



MAPPING THE DEVELOPMENT OF PARADIPLOMACY RESEARCH THROUGH BIBLIOMETRIC ANALYSIS

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Abstrak

Artikel ini bertujuan menganalisis karakteristik bibliometrik tentang artikel paradiplomasi yang terindeks Scopus dengan menganalisis perkembangan studi paradiplomasi, penulis terkemuka dengan kutipan terbanyak, dan jurnal terkemuka yang memuat tulisan paradiplomasi terbanyak. Penelitian ini menggunakan analisis bibliometrik dalam database Scopus yang dikumpulkan melalui aplikasi Publish and Perish. Sebanyak 109 artikel dianalisis dengan menggunakan VOSviewer dengan mengklasifikasikan judul, abstrak, dan kata kunci. Temuan menunjukkan, tren penelitian paradiplomasi saat ini berfokus pada kerangka teoritis dan isu-isu paradiplomasi terkait globalisasi, federalisme, pembangunan, kebijakan luar negeri, dan kepentingan. Temuan ini juga menunjukkan bahwa Kanada, Amerika Serikat, dan Eropa masih mendominasi studi paradiplomasi, tetapi penelitian dari negara lain berpotensi muncul di masa depan. Penulis terkemuka dengan kutipan terbanyak adalah Noe Cornago, sedangkan jurnal terkemuka berisi penelitian paradiplomasi terbanyak adalah The Hague Journal of Diplomacy (HJD).

Kata Kunci: *bibliometrik, paradiplomasi, publish and perish, scopus, VOSviewer*

Abstract

The purpose of this paper was to analyze the bibliometric characteristics of articles on paradiplomacy published in Scopus-indexed by analyzing the development of paradiplomacy studies, the prominent authors with the most citations, and the prominent journals containing the most paradiplomacy research. This article used a bibliometric and content analysis of publications in the Scopus database collected through Publish and Perish. Using VOSviewer, a total of 109 articles were analyzed by classifying titles, abstracts, and keywords. The findings show the trend of paradiplomacy research focuses on theoretical frameworks and paradiplomacy issues such as globalization, federalism, development, foreign policy, and interests. The findings also indicate that Canada, the USA, and Europe still dominate paradiplomacy studies, but research from other areas may emerge in the future. The prominent author with the most citations is Noe Cornago, while the prominent journal that contains the most paradiplomatic research is The Hague Journal of Diplomacy (HJD).

Keywords: bibliometric, paradiplomacy, publish and perish, Scopus, VOSviewer

Introduction

The study of paradiplomacy in international relations is relatively new. It developed in the 1980s. Paradiplomacy becomes a concern in line with the erosion of the concept of Westphalia which places the dominance of the state in international relations. Simultaneously with the decline of state domination, the role of transnational relations has become increasingly prominent. The advent of paradiplomacy is one of the various forms of transnational relations.

Paradiplomacy is a form of participation of subnational actors in global activities. This involvement may include supporting, complementing, replacing, or contradicting the central government (Duchacek, 1984). The term subnational generally refers to the regional or constituent government (Cornago, 2010). Kincaid even says that subnationals include states, provinces, cantons, landers, republics, municipalities, and even port authorities (Kincaid, 2003). Subnational activities in international relations are growing rapidly, whether in federal or unitary government systems (Kutsnetsov, 2015).

Subnational is different from the local administration. Local administration is generally called city or municipal administration, while the international mobilization of cities is called city diplomacy (Kincaid, 1999; Pluijm & Melissen, 2007). Thus, paradiplomacy refers to the international activities of subnational at the regional, while city diplomacy refers to the international activities of the city administration. However, some use the term paradiplomacy to refer to all levels under the central government. It is Hocking that said paradiplomacy is carried out by both regional and local governments (Keating, 1999). Therefore, all have a significant role in encouraging development through external activities. In this study, the term paradiplomacy will refer to international relations activities carried out by the administration at the regional and local levels. The reason is that all regional and local actors have equal opportunities in international activities through low political issues (Tavarez, 2016). Consequently, paradiplomacy may boost regional competency through participation in environmental issues, trade, investment, education, and other international affairs.

The term paradiplomacy is still open for debate. However, researchers tend to analyze subnational internationalization initiatives instead of disputing the term. They use numerous concepts that look more convenient for them. Consequently, many other terminologies, such as substate diplomacy, subnational diplomacy, provincial diplomacy,

city diplomacy, and others, are also used to describe regional and local contacts in global affairs. All these terms have more or less the same meaning focusing on subnational mobilization in foreign affairs. They become an active agent on various global stages. Conducting trade, carrying out cultural exchanges abroad, signing agreements with foreign partners or non-state actors, participating in international networks, or signing regional cooperation agreements are examples of these activities. Some even clash with the central government through statements or actions (Kutsnetsov, 2015). They attempt to address the region's economic, cultural, social, and other demands. Those are autonomous actions by the local government in collaboration with foreign governments as well as foreign organizations.

The study of paradiplomacy has developed based on low political issues. Some scholars analyze paradiplomacy study on climate change issues (Cunha & Rei, 2011; Royles & McEwen, 2015; Setzer, 2015), sustainable development (Graute, 2016; Happaerts, 2012a, 2012b; Happaerts et al., 2011; Sergunin & Joenniemi, n.d.), democracy (Cornago, 1999; Pereira, 2006), trade (Kukucha, 2004; Ouimet, 2015), culture (Issundari et al., 2021; Marié, 2018; Zamorano, 2016; Zamorano & Morató, 2015), public paradiplomacy (Huijgh, 2010, 2012; Issundari, 2018) and others. Considering that previous studies discussed one issue comprehensively, this study concludes that few studies have attempted to map various issues in paradiplomacy research through literature reviews. The majority of the articles discuss using literature reviews as tools to understand one of the issues in paradiplomacy research. It is noted that only Munir's writing focuses on examining literature reviews through the systematic mapping system method by looking at patterns, dimensions, and research trends of paradiplomacy research in border areas (Munir, 2019). Thus, research gaps in discussing the literature review are still open. Therefore, this article aims to cover the existing research gap by analyzing paradiplomacy studies through literature review visually through VOSviewer. In VOSviewer analysis, paradiplomacy scholars can determine research novelty as well as develop new topics. Thus, the problem questions that will arise are: What are the trends in paradiplomacy research in the past, present, and future? Who is the top citation, and what journals contain the most paradiplomacy studies?

