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Original Research

A Bibliometric Analysis of Paradiplomacy Research on the Scopus Database Using the VOSviewer Application

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Abstract

This article seeks to examine the evolution of studies on paradiplomacy thoroughly. This is crucial due to the substantial advancement of this subject in international relations research. This research employs bibliometric analysis using the VOSviewer tool to examine and visually represent the progression of paradiplomacy research in the Scopus database. Within the Scopus database, a total of 214 documents from the years 1984 to 2023 were found that specifically mentioned paradiplomacy. Canada has the most contributors who discuss paradiplomacy, with precisely 34 papers. Most articles on paradiplomacy, specifically 68.0%, focus on the social sciences. Simultaneously, Stéphane Paquin holds the record for the highest number of documents authored, totaling ten. From 1984 to 2023, researchers in the field of paradiplomacy focused on 15 topics. These topics included subnational government, United States, diplomacy, diplomatic relations, cultural paradiplomacy, free trade, European Union, Quebec, decentralization, developing countries, federalism, assemblage theory, foreign relations, foreign policy, and sub-state diplomacy. Regarding the advancement of paradiplomacy research, several factors contribute to its development. These factors include the implementation of decentralization in various countries and the growing recognition among sub-state actors of the benefits they can achieve through paradiplomacy activities. This study concludes that between 1984 and 2023, the research on paradiplomacy primarily examined the interests of sub-state actor entities and their paradiplomacy activities. This is evident in the 15 topics that received significant attention from paradiplomacy researchers during this period.

Keywords: Bibliometric Analysis, Paradiplomacy Research, Visualization.

Introduction

Paradiplomacy is a highly advanced and extensively explored subject within international relations. This demonstrates that the involvement of local governments in global affairs indicates a fundamental shift in the concept of sovereignty. It is no longer possible to think of it in terms of the exclusive state provisions of the Westphalia system. For states to fully exercise

their sovereignty and ensure the well-being of their populations, they must collaborate with other actors in the international arena. This can be seen in paradiplomacy, where the state retains ultimate sovereignty but delegates limited authority to regional governments as determined by the central government (Wolff, 2007).

The field of paradiplomacy studies has witnessed significant growth, as evidenced by the extensive research conducted between 1984 and 2023. Two hundred fourteen studies in the Scopus database have specifically addressed paradiplomacy, emphasizing the activities of sub-state actors driven by their interests. For instance, studies conducted by Duchacek (1984) explicitly describe the interdependence relationship between subnational governments in several countries, which cannot be separated from the increasingly complex problems faced by each subnational government, such as foreign workers' rights, foreign investment, foreign trade promotion, and many other issues (Nganje, 2016; Sharma, Destradi & Plagemann, 2020). Duchacek (1984) mentioned that there are two types of paradiplomacy. The first is transborder regional regimes, which are more based on informal relationships, and the second is global micro diplomacy, interpreted as an official relationship between subnational governments and other subnational governments.

Since the 2000s, research on paradiplomacy has increased in the Scopus database. In 2010, there were 25 documents. In 2017, there were 19 documents. In 2019, there were 14 documents. In 2020, there were 12 documents, and in 2021, there were 32 documents. This shows that the study of paradiplomacy is starting to get the attention of world researchers. Research in the early 2000s includes Paquin (2002), Vos, Boucke, and Devos (2002).

While numerous studies on paradiplomacy research have been conducted, only a limited number have employed a bibliometric methodology using articles from the Scopus database. Additionally, very few studies have utilized the article review process with the VOSviewer tool. Hence, this study centers on a comprehensive analysis of scholarly publications employing a bibliometric methodology, utilizing 214 scientific articles from the Scopus database.

This study uses bibliometric analysis to analyze scientific information regarding paradiplomacy research in the Scopus database (Mesa Bedoya, González Parias & Zeraoui, 2023). Bibliometric analysis is a branch of knowledge and library science that analyzes bibliographic data from scientific publications using statistical methods. Based on Yin, Wang & Zhu (2020), bibliometric analysis is interpreted as the latest statistical methods and data retrieval techniques in informatics, providing a different perspective on a particular topic and enabling the discovery of previously unknown information. Although it was the first part of library science studies, in recent developments, bibliometrics has aimed to evaluate research results on a particular topic, even a bibliometric analysis of a journal in a certain period.

Bibliometric analysis is a scientific approach that describes a comprehensive map of knowledge structure, assessment, and measurement and focuses on scientific publications drawn from databases.

This research study addresses the question: “How is the development of paradiplomacy research in the Scopus database?”. Furthermore, this research enhances the advancement of paradiplomacy studies within the field of international relations and identifies the possibilities for further research in the area of paradiplomacy studies.

Theoretical Framework

The concept of Paradiplomacy

The explanation of the concept of paradiplomacy cannot be separated from the emergence of foreign relations activities carried out by the non-central government (Bursensa & Deforche, 2010; Kuznetsov, 2014). The emergence of the term paradiplomacy itself cannot be separated from the early 1980s, when the renewal of the theory of new federalism emerged, especially when describing the phenomenon of new federalism in North America, which clearly illustrates the emergence of the non-central government in foreign relations (Aguirre, 1999; Jaursch, 2023; Zeemering, 2019).

The term paradiplomacy was first introduced by Panayotis Soldatos, who combined the terms parallel diplomacy and paradiplomacy. It is also inextricably linked to the importance of substate actors in international relations (Kania, 2021; Royles, 2017). It is also expressed by Duchacek (1984), who explained that the emergence of paradiplomacy cannot be separated from the increasingly complex relationships between substate actors, for example, in foreign investment, foreign workers, and others.

The emergence of paradiplomacy ultimately also shows a shift in the role of the central government or state in foreign relations (Cornago, 2010). Because paradiplomacy can directly accommodate the interests of substate actors. In other words, the emergence of paradiplomacy has shifted the meaning of the Westphalia treaty, which places the central government in a country as the sole actor in foreign relations (Chater, 2021)

The reduced capacity of the state or central government to run foreign relations can be seen in the history of world politics; for example, what happened in several countries such as Canada, Belgium, Spain, Iraq, the United Kingdom, Indonesia, and several other countries shows the undeniable fact of the vital role of substate actors in running foreign relations (Akreyi, 2017).

The development of paradiplomacy has finally encouraged each country to make its own rules to ensure that paradiplomacy initiated or implemented by substate actors is in line with the objectives of the central government in a country and does not otherwise threaten the sovereignty of a nation.

Materials and Methods

This study adopts five phases, as shown in Table 1. The first stage of this research was carried out by determining the theme first. In the context of this research, the theme used is Bibliometric Analysis of Paradiplomacy Research on the Scopus database using the VOSviewer application. Making problem formulations and setting research objectives is the second stage. The formulation of the problem and research objectives is to find the bibliometric analysis of paradiplomacy research on the Scopus database using the Vosviewer application. Systematic Literature Review (SLR) is the technique used and is assisted by applications such as Mendeley, an automatic presenter of article sources, and VOSviewer, which displays data. And Scopus, which functions as a reference source.

