between the United States and China, can be analyzed through Mahan's theory, while their technological rivalry requires neo-geopolitical theories. Similarly, Russia's behavior in Eastern Europe can be explained through Mackinder's concepts, while Europe's behavior can be understood through soft power frameworks. This section demonstrates that analyzing today's world requires a hybrid approach that incorporates both traditional and modern elements.

Comparative Analysis of Theories with the Behavior of Great Powers

An analysis of great-power behavior in the twenty-first century shows that no single geopolitical theory can provide a complete and precise picture of global politics. Each theory explains only part of reality. Therefore, a comparative approach to geopolitical theories is particularly important. This section examines the extent to which the main geopolitical theories—namely the Heartland Theory, Rimland Theory, Sea Power Theory, and neo-geopolitical theories—can explain the behavior of great powers in today's world.

Evaluating the Validity of Mackinder's Heartland Theory

The Heartland Theory remains important in analyzing the behavior of Russia, China, Europe, and even the United States. Mackinder believed that the central region of Eurasia—the Heartland—is the key to controlling the world [4]. Developments in the twenty-first century show that this region still holds great importance.

Ukraine

The Ukraine crisis is the most prominent example of the Heartland Theory in today's world. Russia seeks to maintain its influence in this region because it considers it part of its geopolitical security. In contrast, NATO and Europe attempt to prevent the expansion of Russian influence. Mackinder argued that any power controlling Eastern Europe could dominate the Heartland and ultimately become the dominant global power [4][17]. Russia's behavior in Ukraine, Georgia, and Central Asia reflects this pattern.

Central Asia

China, through the Belt and Road Initiative, is seeking to expand its economic and political control in Central Asia. This region, part of the Heartland, is vital to China for energy and trade routes [18]. Thus, the Heartland Theory is also applicable in analyzing China's policies.

Competition in the Arctic

In recent years, competition between Russia, the United States, and the Nordic countries in the Arctic has increased. The melting of the ice has turned the region into a new trade and resource-extraction route. Russia is one of the main players in this competition due to its geographical location [11]. This also increases the importance of the northern regions of the Earth's heartland.

Mackinder's theory remains highly useful for analyzing power behavior in Eurasia; however, it must be complemented by modern theories, as many contemporary rivalries occur in domains such as technology, economics, and information, not solely on land.

Evaluating the Validity of Spykman's Rimland Theory

Spykman's theory, emphasizing the role of Eurasia's peripheral regions, is significant for analyzing global politics [5]. Developments in the twenty-first century show that major power competitions occur precisely in these regions.

South China Sea

The Indo-Pacific region, which forms a major part of the Rimland, is now the center of military and economic competition between China and the United States. Control over the maritime and economic routes of this region is vital for both countries [12][18].

Middle East

The Middle East is also one of the most important landlocked regions. This region has long been a site of competition among the United States, Russia, China, and Europe due to its energy resources, trade routes, and geopolitical location [14]. The importance of energy and the security of energy transport routes have made this region one of the most important geopolitical axes.

Eastern Europe and the Balkans

Eastern Europe lies at the boundary between the Heartland and the Rimland. Russia, Europe, and the United States are engaged in geopolitical competition in this region. Its importance has increased particularly after the Ukraine crisis [17].

Spykman's theory remains valid, as many contemporary rivalries occur in peripheral regions. China's Belt and Road Initiative, the U.S. presence in the Pacific, and competition in the Middle East all reinforce this theory.

Evaluating the Validity of Mahan's Sea Power Theory

Mahan's theory, which emphasizes control over seas and maritime routes, remains highly applicable in analyzing many twenty-first-century rivalries [3].



U.S.–China Maritime Competition

This rivalry is one of the most important examples of Mahan's theory in practice. China seeks to expand its control over the South China Sea, while the United States aims to contain China through its extensive military presence in the region [1][18][19]. This competition is fundamentally maritime in nature and fits precisely within Mahan's framework.