The importance of this topic is that it provides alternative new research themes regarding paradiplomacy studies through bibliometric methods taken from Scopus

metadata using VOSviewer. The findings in this research are: there are many alternative paradiplomacy research themes that focus on case studies and describe derivative forms of paradiplomacy. These findings also show that Canada, the United States, and Europe still dominate paradiplomacy studies, but research from other countries has the potential to emerge in the future. The prominent author with the most citations is Noe Cornago, while the prominent journal that discusses paradiplomacy most is The Hague Journal of Diplomacy (HJD). The potential contribution of the findings of the paper in IR literature is to enrich paradiplomacy studies which have so far focused on low politics issues by looking at them from a different perspective, namely literature review with the latest method in IR, namely the bibliometric method using VOSviewer.

Methodology

This research is a literature database-based descriptive bibliometric study. This study intends to map the development of paradiplomacy research in the past, present, and future, the top authors with the most citations, and the top journals that publish the most paradiplomacy research. The mapping will be conducted based on the title, abstract, and keywords from the publication and afterward processed and visualized by the VOSviewer version 1.6.16 (<https://www.vosviewer.com/>).

This article uses bibliometric research. According to Waltman, van Eck, & Noyons, bibliometric research provides a network that refers to questions, such as the main topics in a particular study, the relationship between topics in similar studies, the development of a topic over a certain period, co-work, co-authors and affiliates (Waltman et al., 2010). Through VOSviewer, researchers can find out the development and trend of topics to determine the position of novelty in their research.

Enriching the information on the main topics in the study of paradiplomacy, several keywords that are closely related to paradiplomacy are also used. Some of these terms are "substate diplomacy," "subnational diplomacy," "provincial diplomacy," and "city diplomacy." Reasons for using these keywords are: first, paradiplomacy research is relatively recently developed compared to other mainstream research. The metadata collected is still limited. To overcome the limitations and enrich the mapping of the study, other keywords that have a similar meaning to paradiplomacy are also used. Second, there is no consensus on the appropriate term to represent subnational participation in international affairs. Researchers generally pay attention to the global activities of

subnational actors rather than debating terminology. Many other terms are used, which refer to the phenomenon of regional activity on the international stage, as mentioned above.

Furthermore, the metadata stored in Mendeley will be exported to the VOSviewer program. The steps to generate a study mapping are first, turning on the VOSviewer program. Second, select create button on the file tab until a dialog box appears. Third, select the data type, create a map based on text data, then select the next button. Fourth, select the data source: Read data from the reference managers file and select the next button. Next, enter the source document that has been stored in Mendeley. Next, select the next button. Fifth, choose the title and abstract field option and wait a while. Sixth, choose the binary counting method and then select the next button. Then fill in the minimum number of occurrences and then select the Next button. It will automatically fill in the numbers obtained by the keyword and then select the Next button. Seventh, verify keywords by using keywords that are relevant to the theme and removing irrelevant keywords. Then choose the finish button (<https://www.vosviewer.com/>). These steps will produce a paradiplomacy bibliometric visualization in network visualization, overlay visualization, and density visualization. From the program, researchers may analyze based on the state of the art of paradiplomacy research, the top authors with the most citation, and the most productive top journals containing the most paradiplomatic studies.

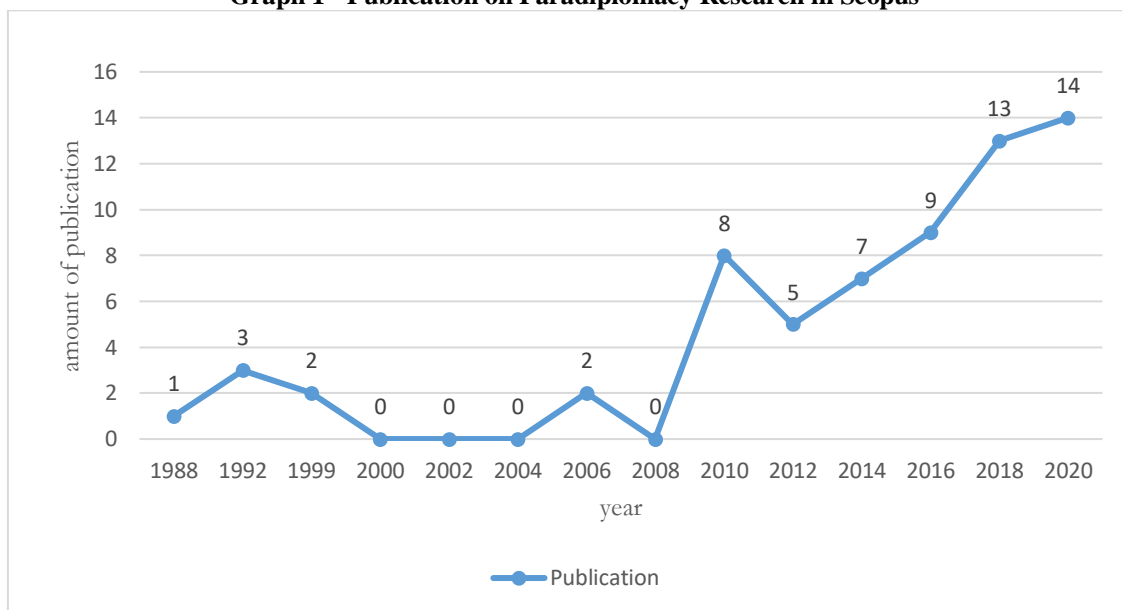
Result

The study of paradiplomacy began with Duchacek's writing entitled "Federalism and International Relations," which raised the phenomenon of international relations activities carried out by Canadian provinces, American states, and German landers (Duchacek, 1984). This study provides an opportunity to be one of the fascinating research materials in international relations. Paradiplomacy research grows from a border study that provides an overview of collaboration between subnational actors from different countries in border areas. During the process, this research starts to focus not only on border paradiplomacy but also on paradiplomacy action in geographically distant areas (Pietrasiak et al., 2018). Paradiplomacy research eventually spread to various parts of the world in diverse ways. Various types of paradiplomacy characterize this diverse pattern. Duchacek identified five types of paradiplomacy, namely: "microdiplomacy of bordering

regions, transregional diplomacy, global paradiplomacy, protodiplomacy, global protodiplomacy" (Duchacek, 1984).