Table 1
Steps in Conducting Research with Reference Sources from Scopus

Research Implementation Stage				
Step I	Step II	Step III	Step IV	Step V
Determining the research topic. ↓ A Bibliometric Analysis of Paradiplomacy Research on the Scopus Database Using the Vosviewer Application	Formulating Research Questions. ↓ How is paradiplomacy research developed in the Scopus database? ↓ The purpose of the research is to find out the development of paradiplomacy research in the Scopus database. ↓ Determine the systematic literature review (SLR) method using supporting applications like Scopus, VOSviewer, and Mendeley.	Article Search and Selection. ↓ Determine a reputable journal as a journal database, namely Scopus. ↓ Use the database to find related articles for reference. ↓ Search for articles titled "Paradiplomacy" and then find 214 related articles. .	Thematic analysis and conceptualization of paradiplomacy. ↓ Download the RIS file from Scopus, which is then extracted into the Mendeley application for automatic reference formatting. ↓ Extract the RIS file into the VOSviewer application to visualize data from Scopus through network, overlay, and density visualization. ↓ Then, the results from the VOSviewer visualization will be downloaded and analyzed.	Finding and compiling research results ↓ Choose the article's title that suits the needs and group it according to its relationship to the topic of paradiplomacy. ↓ Opening, reading, analyzing, and concluding the results of previous research from the articles contained in the Mendeley application ↓ Analyzing the coherence of these findings with the topic of paradiplomacy. ↓ Develop a narration based on analyzed article data and data visualization from the VOSviewer application. ↓ Determine the general description for compiling research results. ↓ Build references with the Mendeley application.

The search and choice of articles constitute the third stage. At this point, Scopus is a credible source of journal articles to conceptualize paradiplomacy. An analysis of themes will be carried out in the fourth stage. The first step is downloading the Scopus RIS file, which

includes articles from previously searched journals. The Mendeley program then extracts the RIS file to compile reference sources automatically. The data obtained from Scopus is next visualized in the VOSviewer application using a Scopus RIS file. Network, overlay, and density visualization are the three data visualization methods.

All the collected data is then analyzed. The stages of data analysis are described in Figure 1.

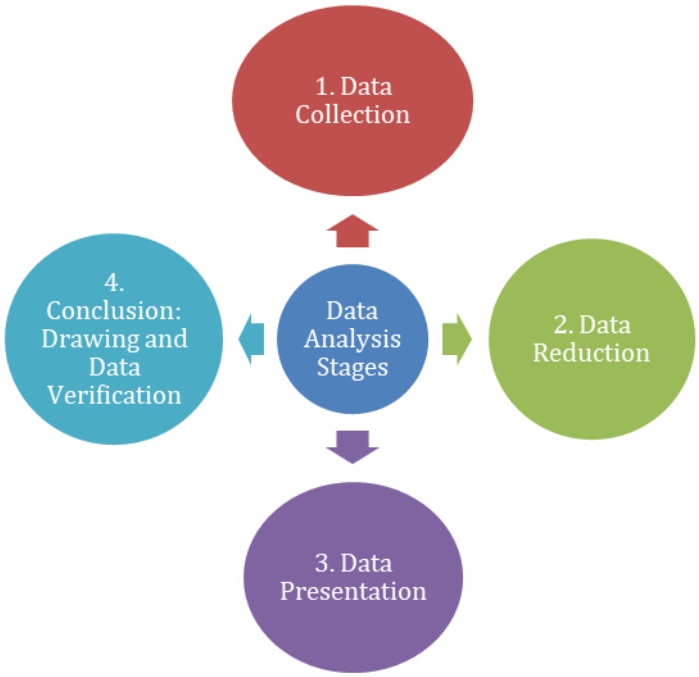

Figure 1: Data Analysis Stages

Data collection is the first stage in the data analysis process. The information has been collected through prior articles pertinent to the issue discussed. This source originates from the Scopus database, a reliable source of information. The data gathered in this research will be converted into qualitative and quantitative data. Quantitative data is in the form of statistical data from Scopus, while qualitative data is controlled using the VOSviewer tool. The data is reduced in the second stage. Reducing involves removing information deemed unneeded or less helpful for research. Data reduction helps research concentrate more effectively to create fresh discoveries that are credible and understandable.

Presenting data serves as the third stage. Pictures, charts, tables, or a brief description of the data obtained can all be used to illustrate the data. Concluding, sketching, and validating data are the final stages. We also outline the quantitative facts to explain and facilitate understanding. This research's qualitative data, which is crucial, is also given attention. New findings, conclusions, and ideas would emerge from the research techniques and results as social science connected to the issue, namely paradiplomacy, so the research findings could be the most recent findings and support earlier studies. Research findings can take the form of confirmation of earlier research findings that are still in the dark or brand-new research discoveries.

Result

Leading authors, institutions, and countries represented in Paradiplomacy studies

This section describes the contributors to the study of paradiplomacy based on authors, institutions, and countries. Figure 2 shows that Stéphane Paquin from the Ecole Nationale d'Administration Publique, Quebec, Canada, is a prominent author in the study of paradiplomacy. This can be seen from the number of documents in the Scopus database, namely, 10. The following authors who contributed to developing paradiplomacy studies are Noe Cornago, Fritz Nganje, and Jorge A. Schiavon, with four documents, followed by Elena Albina, Hynek Böhm, Cristian Cantir, Annie Chaloux, David Criekemans, and Jana Deforche, with 3 documents. A clear picture of the most prominent contributors to paradiplomacy studies can be seen in the figure below.

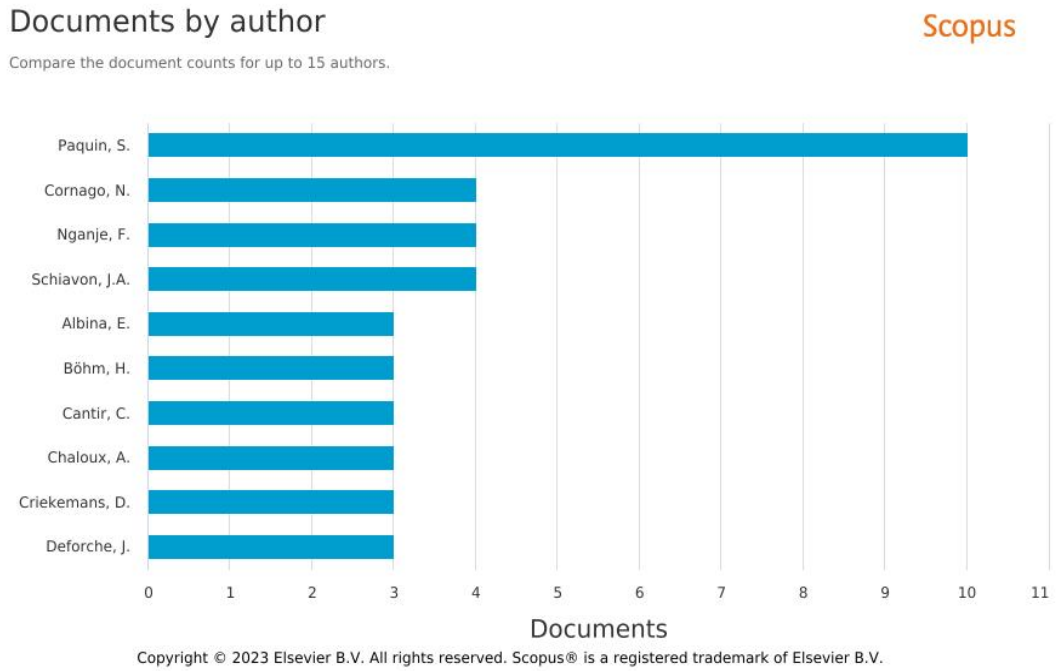

Figure 2: The Most Authors Contribution to Paradiplomacy Studies, 1984-2023

Based on the author's affiliation, the institution that contributes the most to the development of paradiplomacy studies is Ecole Nationale d'Administration Publique, Canada, with 12 documents, followed by several other institutions, namely Université de Sherbrooke and Universiteit Antwerpen, with nine papers. University of Padjadjaran with six documents. University of Johannesburg, Centro de Investigación y Docencia Económicas, and University of Ottawa with four papers. The University of Adelaide, Oakland University, and Universiteit Leiden with three papers (Figure 3).