Importance of the Indian Ocean

The Indian Ocean is one of the most important global energy transit routes. Countries such as China, India, and the United States seek to maintain a presence in this region. China, through investments in ports in Pakistan, Sri Lanka, and Africa, aims to create a maritime belt. This behavior is a clear example of Mahanian patterns [18].

Importance of Ports and Maritime Routes in Europe

Europe, despite its focus on economic and soft power, recognizes the importance of maritime routes. The security of energy and maritime trade routes is vital for the European economy [14].

Due to the importance of maritime routes, global transportation, energy flows, and naval competition, Mahan's theory remains valid and continues to play an important role in analyzing global politics.

Assessing the validity of new geopolitical theories

New geopolitical theories focus on technology, information, economics, environment, and global networks [7][8]. In the 21st century, many new competitions have been formed in these areas.

The US-China technological competition

This competition, which includes data control, digital networks, the Internet, artificial intelligence, robotics, and satellites, is one of the most important areas of geopolitics today. This competition cannot be analyzed with traditional theories and requires new theories [13][18][19].

Energy geopolitics

Countries such as Russia and Saudi Arabia use energy as a foreign policy tool. Europe is also trying to reduce its dependence. New energies are also part of the future competition [14][17].

Cyber geopolitics

Cyberattacks, information warfare, and the role of digital networks are among the most important elements of geopolitics today. Many competitions are conducted in cyberspace [7].

Climate Geopolitics

Climate change and environmental crises have affected global politics. The competition in the Arctic is a clear example of this [11].

New geopolitical theories are essential for analyzing technological, cyber, energy, and environmental competitions and for understanding the behavior of great powers.

General conclusions of comparative analysis

The comparative analysis shows:

- Classical theories are still valid but not sufficient.
- The core of the Earth, the land margin, and sea power are clearly visible in many competitions.
- New geopolitical theories are essential for analyzing new phenomena.
- Old theories cannot explain technology, cyberspace, the global economy, and energy.
- Combining theories is the best analytical tool.
- The competition between China and the United States in the South China Sea can be explained by Mahan, but new theories are needed to explain their competition in artificial intelligence.
- Great powers compete in several areas at the same time.
- Geography, economy, technology, energy, and information are all parts of power.
- The world today is more networked and complex than in the past.
- Therefore, geopolitical analysis must be multidimensional.

Geopolitical Case Studies

Examining real-world examples helps to better how geopolitical theories are applied in today's world. In this section, three important examples are analyzed: the Ukrainian crisis, the Sino-American competition in the South China Sea, and the geopolitics of energy in the Middle East.

The Ukrainian Crisis

The Ukrainian crisis is one of the most important geopolitical events of the 21st century. This crisis can be analyzed directly using Makin's Heart of the Earth theory. The Ukrainian region lies at the border between the Heart of the Earth and Europe and has historically been a strategic region.

The geopolitical importance of Ukraine

Macin believed that control over Eastern Europe is the key to mastery over the Heart of the Earth [4]. Russia also considers this region as part of its security sphere. Ukraine's possible

membership in NATO is considered a threat to Russia's security, because NATO's presence near Russia's borders could weaken its defenses [17].

Russia-West Competition

This crisis is not only a competition between Russia and Ukraine, but also a broader competition between Russia and the West. The United States and Europe are seeking to reduce Russian influence, while Russia seeks to maintain its influence in the region. This competition also reflects the conflict between land and sea powers [11][14].

The role of energy

Ukraine is an important route for transporting Russian gas to Europe. Control over these routes is of great geopolitical importance. Russia uses energy as a tool of pressure, while Europe is trying to reduce its dependence [17].

Theoretical insights

This crisis is a perfect example of the application of the Makin-Der and Spikeman theory, because Ukraine is both at the heart of the Earth and at the land margin.

China-US competition in the South Sea

The South China Sea is one of the most important geopolitical points in the world, where the main competition between the United States and China is taking place.

The importance of the South China Sea

This region accounts for more than a third of global trade. A large part of China's imported energy also passes through this route [12]. Therefore, control of this region is vital for China.

Chinese behavior

China is seeking greater control over this region by building artificial islands, establishing military bases, and strengthening its navy. This behavior of China is consistent with Mahan's theory of sea power [3][18].