Scopus-indexed paradiplomacy studies have increased. In 1988 there was only one Paradiplomatic article indexed by Scopus, in 2010 it increased to ten articles, and in 2020 there were fourteen articles.

Graph 1 - Publication on Paradiplomacy Research in Scopus

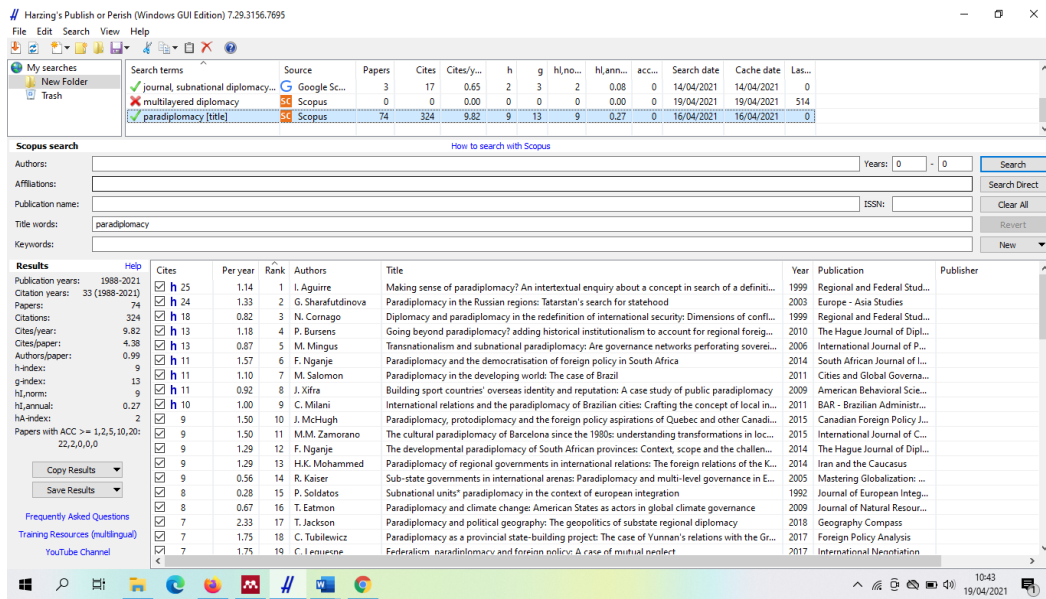


Source: Scopus

Graph 1 shows the development of publications on paradiplomacy. Although the appearance of these topics was still limited at first, the publication of paradiplomacy increased. Researchers are encouraged to study the phenomena as subnational actions in the international arena become more intense in various places. The intensification of subnational movements on the global stage in countless regions encourages academics to analyze this phenomenon.

Several keywords are used in data searches to obtain complete information. In the first search using the keyword "paradiplomacy," 74 metadata articles were collected from 1988-2020. Below is the Scopus metadata collected through Publish and Perish.

Figure 1 - Scopus metadata collected through publish and perish



Source: Publish and Perish software

Figure 1 shows a number of metadata collected in Publish and Perish from Scopus metadata. All metadata are grouped in citations, average annual citations, ranking, author, title, year of publication, and journal name. In general, the data collected is from 1988 – 2020. The total number of documents collected is 74, with 324 citations and an average annual citation of 9.82. Besides the topic of paradiplomacy, other similar themes were also explored, namely "substate diplomacy," "subnational paradiplomacy," "city diplomacy," and "provincial diplomacy." The following are the results of searching metadata for journal publications on Scopus metadata using several keywords:

Table 1 - Number of Paradiplomacy Metadata Documents in Scopus with Several Keywords

No	Keywords	Number of metadata
1.	Paradiplomacy	74
2.	Substate diplomacy	6
3.	Subnational diplomacy	11
4.	Provincial diplomacy	11
5.	City diplomacy	11
Total		113

Source: Scopus

Table 1 shows the total number of metadata articles discussing regional activities in international relations is 113 articles. At that time the sorting process, 109 metadata may be processed. Some articles cannot be processed for several reasons. Firstly there is one publication that does not have complete information; namely, there are no abstract

and keywords, while abstracts and keywords are essential for the search process in VOSviewer. Publication without abstracts and keywords is separated from the primary metadata. Secondly, several publications appeared on two main topics at once. For example, Nganje's writing entitled "Sub-state diplomacy and the foreign policy development nexus in South Africa" was found in two keywords, namely provincial paradiplomacy and sub-state sub-state diplomacy. Likewise, Acuto's writing entitled "World Politics by Other Means? London, City Diplomacy and the Olympics" is found in the theme of city diplomacy and subnational diplomacy. Altogether, these publications appear in two keywords, thereof they should be separated from the primary metadata.

The subsequent step is to explore the document via VOSviewer. Mapping of the main topics was done by extracting the titles, abstracts, and keywords of 109 articles. During the processing, it was decided to limit the keyword occurrence frequency to 5 times, of 2,482 keywords. As a result, VOSviewer found 82 keywords that met the threshold. After the verification process, 59 relevant keywords were finally obtained, which were divided into four clusters. Each cluster has a different color. The following are the results of clustering:

Table 2 - Clustering Group

Cluster	Keywords
Cluster 1 (18 kata words) red	central government (9), challenge (9), country (20), foreign policy (17), foreign relation (6), government (11), interest (19), international activity (11), investment (11), involvement (12), region (30), relations (26), relationship (10), subnational actor (7), subnational diplomacy (6), subnational government (11), subnational unit (6), world (12).
Cluster 2 (16 items) green	activity (22), case study (8), china (10), city 23), city diplomacy (9), development (28), diplomacy (34), framework (17), international relations (24), local government (8), order (5), paradiplomatic activity (11), power (11), practice (18), province (17), role (35).
Cluster 3 (13 items) blue	canada (5), canadian province (6), cooperation (20), federalism (9), form (10), globalization (10), influence (8), level (22), north america (7), policy (19), quebec (8), state (41), strategy (12)
Cluster 4 (12 items) yellow	action (14), actor (31), agency (10), approach (13), brazil (6), concept (16), case (30), issue (15), management (9), Nation state (9), paradiplomacy (80), place (9)

Source: VOSviewer

The first cluster is represented by red color with 18 keywords. The keywords frequently appear in the cluster are region (30), relations (26), country (20), interest (19), and foreign policy (17). This cluster represents a series of articles describing subnational relations on the international stage related to countries' interests, investments, and foreign policies.