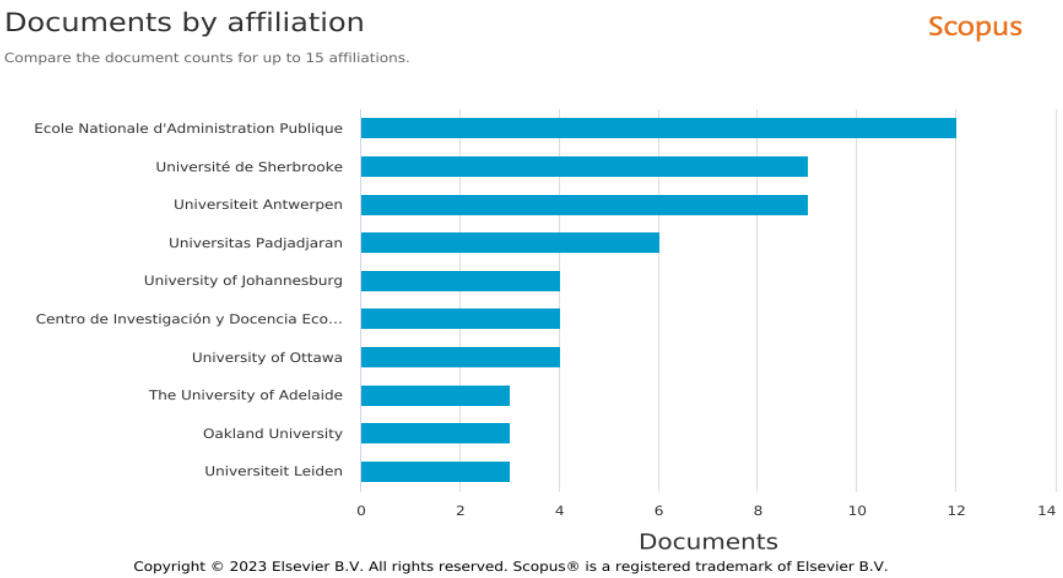

Figure 3: Affiliation Contribution to Paradiplomacy Studies

Figure 4 describes the countries of origin of contributors to the study of paradiplomacy. Among them are Canada, with 34 documents; the United States, with 29 documents; the United Kingdom, with 24 documents; Brazil, with 20 documents; Belgium, with 18 documents; Indonesia, with 13 documents; South Africa and Spain, with nine documents, and France and the Netherlands, with eight documents (Figure 4).

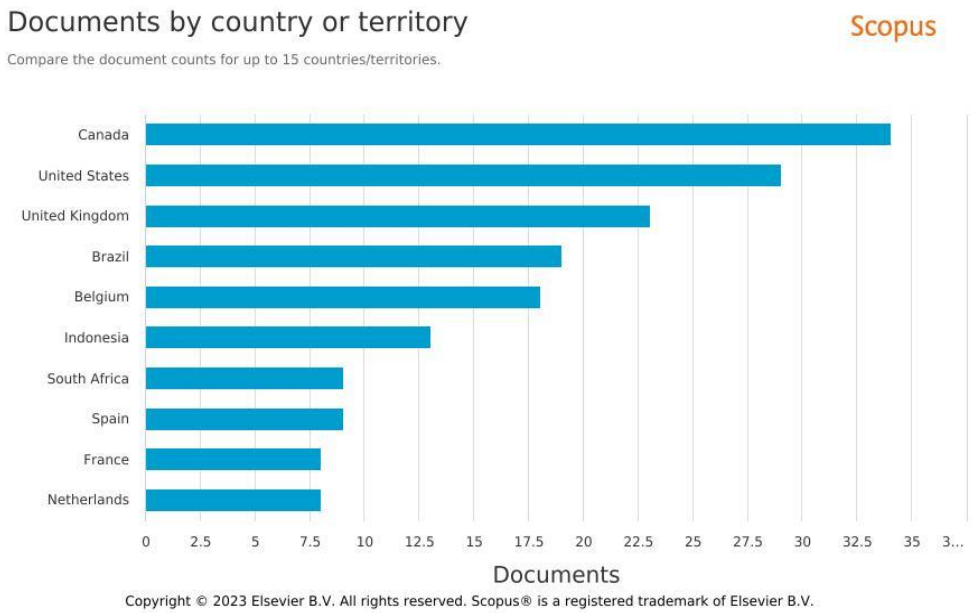

Figure 4: Author's Countries in Paradiplomacy Studies

Influential works in Paradiplomacy studies

Table 2 shows the ten most cited works, or, in other words, the most influential articles published in paradiplomacy studies. The citations taken are those entered into the Scopus database (as of April 2023), meaning that documents citing articles in Paradiplomacy Studies

are also published in other Scopus-indexed journals. Michael F. Keating's article Regions and International Affairs: Motives, Opportunities, and Strategies was cited 106 times in the Scopus database. Ivo D. Duchacek's The International Dimension of Subnational Self-Government was cited 80 times. Noe Cornago's on the Normalization of Sub-State Diplomacy was mentioned 67 times.

Michaël Tatham's article entitled 'With or without you'? Revisiting territorial state bypassing in EU interest representation was cited 62 times. David Criekemans' Regional Sub-State Diplomacy from a Comparative Perspective: Quebec, Scotland, Bavaria, Catalonia, Wallonia, and Flanders were cited 42 times. Gulnaz Sharafutdinova, Iñaki Aguirre, Alexander S. Kuznetsov, Noe Cornago, and Michaël Tatham were cited 36 times, 34 times, 32 times, 31 times, and 27 times, respectively.

Table 2
Top Ten Most Cited Works

No	Authors	Title Article	Year, Source	Cited
1	Keating, M.	Regions and international affairs: Motives, opportunities and strategies	1999, Regional and Federal Studies 9(1), pp. 1-16	106
2	Duchacek, I.D.	The international dimension of subnational self-government	1984, Publius 14(4), pp. 5-31	80
3	Cornago, N.	On the normalization of sub-state diplomacy	2010, The Hague Journal of Diplomacy 5(1-2), pp. 11-36	67
4	Tatham, M.	'With or without you'? Revisiting territorial state-bypassing in EU interest representation	2010, Journal of European Public Policy 17(1), pp. 76-99	62
5	Criekemans, D.	Regional sub-state diplomacy from a comparative perspective: Quebec, Scotland, Bavaria, Catalonia, Wallonia and Flanders	2010, The Hague Journal of Diplomacy 5(1-2), pp. 37-64	42
6	Sharafutdinova, G.	Paradiplomacy in the Russian regions: Tatarstan's search for statehood	2003, Europe - Asia Studies 55(4), pp. 613-629	36
7	Aguirre, I.	Making sense of paradiplomacy? An intertextual inquiry about a concept in search of a definition	1999, Regional and Federal Studies 9(1), pp. 185-209	34
8	Kuznetsov, A.S.	Theory and practice of paradiplomacy: Subnational governments in international affairs	2014, Theory and Practice of Paradiplomacy: Subnational Governments in International Affairs pp. 1-174	32
9	Cornago, N.	Diplomacy and paradiplomacy in the	1999, Regional and	31

No	Authors	Title Article	Year, Source	Cited
		redefinition of international security: Dimensions of conflict and cooperation	Federal Studies 9(1), pp. 40-57	
10	Tatham, M.	Paradiplomats Against the State: Explaining Conflict in State and Substate Interest Representation in Brussels	2013, Comparative Political Studies 46(1), pp. 63-94	27

*The Data Retrieved on 25 April 2023 in the Scopus database

Main research, cluster analysis, and mapping study

Cluster analysis

This section will explain the concepts that were discussed between 1984 and 2023. The paradiplomacy study, based on 214 documents, found 15 concept clusters in paradiplomacy studies. Figure 5 illustrates the cluster analysis of the paradiplomacy concept. This clustering is intended to help researchers analyze particular topics in the future. An idea is discussed by prior researchers more frequently the larger its circle. Researchers can also compare their work to studies comparable to or dissimilar to theirs through this network. The network shown below further demonstrates that, despite belonging to the same cluster, the concept of one is nonetheless related to ideas from different clusters. The detected cluster and the list of idea items are shown in Table 3.