US response

The US is seeking to contain China's influence by emphasizing freedom of navigation and by sending its ships to the region. This action by Washington is an example of competition between an established maritime power and an emerging power [1][19].

Technological dimensions

In addition to the military dimensions, this competition is also ongoing in the field of

technology. China and the US are engaged in fierce competition in 5G, artificial intelligence, and digital infrastructure [13]. This part of the competition can be analyzed with new geopolitical theories.

Theoretical understandings

This case shows how Mahan's theory and new technological theories can be seen as competing at the same time.

Geopolitics of Energy in the Middle East

The Middle East remains one of the world's most important geopolitical regions and a major source of global energy. The competition between powers over energy, transport routes, and regional influence can be analyzed within the framework of various theories.

The Role of Energy

The countries of the Middle East have vast oil and gas reserves. This has led to the presence of global powers such as the United States, Russia, and even China in this region [14].

Security of Strategic Straits

The Straits of Hormuz, Bab al-Mandeb, and Suez are among the most important geopolitical points in the world. Any disruption in them can have a severe impact on the global energy market [11].

Regional Competition

The competition between Iran and Saudi Arabia, Turkey's role, Russia's influence in Syria, and the United States' presence in the Persian Gulf all underscore the geopolitical importance of this region [14].

Policies of World Powers

China has also entered the region in recent years and is trying to strengthen its relations with the Persian Gulf countries. China's energy needs are the main reason for this presence [18].

Relationship with Geopolitical Theories

Energy geopolitics is part of modern theories, but the importance of sea routes in this region also confirms Mahan's theory.

The analysis of case studies shows that geopolitical theories remain applicable in today's world, but only in a combined form.

The Ukrainian crisis is better explained by the core theory, while the competition between China and the United States in the South China Sea is better explained by Mahan's theory. Energy geopolitics also shows that classical and modern theories complement each other.

Case studies show that today's world is multifaceted and complex, and that its geopolitical analysis requires a set of theories.

CONCLUSION

A geopolitical analysis of the behavior of great powers in the 21st century shows that, although today's world is defined by new technologies, a globalized economy, and complex information networks, it still retains deep roots in geography and traditional factors of power. In fact, the 21st century should be considered an era of combining classical geopolitics and new geopolitics. Traditional theories such as the core of the earth, the land edge, and sea power are still evident in many global competitions, but these theories alone cannot explain the complexities of today's world. For this reason, new theories that emphasize technology, economics, energy, the environment, and global networks have become necessary.

The study of the behavior of the United States, China, Russia, and the European Union in this article showed that each of these powers pursues a combination of land-based, sea-based, economic, technological, and information strategies. The United States continues to use its naval power as its primary tool for maintaining global supremacy, while simultaneously playing a dominant role in technology and information. China is on its way to becoming a global power, and its strategies include developing its navy and creating international economic and technological networks. Russia, emphasizing the role of the Eurasian regions and energy resources, seeks to rebuild its geopolitical position, and Europe, relying on economics and soft power, plays an important role in the international system.

The case studies examined in this article clearly demonstrate how different geopolitical theories are applicable in today's world. The Ukrainian crisis underscores the enduring importance of Eurasian geography to global security. The maritime competition between China and the United States demonstrates the continuing role of sea routes in global politics. The geopolitics of energy in the Middle East also shows that control of energy resources and transport routes continues to play a decisive role in countries' behavior.

However, today's world cannot be explained by traditional theories alone. The rise of cyber power, the role of digital networks, the importance of data, and the growth of technology companies have reshaped geopolitics. Countries that can play a central role in advanced technology, information infrastructure, new energy, and global supply chains will have more power in the future.

Consequently, geopolitical analysis in the 21st century must take a hybrid, flexible, and multidimensional approach. Researchers and policymakers must consider both classical concepts and the role of new factors. Today's world is a world in which land, sea, space, technology, economics, and information all work together to shape the power structure. Understanding this reality helps us better analyze global developments and gain a more accurate picture of the future of international politics.

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