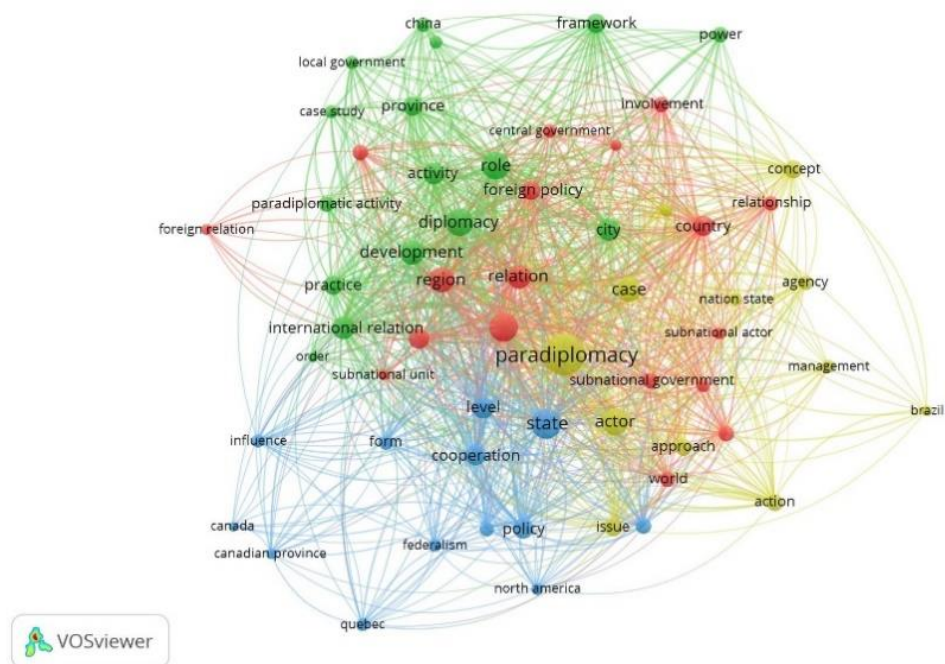
The second cluster represented by green has 16 keywords. This second cluster brings up the following keywords: role (35), diplomacy (34), development (28), and international relations (24), as well as other keywords. This cluster represents a series of articles focusing on regional and city diplomacy activities on the international stage within the development framework. The study area that appears in this cluster is Asia, especially China.

The third cluster is represented in blue with 13 keywords. Clusters are related to keywords: level (22), cooperation (20), and policy (19). This cluster represents a series of publications describing globalization and federalism within the framework of subnational international cooperation. The study areas in this cluster are North America, Canada, and Quebec.

The fourth cluster is depicted in yellow, which has 12 keywords. This cluster is related to the keywords paradiplomacy (80), case (30), and issue (15). These keywords represent topics that describe: case studies and problems and management paradiplomacy. In the context of geography, the study featured Latin America, especially Brazil (6). From the whole cluster, the keywords that appear the most are paradiplomacy (80), state (41), role (35), and diplomacy (34) are the top keywords. This shows that the current discussion of paradiplomacy research is mostly focused on the context of state diplomacy, the participation of states.

The next step is a bibliometric analysis using VOSviewer. The analysis is done through network, overlay, and density visualization to see the relationship between the networks. The bibliometric network consists of nodes and edges (Figure 2). Nodes are indicated by circular shapes that indicate keywords and publication abstracts. At the same time, the edge is a connecting line showing the relationship between nodes. The relationship between two nodes is not only connected by an edge but also shows the size of the strength of the relationship, which is shown in the form of distance. The closer the distance from one node to another, the higher the relationship between the nodes. The following is a network visualization of paradiplomacy research through VOSviewer.

Figure 2 - Network Visualization

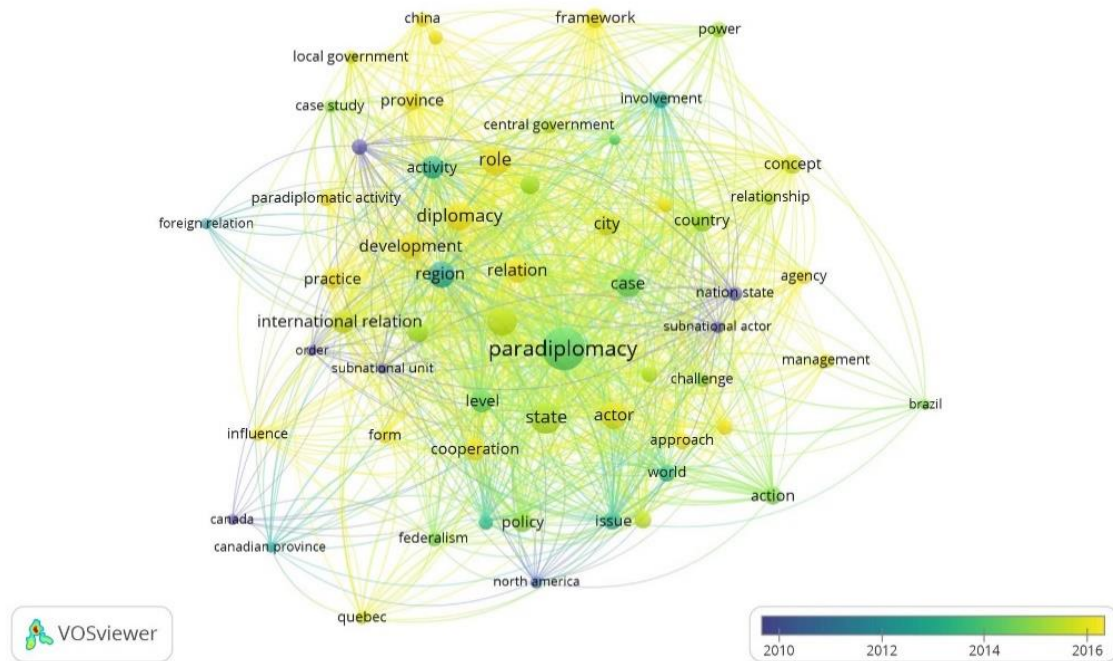


Source : VOSviewer

The network visualization in Figure 2 shows the size of a node. The more or fewer publications related to that keyword, the bigger or smaller the node size will be. This can be seen from the paradiplomacy node in the figure. The paradiplomacy node has a larger size than the other nodes. This symbol indicates that many articles use this keyword. The more often the keyword appears, the closer the nodes are to each other in the visualization. An example that can be taken is the relationship between federalism and cooperation in the blue circle on the bottom left, which is closer than federalism and management. This shows that the number of articles that have the keyword federalism with cooperation is relatively more than the number of articles that have the keyword federalism with management.