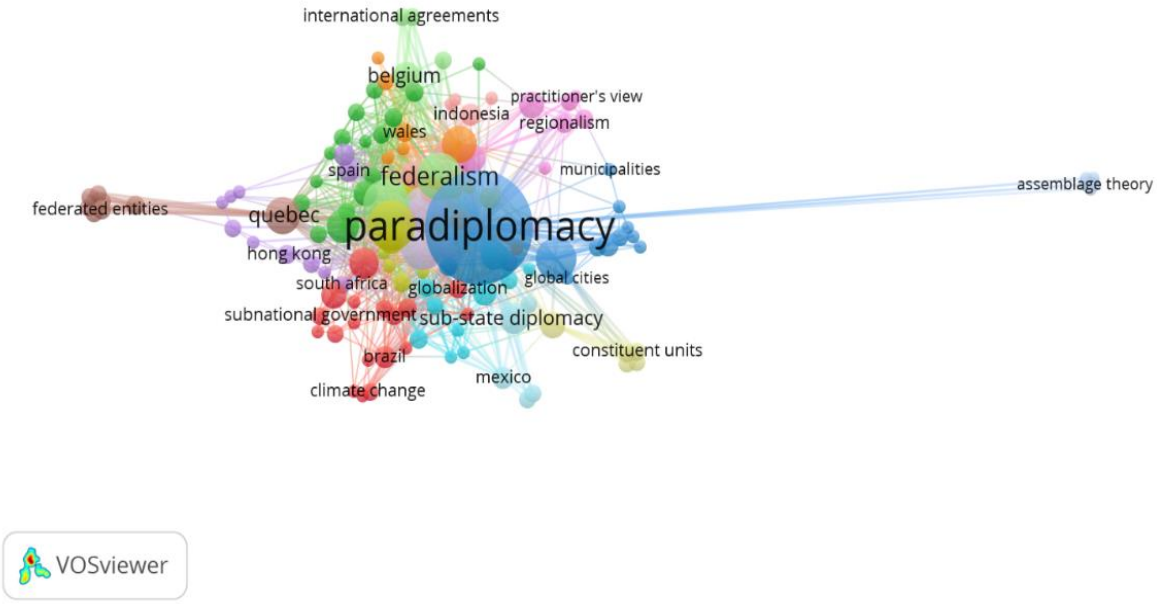

Figure 5: Cluster analysis of concepts in Paradiplomacy Studies, 1984-2023

Table 3 displays each cluster and the concept items within it. This implies that researchers, especially new ones, can concentrate on other ideas if they choose a specific cluster. Using the concept items presented in each cluster, researchers can identify areas relevant to the study.

Table 3
Cluster and items of concept

Cluster	Items of Concept	Total
Cluster 1	Africa, brazil, cap and trade, china, cities, comparative study, covid-19, global health, globalization, international cooperation, leadership, mayors, multilevel governance, subnational diplomacy, subnational government, sao paulo	17
Cluster 2	cross-border relations, Eurasia, Europe, European dimension, federal system, governance, governance approach, international trade, Japan, NAFTA, negotiation process, regional development, Russian federation, security, United States, wallonia	16
Cluster 3	city diplomacy, city twinning, diaspora diplomacy, diplomacy, global cities, global governance, globalization, india, municipalities, non-state actors, paradiplomacy, regions	13
Cluster 4	Australia, diplomatic relations, geopolitics, indigenous peoples, islands, political geography, political system, regional politics, sovereignty, state role, strategic approach	11
Cluster 5	Catalonia, cultural paradiplomacy, decentralization, democracy, development, hongkong, public paradiplomacy, soft power, South Africa, spain, subnational	11
Cluster 6	Culture, economic relations, free trade, Latin America, nationalism, political relations, Russia, subnational actors, Tatarstan, transnationalism	10
Cluster 7	Development cooperation, devolution, European Union, interest representation, regionalization, Scotland, stakeholder, United Kingdom, wales	9
Cluster 8	Domestic outreach, federated entities, identity pluralism, institutionalization, multi-actor development, network and information models, public diplomacy, quebec	8
Cluster 9	Decentralization, European Union, federated state diplomacy, multi-level governance, neo-medievalism, practitioner's view, regionalism	7
Cluster 10	Developing countries, Indonesia, investments, local government, protodiplomacy	5
Cluster 11	Belgium, Canada, federalism, institutionalism, international agreements, treaty-making	6
Cluster 12	Assemblage theory, Gibraltar, Greece, Iran, overseas territories	5
Cluster 13	Constituent units, foreign relations, international socialization, normalization, sub-state	5
Cluster 14	Foreign policy, government, international relations, Iraq, parliamentary diplomacy	5
Cluster 15	Diplomatic representation, federal diplomacy, local diplomacy, Mexico, sub-state diplomacy	5

Mapping study

This section will describe the dominant research in paradiplomacy studies based on the 15 clusters. To analyze the dominant research, we will use VOSviewer to visualize it. The central topic in each cluster can be determined by observing the largest circle within the cluster. The largest circle represents the topic most frequently addressed within the cluster. In Cluster

1, **subnational government** was the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. According to the graph, subnational government was linked to 11 different terms (Figure 6).

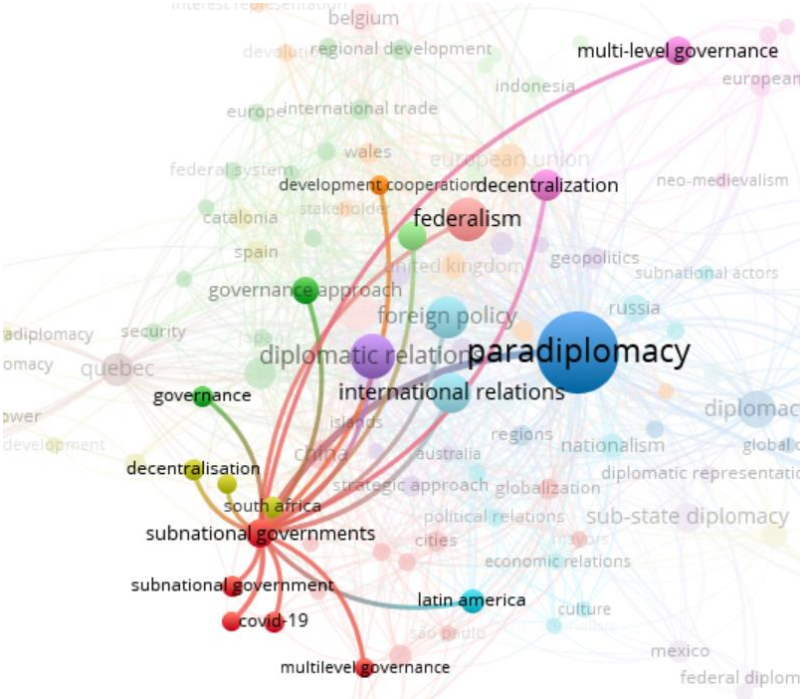

Figure 6: Network Visualization of Cluster 1

In cluster 2, **the United States** was the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. According to the graph, the United States was linked to 12 different terms (Figure 7).