The following is a mapping of paradiplomacy research trends based on overlay visualization. This mapping is useful to see the trend of paradiplomacy research in recent years. Based on the results of VOSviewer's exploration, it can be seen the trend of the year of research and the main topics that developed. In Figure 3, the color of the node shows the keyword and the year the article was published regarding that keyword. The darker the color of the node, the more topics are covered in the study.

Figure 3 - Overlay Visualization



Source: VOSviewer

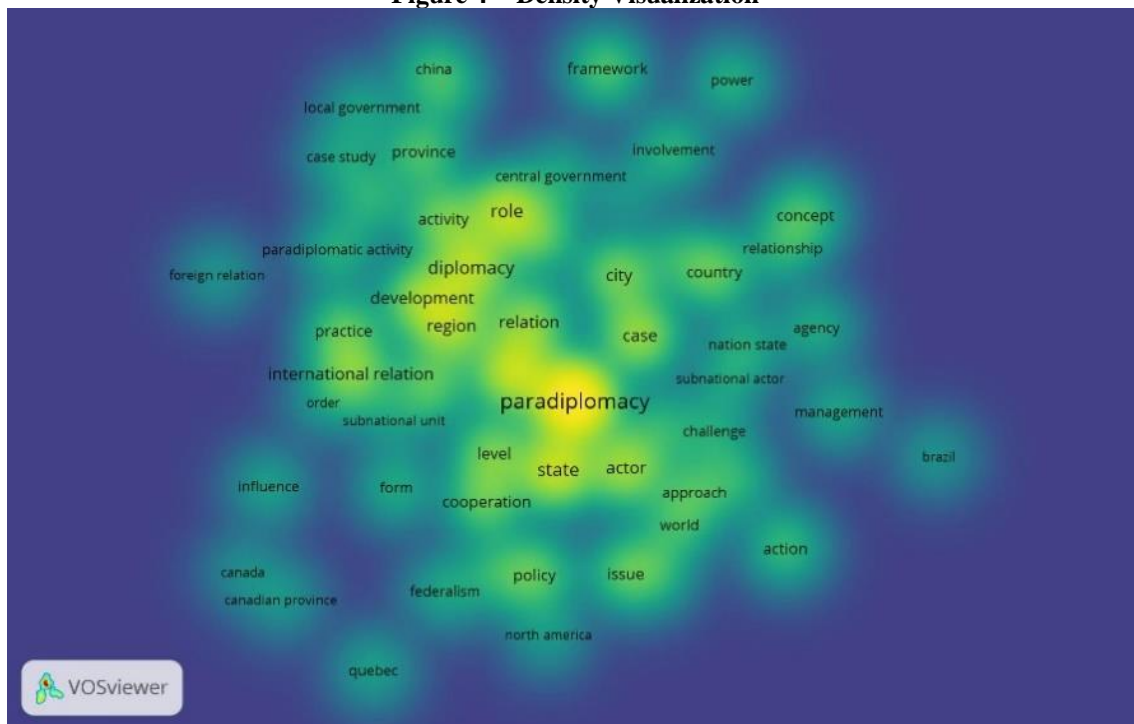
The overlay visualization in Figure 3 shows that paradiplomacy research on the topic of subnational actors, international activities, orders, and nation-states appeared in 2010. Studies in the North American area, especially Canada, also appeared in those years. In comparison, the main topics regarding involvement, activity, region, globalization, and issues emerged in 2012. The main topics in 2014 were federalism, government, power, Brazil, strategy, level, and policy. Meanwhile, the topics that emerged in 2016 focused on development, cooperation, as well as various approaches to paradiplomacy, and China case studies.

The following is the result of the density visualization in Figure 4. This figure shows that a dense area is represented by the number of nodes close to each other. The yellow zone in the image above is the most studied area. The more yellow an area is, the denser it will be. Even if area's density is higher than other areas, the color in the yellow zone will turn red. On the other hand, the greener an area is, the less research it is.

Based on the keywords used to browse the topics, it can be seen that the yellow area is the most researched topic. Keywords located in the yellow zone are paradiplomacy, government, state, region, diplomacy, development, subnational government, and others.

The green zone on the visualization represents the least researched area. Keywords in the green zone include Brazil, Quebec, Canada, foreign relations, management, and others.

Figure 4 - Density Visualization



Source: VOSviewer

Figure 4 shows that the keywords paradiplomacy, city government, development, state actor, role, and diplomacy in the yellow area are widely used as keywords and have become the main topic widely used in paradiplomacy research. At the same time, the keywords Brazil, Quebec, Canada, and form in the green area is still less used in paradiplomacy research topics. The keywords in the green zone also indicate a research gap in current paradiplomacy research. Thus, the opportunity to research these topics is still open. Future paradiplomacy research may emphasize these themes.

The fascinating matter about density visualization is that the keyword "form" is in the green area. This indicates that the keyword "form" does not appear much in paradiplomacy research. Thus, research exploring the forms of paradiplomacy has not been explored much. The forms of paradiplomacy such as environmental paradiplomacy, trade, education, culture, borders, agriculture, and others may be developed in future paradiplomacy research.

Moreover, mapping research development, this study also collects metadata to analyze the top authors who are cited the most and productive journals containing the most paradiplomacy research. Search results from Scopus metadata show the top ten most cited articles:

Table 3 - Top 10 Articles on Scopus Metadata Based on the Number of Citations

No	Citation	Citation average per year	Author	title	year	Name of journal
1	38	3,45	N. Cornago	On the Normalization of Sub-state Diplomacy	2010	The Hague Journal of Diplomacy
2	25	1,14	Aguirre	Making sense of paradiplomacy? An intertextual enquiry about a concept in search of a definition	1999	Regional and Federal Studies
3	24	1,33	G. Sharafutdinova	Paradiplomacy in the Russian Region: Tatarstan's Search for Stateshood	2003	Europe-Asia Studies
4	23	2,09	D. Criekemans	Regional Sub-State Diplomacy from A Comparative Perspective: Quebec, Scotland, Bavaria, Catalonia, Wallonia and Flanders	2010	The Hague Journal of Diplomacy
5	18	0,82	N. Cornago	Diplomacy and paradiplomacy in the redefinition of international security: Dimensions of conflict and co-operation	1999	Regional and Federal Studies
6	16	1,45	S. Paquin	Federalism and compliance with international agreements: Belgium and Canada compared	2010	The Hague Journal of Diplomacy
7	13	1,18	P. Bursens	Going Beyond Paradiplomacy? Adding Historical Institutionalism to Account for Regional Foreign Policy Competences	2010	The Hague Journal of Diplomacy
8	13	0,87	M. Mingus	Transnationalism and subnational paradiplomacy: Are governance networks perforating sovereignty?	2006	International Journal of Public Administration

9	13	1,63	M. Acuto	World Politics by Other Means? London, City Diplomacy and the Olympics	2013	The Hague Journal of Diplomacy
10	12	1,33	R. Wyn Jones	Wales in the World: Intergovernmental Relations and Sub-state Diplomacy	2012	British Journal of Politics and International Relations

Source: Scopus

Table 3 shows the ten most cited articles with the theme of paradiplomacy. The series of articles cited above show that subnational mobility on the international stage cannot be ignored (Cornago, 2010). Various situations and conditions (Paquin, 2010), as well as the problems that arise (Mingus, 2006) from these paradiplomacy activities, make the concept and definition of paradiplomacy develop (Aguirre, 1999). Study areas in various regions (Acuto, 2013; Criekemans, 2010; Sharafutdinova, 2003; Jones & Royles, 2012) further enrich the uniqueness and diversity of paradiplomatic activities.

The most cited article is Cornago from the University of the Basque Country, written in 2010. This article, which emphasizes constitutional and institutional recognition for international subnational activities, has been cited 38 times. The article was published by The Hague Journal of Diplomacy. In addition to the title mentioned above, Cornago also wrote articles related to paradiplomacy research, such as "Diplomacy and paradiplomacy in the redefinition of international security: Dimensions of Conflict and cooperation" which was published in Regional and Federal Studies in 1999. While publication that became a major work of Cornago is "Plural Diplomacy Normative Predicaments and Functional Imperatives" published by Martinus Nijhoff Publishers.

The second top citation is Aguirre's article entitled "Making sense of paradiplomacy? An Intertextual Inquiry about a concept in search of a definition" in 1999, which was cited 25 times. Aguirre is an Associate Professor at, Department of Economic Analysis, University of the Basque Country. He also writes an article titled "Monopoly price discrimination and demand curvature" published in American Economic Review in 2010. The third top citation is Sharafutdinova from King's College London in his article entitled "Paradiplomacy in the Russian Region: Tatarstan's Search for Stateshood," cited 24 times. In addition, Sharafutdinova also edited a book entitled "Soviet Society in the Era of Late Socialism, 1965-1985" and wrote an article entitled "The Pussy Riot affair and Putin's démarche from sovereign democracy to sovereign morality" which was

published in The Journal of Nationalism and Ethnicity in 2014. She also writes "Subnational governance in Russia: How Putin changed the contract with his agents and the problems it created for Medvedev" published in Publius: The journal of federalism in 2010.

Moreover, based on a search of journals containing diplomatic research, it was found that The Hague Journal of Diplomacy (HJD) is the journal that contains the most articles on paradiplomacy. HJD is a research journal with a focus on diplomacy studies. The journal was founded in 2005 by the publisher Brill is very productive in publishing paradiplomatic research. There are 16 paradiplomatic articles published in the journal. Other journals that also contain articles on paradiplomacy are the South Africa Journal of International Affairs, Civitas, and Canadian Foreign Policy, with three articles.

Table 4 List of Journals Contain the Most Research on Paradiplomacy

No	Name of Journal	Number of Articles on Paradiplomacy
1.	The Hague of Diplomacy	16
2.	South Africa Journal of International Affairs	3
3.	Civitas	3
4.	Canadian Foreign Policy	3
5.	Regional and Federal Studies	2
6.	Geography Compass	2
7.	Revista Brasileira de Politica Internacional	2

Source: Scopus

Scopus metadata search results also showed that 109 articles came from affiliated authors in various countries. Although most of the articles are written in English, some are written in another language, such as French 2 articles, Spanish 5 articles, and Portuguese 1 article. However, all article still includes the title, abstract, and keywords in English. Below is a list of countries with the number of publications on paradiplomacy research.

Table 5 - List of Affiliated Countries and Number of Paradiplomatic Publications

No	Country	Number of publication
1	Canada	14
2	USA	12
3	UK	11
4	Brazil	10
5	Spain	7
6	Belgium, South Africa, Indonesia,	4
7	Mexico, Japan, Australia, Netherland,	3
8	France, Poland, Chile, China, Hongkong,	2
9	Norway, Czech, Portugal, Wales, Rusia, Turkey, Italy, Slovakia, Austria, Uruguay, Argentina, Columbia, Singapore, India,	1

Source: Scopus

Table 5 shows that Canada and the United States are the most productive countries in developing paradiplomacy studies. This can be traced from the beginning of the development of paradiplomacy research come from both countries. The Quiet Revolution in Quebec, which began Quebec's international engagements with neighboring countries, fueled paradiplomacy in Canada. Several academics who became pioneers of paradiplomacy studies in Canada include Duchacek, Soldatos, Fry, Michelmann, and some others. Meanwhile, paradiplomacy in the United States was marked by "new federalism" throughout President Richard Nixon's administration in the early 1970s. This event paved the way for US states to increase global activity. Kincaid became one of the pioneers who raised paradiplomacy in the United States. Both writers from Canada and the United States contributed significantly to developing contemporary studies on diplomacy today.

Additionally, some countries in the European region also developed paradiplomatic studies in the 1990s. This can be seen from the many paradiplomacy studies from Europe, such as the UK, Spain, and Belgium. The global activities carried out by Flanders and Wallonia in Belgium, the Basque Country and Catalonia in Spain and other regions have become an essential basis for paradiplomacy research in this region. These regions received assistance from the European Union, which promoted the idea of high diversity in Europe on the subnational level (Kutsnetsov, 2015). Wallonia, Flanders, Catalonia, and others are the leading regions in Europe in engaging relations on international affairs.