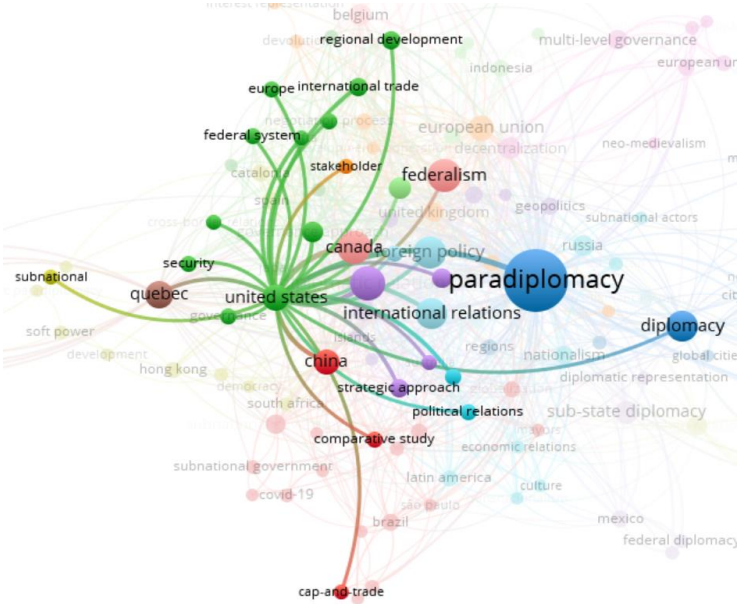

Figure 7: Network Visualization of Cluster 2

In cluster 3, **diplomacy** was the center of the term most commonly used as a research topic

for paradiplomacy studies and had numerous connections with other terms. According to the graph, diplomacy was linked to 16 different terms (Figure 8).

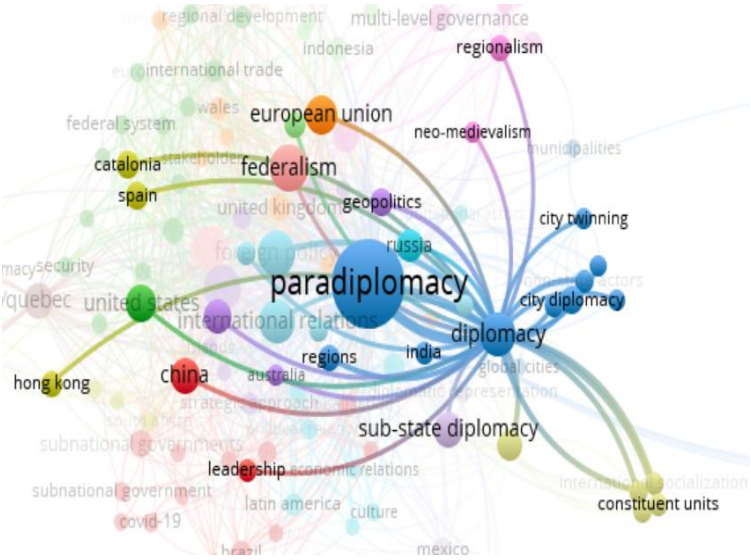

Figure 8: Network Visualization of Cluster 3

In cluster 4, **diplomatic relations** were the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. According to the graph, diplomatic relations were linked to 32 different terms (Figure 9).

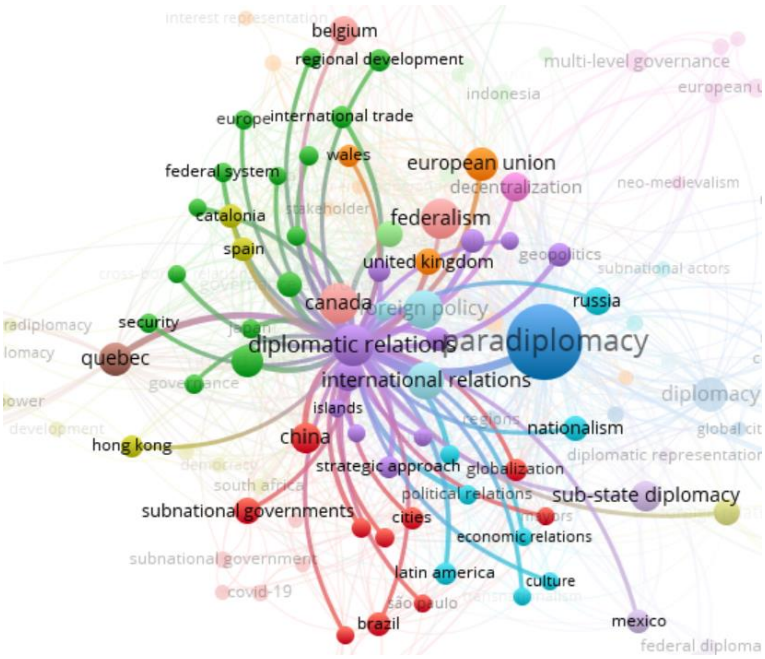

Figure 9: Network Visualization of Cluster 4

In cluster 5, **cultural paradiplomacy** was the center of the term most commonly used as a research topic for paradiplomacy studies, but it has no connections with other terms (Figure 10).

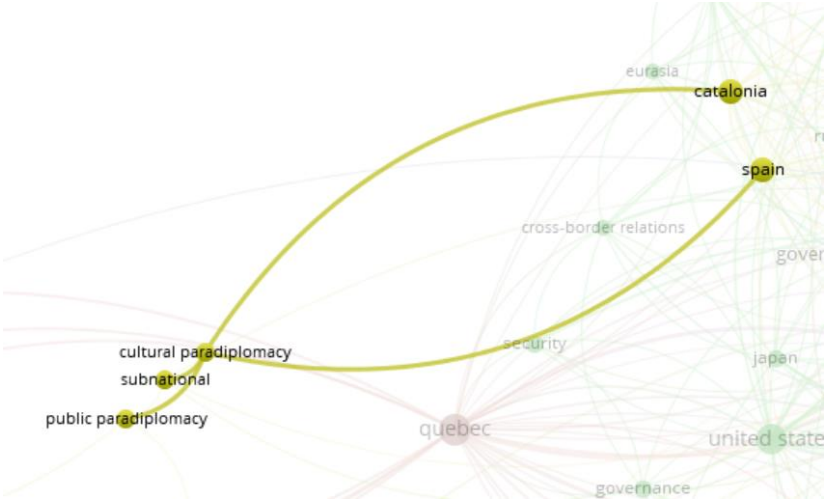

Figure 10: Network Visualization of Cluster 5

In cluster 6, **free trade** was the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. According to the graph, free trade was linked to 12 different terms (Figure 11).