The fascinating matter is that developing countries have also begun to develop paradiplomacy research. It can be seen that Brazilian writers are productive in producing paradiplomacy research, followed by South Africa and Indonesia. The momentum of the 2000s became an important marker for the emergence of paradiplomacy research in Asia, Latin America, and Africa. In Indonesia, the emergence of paradiplomacy coincided with the regional autonomy policy in 1999, which provided broad opportunities for provinces in Indonesia to establish cooperation with both foreign governments and non-government. In line with the opening of regional opportunities for collaboration, the study of paradiplomacy in Indonesia is also experiencing an increasing trend. The case studies analyzed come from various regional and international collaborations throughout Indonesia. In summary, it may be concluded that paradiplomacy research is no longer the

domination of European and American countries but spreads to various regions with different variations and patterns.

Discussion

Based on the bibliometric analysis of 109 publications indexed in the Scopus database, it can be seen how paradiplomacy research is developing. The results of paradiplomacy studies in VOSviewer concluded that paradiplomacy research, in general, can be divided into three parts: first, research that focuses on conceptual development and theoretical frameworks. The second research focuses on various issues and problems faced by sub-nationals, namely globalization, federalism, development, investment, foreign policy, interests, and others. Third, research raised case studies based on geographic areas such as China, Quebec, Brazil, etc. In general, the top keywords in paradiplomacy research are paradiplomacy, state, role, and diplomacy. Based on the trend of the research year, in 2010, the research focused on keywords: international activity, order, nation-state, and subnational actor. The study area based on geography is North America, particularly Canada. The research trend in 2012 was marked by keywords: involvement, activity, region, globalization, and issue. The main topics in 2014 were: federalism, government, power, strategy, level, and policy. The study area based on geography is Latin America particularly Brazil. Topics that emerged in 2016 were theoretical framework development, development, and cooperation. The study area based on geography is East Asia, especially China. Paradiplomacy topics that can be developed are related to the keywords federalism, power, form, influence, Brazil, Quebec, China, and several other topics. Another main topic that can also be developed is forms of paradiplomacy such as cultural paradiplomacy, commercial paradiplomacy, environment paradiplomacy, sport paradiplomacy, and others. The top author with the most citations is Noe Cornago, while the prominent journal that contains the most paradiplomatic research is The Hague Journal of Diplomacy (HJD).

Conclusion

This study is interesting because it offers new perspectives on paradiplomacy research by utilizing bibliometric techniques extracted from Scopus information and visualized with VOSviewer. Paradiplomacy research has developed over the past three decades. Paradiplomacy research in the past has focused more on developing conceptual and

theoretical frameworks, issues, and problems, namely globalization, federalism, development, foreign policy, and interests, but lesser attention has been paid to developing case studies and elaborating derivatives of paradiplomacy such as trade paradiplomacy, culture paradiplomacy, commercial paradiplomacy, and others. Paradiplomacy themes based on geographic case studies and other forms of paradiplomacy will be very interesting to develop in future research. In addition, although Europe and America still dominate paradiplomacy research, future research may emerge from other regions such as Latin America, Asia, and Africa. Therefore, research from developing countries has the potential to be developed by raising the empirical practice experienced by themselves.

In mapping the study, this article has limitations for several reasons. The first limitation is that it only limits the search for metadata from Scopus and does not add from other indexing engines such as Web of Science, Dimension, Lens, PubMed, or others. The reason is that Scopus has a complete database and covers more journals than any other indexing engine. The second limitation, this research does not map co-authorship. Co-authorship is useful to support research development considering that an article or work cannot be handled by the researcher alone, so it requires assistance or cooperation with others. Furthermore, these limitations become recommendations to offer a wider overview of the issue in the future. The results of the study have the potential to strengthen paradiplomacy studies, which have recently concentrated on low politics and the theoretical framework, by approaching them from a different angle, namely a literature review using the bibliometric method using VOSviewer.

References

- Acuto, M. (2013). *Global Cities, Governance, and Diplomacy* (1st ed.). Routledge Taylor & Francis Group.
- Aguirre, I. (1999). Making sense of paradiplomacy? An intertextual enquiry about a concept in search of a definition. *Regional & Federal Studies*, 9(1), 185–209. <https://doi.org/10.1080/13597569908421078>
- Cornago, N. (1999). Diplomacy and paradiplomacy in the redefinition of international security: Dimensions of conflict and co-operation. *Regional and Federal Studies*, 9(1), 40–57. <https://doi.org/10.1080/13597569908421070>
- Cornago, N. (2010). On The Normalization of Sub-State Diplomacy. *Regional Sub-State Diplomacy Today*, 5, 11–36. <https://doi.org/10.1163/ej.9789004183575.i-210.5>
- Criekemans, D. (2010). *Regional Sub-State Diplomacy Today* (D. Criekemans (ed.)).