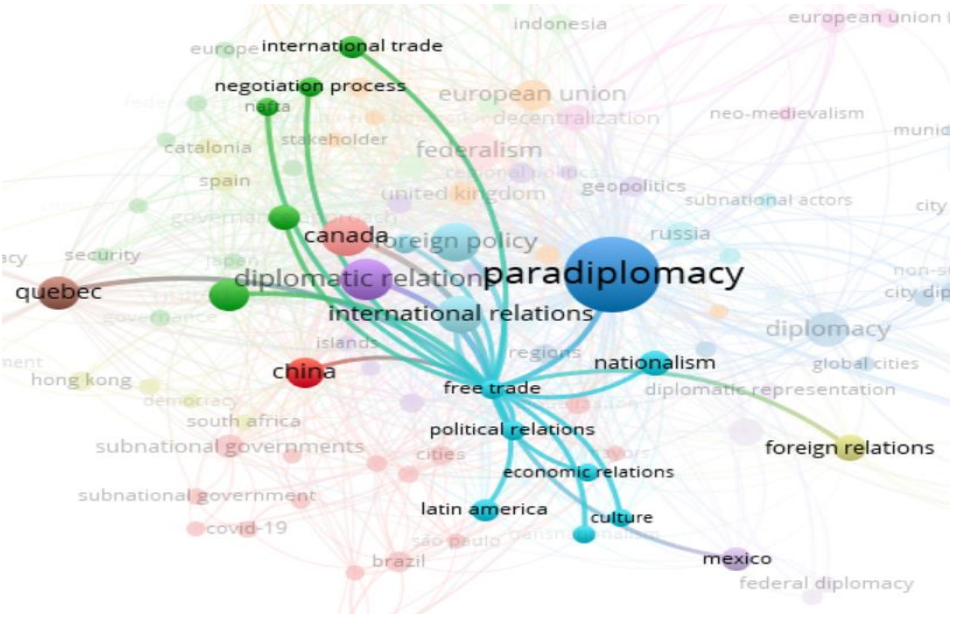

Figure 11: Network Visualization of Cluster 6

In cluster 7, "**European Union** was at the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. According to the graph, the European Union was linked to 18 different terms (Figure 12).

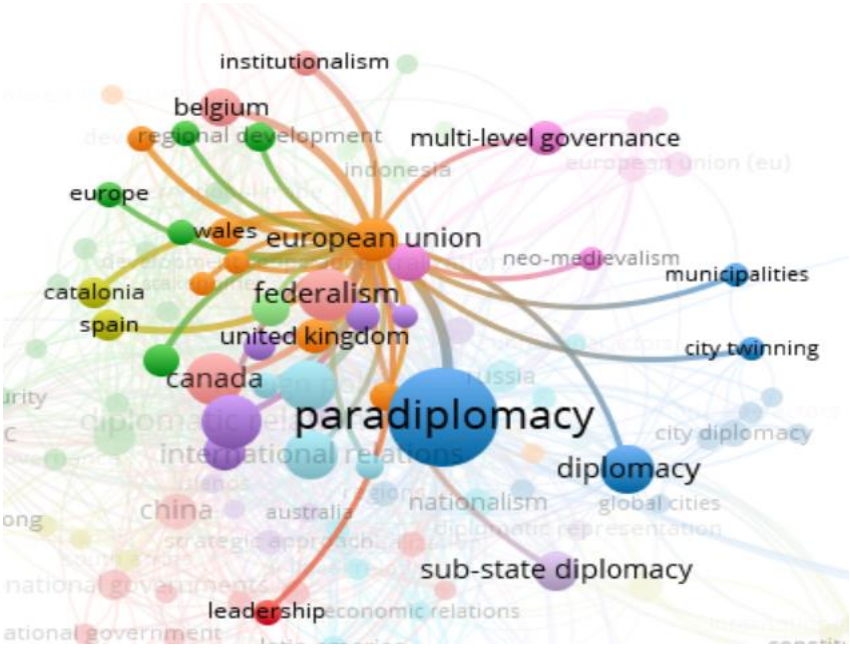

Figure 12: Network Visualization of Cluster 7

In cluster 8, **Quebec** was the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. According to the graph, Quebec was linked to 28 different terms (Figure 13).

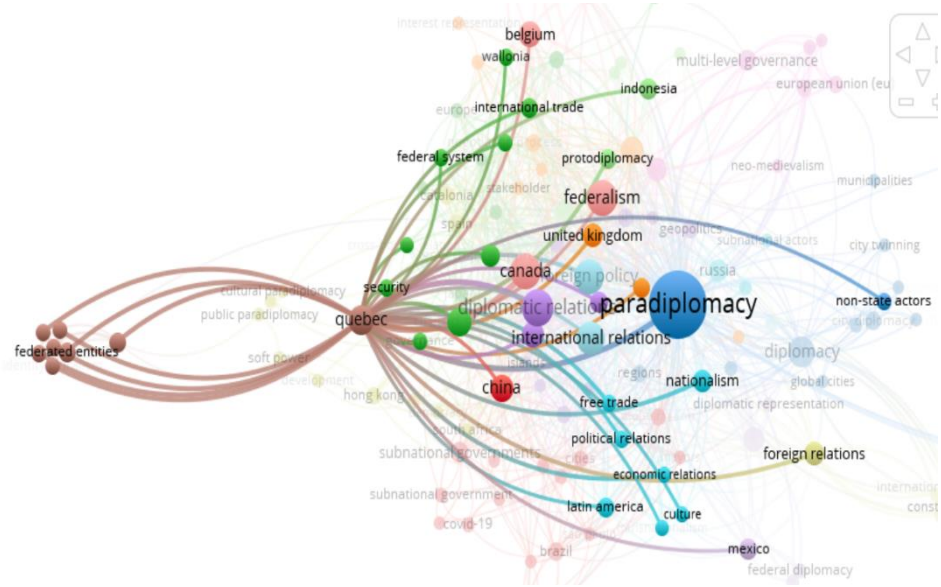

Figure 13: Network Visualization of Cluster 8

In cluster 9, **decentralization** was the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. The graph shows decentralization was linked to 23 other terms (Figure 14).

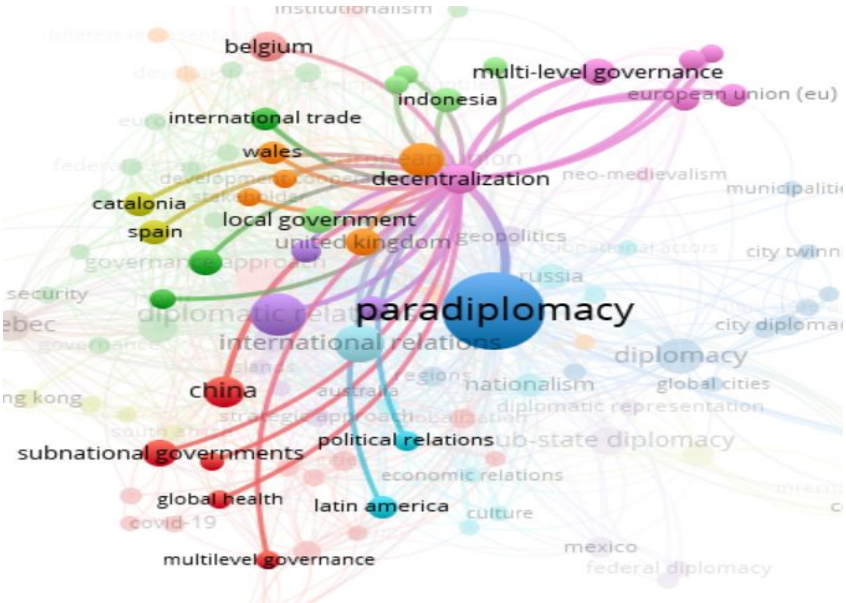

Figure 14: Network Visualization of Cluster 9

In cluster 10, **developing countries** were the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. According to the graph, developing countries were linked to three other terms (Figure 15).