- Martinus Nijhoff Publishers.
- Cunha, K., & Rei, F. (2011). The Environmental Paradiplomacy In New International Governance. *Proceedings of The 1st World Sustainability Forum*, 563. <https://doi.org/10.3390/wsf-00563>
- Duchacek, I. D. (1984). The International Dimension of Subnational Self-Government. *Publius: The Journal of Federalism*, 14, 5–31.
- Graute, U. (2016). Local Authorities Acting Globally for Sustainable Development. *Regional Studies*, 50(11), 1931–1942. <https://doi.org/10.1080/00343404.2016.1161740>
- Happaerts, S. (2012a). Sustainable development and subnational governments: Going beyond symbolic politics? *Environmental Development*, 4, 2–17. <https://doi.org/10.1016/j.envdev.2012.07.001>
- Happaerts, S. (2012b). Are you Talking to us? How Subnational Governments Respond to Global Sustainable Development Governance. *Environmental Policy and Governance*, 22(2), 127–142. <https://doi.org/10.1002/eet.1577>
- Happaerts, S., van den Brande, K., & Bruyninckx, H. (2011). Subnational governments in transnational networks for sustainable development. *International Environmental Agreements: Politics, Law and Economics*, 11(4), 321–339. <https://doi.org/10.1007/s10784-010-9128-4>
- Huijgh, E. (2010). The Public Diplomacy of Federated Entities Examining the Quebec Model. *The Hague Journal of Diplomacy*, 5, 125–150.
- Huijgh, E. (2012). The Future of Sub-State Diplomacy. *Innovations in Public Diplomacy*, 8, Winter, 23–30.
- Issundari, S. (2018). Paradiplomacy and Indonesian Public Diplomacy. *Proceedings of the 5th International Conference on Community Development (AMCA 2018)*. <https://doi.org/10.2991/amca-18.2018.44>
- Issundari, S., Yani, Y. M., Sumadinata, R. W. S., & Heryadi, R. D. (2021). From Local to Global: Positioning Identity of Yogyakarta, Indonesia through Cultural Paradiplomacy. *Academic Journal of Interdisciplinary Studies*, 10(3), 177. <https://doi.org/10.36941/ajis-2021-0074>
- Jones, R. W., & Royles, E. (2012). Wales in the World: Intergovernmental Relations and Sub-State Diplomacy. *The British Journal of Politics and International Relations*, 14(2), 250–269. <https://doi.org/10.1111/j.1467-856X.2011.00502.x>
- Keating, M. (1999). Regions and International Affairs: Motives, Opportunities and Strategies. *Regional and Federal Studies*, 9(1), 1–16. <https://doi.org/10.1080/13597569908421068>
- Kincaid, J. (1999). The international competence of US States and their local governments. *Regional and Federal Studies*, 9(1), 111–133. <https://doi.org/10.1080/13597569908421074>
- Kincaid, J. (2003). Foreign Relations of Sub-national Units. In Blindenbacher A. and Koller A (Ed.), *Federalism in a Changing World* (pp. 132–168). McGill- Queen's Press.
- Kukucha, C. J. (2004). The Role of the Provinces in Canadian Foreign Trade Policy: Multi-Level Governance and Sub-National Interests in the Twenty-First Century. *Policy and Society*, 23(3), 113–134. [https://doi.org/10.1016/S1449-4035\(04\)70040-5](https://doi.org/10.1016/S1449-4035(04)70040-5)
- Kutsnetsov, A. S. (2015). *Theory and Practice of Paradiplomacy; Subnational Governments in International Affairs* (1st ed.). Routledge Taylor & Francis Group.

- <https://doi.org/10.1111/j.1467-9752.1980.tb00536.x>
- Marié, S. (2018). Cultural paradiplomacy institutions and agenda: the case of Rio Grande do Sul, Brazil. In *Civitas - Revista de Ciências Sociais* (Vol. 18, Issue 2, p. 351). Edipucrs. <https://doi.org/10.15448/1984-7289.2018.2.28907>
- Mingus, M. (2006). Transnationalism and subnational paradiplomacy: Are governance networks perforating sovereignty? *International Journal of Public Administration*, 29(8), 577–594. <https://doi.org/10.1080/01900690500455305>
- Munir, F. (2019). Dimensions of the para-diplomacy of border areas in international relations studies: A systematic literature review. *International Journal of Innovation, Creativity and Change*, 10(3), 89–108. <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85079627606&origin=inward>
- Ouimet, H. R. (2015). From Sub-state Nationalism to Subnational Competition States: The Development and Institutionalization of Commercial Paradiplomacy in Scotland and Quebec. In *Regional & Federal Studies* (Vol. 25, Issue 2, pp. 109–128). Informa UK Limited. <https://doi.org/10.1080/13597566.2014.992886>
- Paquin, S. (2010). Federalism and compliance with international agreements: Belgium and Canada compared. *The Hague Journal of Diplomacy*. https://brill.com/view/journals/hjd/5/1-2/article-p173_8.xml
- Pereira, R. A. O. (2006). How Can Local Governments Foster Peace Through Paradiplomacy? *2005 United Nations University Joint Graduate Course Term's Paper Paradiplomacy and International Security, January*, 1–17.
- Pietrasiak, M., Bywalec, G., Kamiński, T., & Mierzejewski, D. (2018). *Paradiplomacy in Asia; Case Studies of China, India and Russia* (1st ed.). Łódź University Press.
- Pluijm, R. van der, & Melissen, J. (2007). *City Diplomacy: The Expanding Role of Cities in International Politics* (Issue April). The Netherlands Institute of International Relations Clingendael. <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:City+Diplomacy++The+Expanding+Role+of+Cities+in+International+Politics#0>
- Royles, E., & McEwen, N. (2015). Empowered for action? Capacities and constraints in sub-state government climate action in Scotland and Wales. *Environmental Politics*, 24(6), 1034–1054. <https://doi.org/10.1080/09644016.2015.1053726>
- Sergunin, A., & Joenniemi, P. (n.d.). Paradiplomacy as a Sustainable Development Strategy: The Case of Russia's Arctic Subnational Actors. *Eurasia Border Review*, 1–17.
- Setzer, J. (2015). Testing the boundaries of subnational diplomacy: The international climate action of local and regional governments. *Transnational Environmental Law*, 4(2), 319–337. <https://doi.org/10.1017/S2047102515000126>
- Sharafutdinova, G. (2003). Paradiplomacy in the Russian regions: Tatarstan's search for statehood. *Europe - Asia Studies*, 55(4), 613–629. <https://doi.org/10.1080/0966813032000084028>
- Tavarez, R. (2016). *Paradiplomacy. Cities and States as Global Players*. Oxford University Press.
- Waltman, L., van Eck, N. J., & Noyons, E. C. M. (2010). A Unified Approach to Mapping and Clustering of Bibliometric Networks. *Journal of Informetrics*, 4(4), 629–635. <https://doi.org/10.1016/j.joi.2010.07.002>
- Zamorano, M. M. (2016). Imagined Community and Governance of Catalonian Cultural Action Abroad: Midway between Corporatism and Social Participation. *Debats*.

Journal on Culture, Power and Society, 1, 45–58.
<https://doi.org/10.28939/iam.debats-en.2016-4>

Zamorano, M. M., & Rodríguez Morató, A. (2015). The cultural paradiplomacy of Barcelona since the 1980s: understanding transformations in local cultural paradiplomacy. *International Journal of Cultural Policy*, 21(5), 554–576.
<https://doi.org/10.1080/10286632.2014.943752>