Figure 15: Network Visualization of Cluster 10

In cluster 11, **federalism** was the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. According to the graph, federalism was linked to 29 different terms (Figure 16).

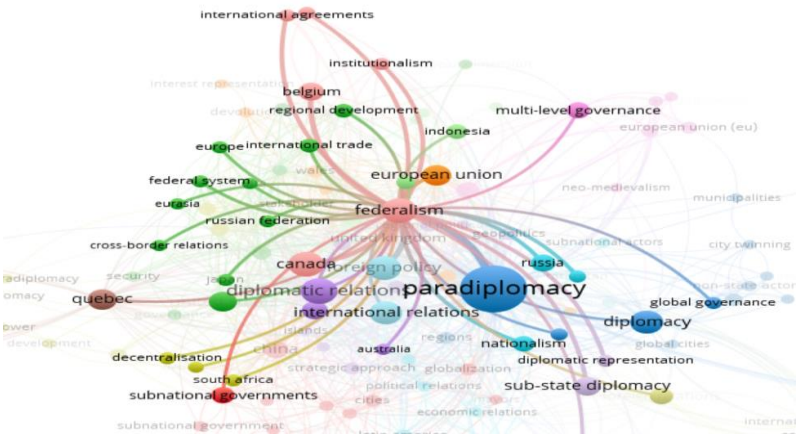

Figure 16: Network Visualization of Cluster 11

In cluster 12, **assemblage theory** was at the center of the term most commonly used as a research topic for paradiplomacy studies and had one connection with the term paradiplomacy (Figure 17).

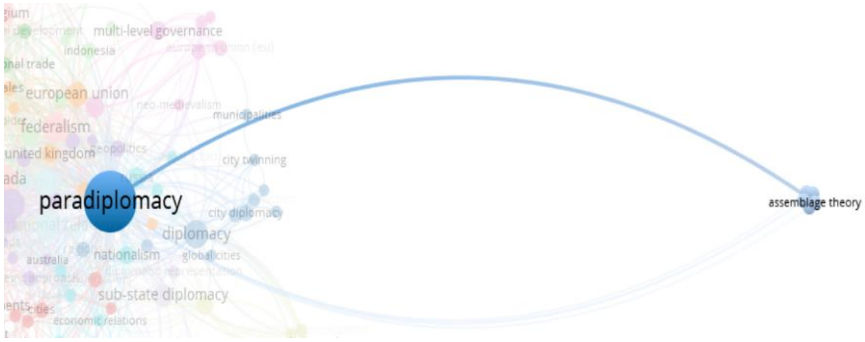

Figure 17: Network Visualization of Cluster 12

In cluster 13, **foreign relations** was the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. According to the graph, federalism was linked to 10 different terms (Figure 18).

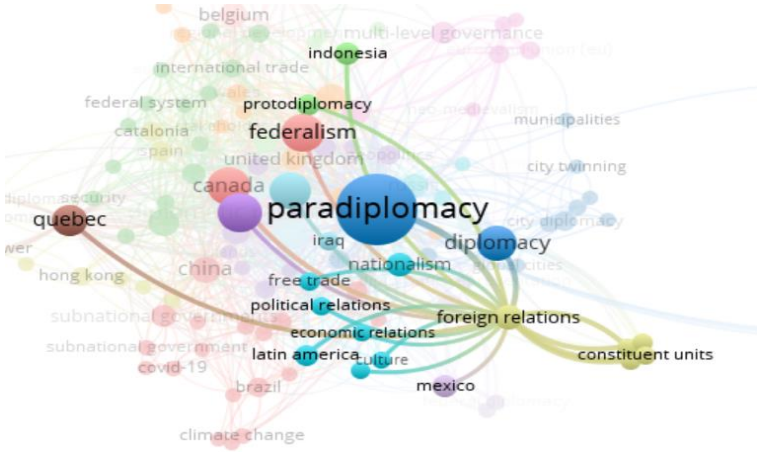

Figure 18: Network Visualization of Cluster 13

In cluster 14, **foreign policy** was the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. According to the graph, foreign policy was linked to 34 different terms (Figure 19).

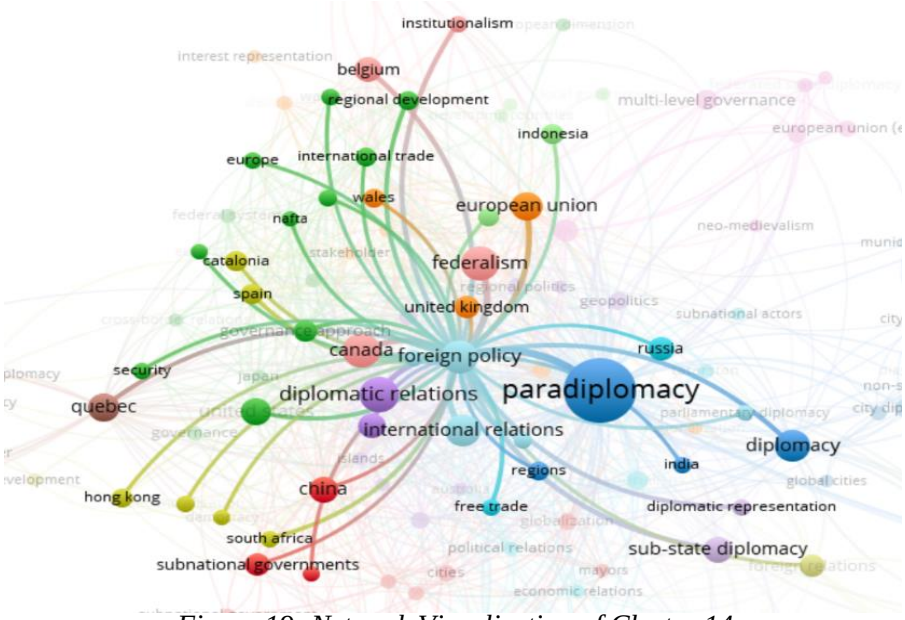

Figure 19: Network Visualization of Cluster 14

In cluster 15, **sub-state diplomacy** was the center of the term most commonly used as a research topic for paradiplomacy studies and had numerous connections with other terms. The graph shows that sub-state diplomacy was linked to 10 different terms (Figure 20).

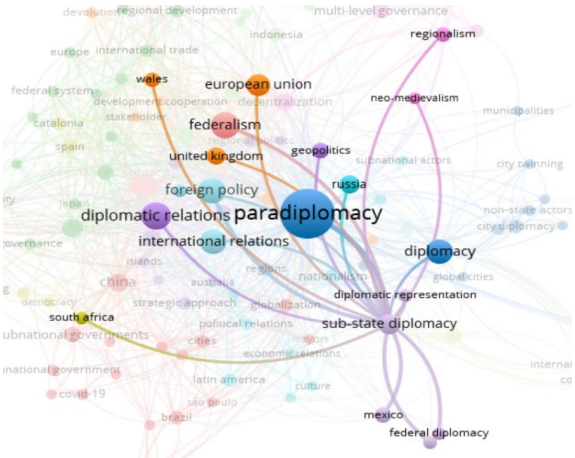

Figure 20: Network Visualization of Cluster 15

The development of paradiplomacy studies from 1984–2023, divided into 15 clusters, then provides opportunities for future researchers to examine terms that have not been widely researched in paradiplomacy studies. Researchers use the density feature in VOSviewer to map research topics that can be explored in paradiplomacy studies, including research on international agreements, federated entities, constituent units, climate change, and several other terms that provide opportunities for the development of paradiplomacy research (Figure 21).

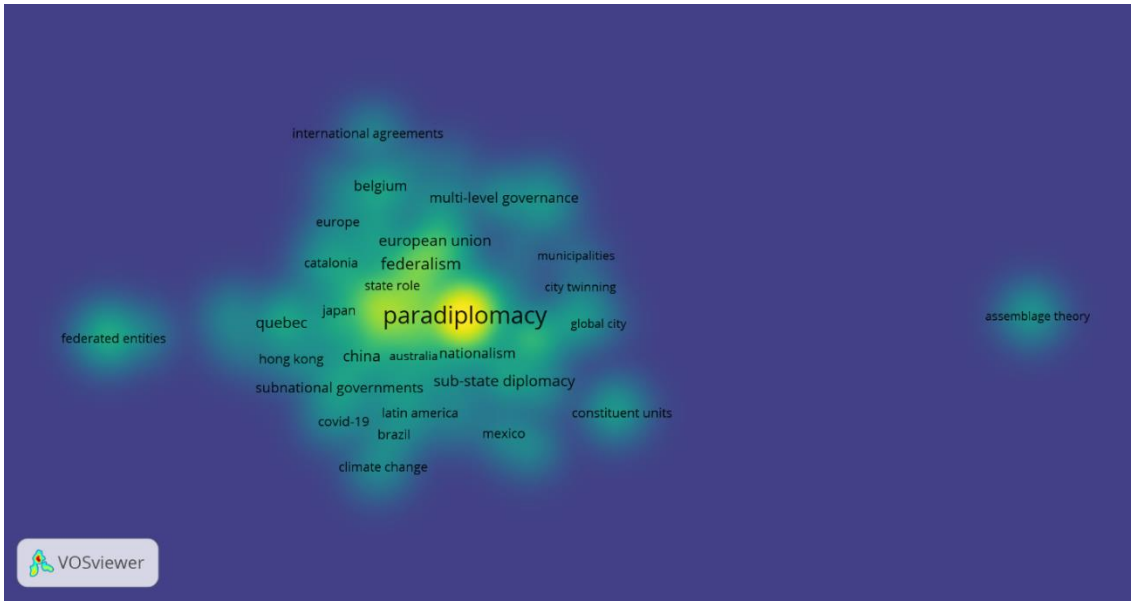

Figure 21: Density Visualization in Paradiplomacy Studies

Discussion

A bibliometric analysis was utilized to investigate the patterns in global publications about paradiplomacy. This investigation focused on various data visualization tools to enhance data interpretation and understanding and accelerate assessing a substantial volume of released documents. This study examines a comprehensive collection of 224 Scopus-oriented papers from the years 1984 to 2023 that were subjected to analysis, revealing some intriguing trends.

Firstly, on the topic of paradiplomacy, the first article was published in the Scopus database in 1984 under the title The International Dimension of Subnational Self-government by Duchacek (1984), which explicitly describes the interdependence relationship between subnational governments in several countries, which cannot be separated from the increasingly complex problems faced by each subnational government. Gradually, the study of paradiplomacy has become more popular, with the most articles published in the Scopus database in 2021 (32 documents). The increase in documents discussing paradiplomacy cannot be separated from the conditions of the world at that time, which began to recognize non-state actors in foreign relations so that, practically, foreign relations were no longer dominated by state actors.

Several factors cause this, including (1) The phenomenon of decentralization and devolution of power involves the transfer of authority and autonomy from central governing bodies to subnational institutions. This movement has granted non-central governments increased capacity to participate in international affairs (Keating, 1999). (2) globalization and regional integration have given rise to a heightened interconnection and interdependence among states and regions in the contemporary globalized era. This has consequently presented subnational governments with novel prospects and obstacles in their pursuit of engagement in international affairs (Lecours, 2002) and (3) Economic factors: Subnational governments are driven to partake in paradiplomacy to entice foreign direct investment, fostering trade, and bolstering economic growth within their territories (Kuznetsov, 2014).

Secondly, Canada and the United States have produced the most studies on paradiplomacy, suggesting that these two countries have dominant experience in implementing paradiplomacy. For example, Paradiplomacy in the United States pertains to the international endeavors and involvements of subnational entities, including states, cities, and regions. These entities actively participate in paradiplomacy to advance their regional interests, attract foreign investment, and effectively tackle global concerns (Díaz Abraham, 2019).

An instance of paradiplomacy observed within the United States is the United States Climate Alliance. In 2017, upon the federal government's declaration of its decision to withdraw from the Paris pact on climate change, a group of state governors established the United States Climate Alliance, intending to uphold the pact's objectives at the subnational level. In 2019, the alliance received endorsements from 30 governors, indicating the active involvement of subnational bodies in the pursuit of global environmental concerns (McMillan, 2008).

It is imperative to acknowledge that, although subnational bodies partake in paradiplomacy, the central government is the primary actor in international relations within the United States. The paradiplomatic endeavors undertaken by subnational entities supplement the foreign policy followed by the federal government, thereby enhancing the United States' total international participation (Alvarez, 2020).

The paradiplomacy process in Canada includes engaging subnational entities in determining their regional interests and goals, developing diplomatic links with other governments and international organizations, and actively participating in global events and conferences. Provincial governments frequently establish specialized offices or departments that are entrusted with the task of managing international relations. These entities are crucial in facilitating paradiplomatic endeavors and assisting the province's interactions with international counterparts (Bakvis & Skogstad, 2020).

It is imperative to acknowledge that, although subnational bodies partake in paradiplomacy, the federal government is the primary actor in international relations within Canada. The paradiplomatic endeavors undertaken by provinces supplement the foreign policy conducted by the federal government, thereby contributing to Canada's broader international engagement (Allan & Vengroff, 2012).

An instance of paradiplomacy in Canada can be observed through the engagement of provinces in international trade missions. Provinces such as Ontario, Quebec, and British Columbia have proactively participated in trade promotion endeavors, orchestrating trade delegations to international nations intending to attract investments, foster exports, and forge commercial alliances. Trade missions offer provinces a valuable platform to exhibit their businesses, products, and services internationally (Government of Ontario, n.d.; Government of Quebec, n.d.).

Thirdly, there are several important topics discussed in this research, including subnational government, the United States, diplomacy, diplomatic relations, cultural paradiplomacy, free trade, the European Union, Quebec, decentralization, developing countries, federalism, assemblage theory, foreign relations, foreign policy, and finally sub-state diplomacy. Although in other studies, paradiplomacy is directed at specific topics such as Legal and constitutional grey zones (Mattoo & Jacob, 2009), coherence and national unity (Dumberry, 2008), conflict in multinational countries (Paquin, 2003), Democratic development (Schiavon, 2018) and relationship between regional and state officials (Mohammed & Owtram, 2014).

Conclusion

Using the bibliometric approach and data visualization with VOSviewer, this study identified 15 clusters in the field of paradiplomacy. Each cluster contains the most prominent subjects within it, among them: subnational government, the United States, diplomacy, diplomatic relations, cultural paradiplomacy, free trade, the European Union, Quebec, decentralization, developing countries, federalism, assemblage theory, foreign relations, foreign policy, and finally sub-state diplomacy. According to this visualization, it can be inferred that all paradiplomacy research in the Scopus database from 1984-2023 is grounded in the interests of individual sub-state actors, which are manifested through paradiplomacy activities.

This presents possibilities for advancing paradiplomacy research that goes beyond the interests of sub-state actors. In international relations, these interests can be classified within the frameworks of realism and liberalism. Consequently, it becomes evident that there needs to be more comprehensive research in paradiplomacy, particularly about the constructivism approach, which has not been extensively explored by scholars in the field of international relations.

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