Qualitative and Quantitative Methods in Libraries (QQML) 11,2:319-348 ,2022

A Bibliometric Analysis of Marxian Political Economy Research in Canada

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Abstract
The present Scopus-based study is an attempt to examine Marxian political economy research by Canadian social scientists. The data analysis was done using bibliometric software, including MS Excel, VOS Viewer, and biblioshiny (R Studio). The growth of publications over time and their citations are analyzed first, followed by top authors, leading institutions, international collaboration and top journals. Further, the co-occurrence of keywords and top-cited articles are analyzed. The results show that Giroux, H A from McMaster University, is the most productive author. At the same time, Peck, J from The University of British Columbia is most influential among the top authors, and the University of Toronto is the most productive institution. The results also reveal that capitalism, neoliberalism, globalization, democracy, and ideology are the most important research topics.

Keywords: Marxian political economy, bibliometrics, Canada, Scopus, capitalism

Received: 3.3.2022 Accepted: 24.6.2022 ISSN 2241-1925

Introduction

Political economy is an intellectually rich sphere of social sciences that has developed tremendously in its popularity and importance in recent years (Nurmi 2006). It includes the work of great political economists from Adam Smith to Karl Marx. The Marxian political economy (MPE) approach has become popular after Marx's comprehensive theoretical and methodological critique of prominent social scientists and philosophers of his time. After the death of Marx, this discipline was maintained by his followers, and attempts have been made to extend the use of the political economy approach to understand the complexity of the working of the capitalist system. The MPE approach was characterized as a representative of socialist ideology and has been marginalized in the universities of capitalist countries. The fundamental reason behind the marginalization of the MPE approach has not the less utility of this approach to understanding the complex problems under capitalism, but instead, it is critical and pluralist methodology that not only unfolds the natural character of the capitalist system but also blames capitalism as the root cause of significant problems in the world (Roemer 1989; Das 2013). Since the 1990s, under the influence of the American education system, political economy as a discipline has also been either removed or diluted from the curriculum in many developing countries.

On the other hand, in some developed countries, this discipline has been reviving and flourishing. Since last couple of decades, Marxian political economists are putting efforts to build a critique of the neoliberal capitalism, posing a threat to equality, justice, and ecology. In this context, Canada emerged as an important country where Marxian political economy research has gained some ground. In the last couple of decades, Canada ranked as a 'full democracy', one of only 20 countries out of 167 countries achieved that title (EIU 2020). The overall score of Canada in EUI democracy indes was 9.15 out of 10 in 2020.

We argue that academic freedom and plurality have played an essential role in promoting Canada's tradition of discussion and deliberation. In recent decades, Marxian political economists have enhanced the mass consciousness about the problems produced by capitalist greed worldwide. This consciousness has played a vital role in promoting, what (Sen 2009) said, the environment of discussion and deliberation in Canada. In other words, the critical social

sciences research culture that the MPE approach has promoted is an essential contributing factor to make Canada a full democracy. In the light of these facts, the present study attempts to understand the progress of MPE research in Canada. For the present study, we used a bibliometric analysis of MPE research in Canada.

Bibliometric refers to applying mathematical and statistical methods to evaluate the research performance of an individual, discipline, academic institute, region, or country (Wallin 2005). It is a widely-recognized tool to assess the scientific literature in specific areas (Zhao et al. 2018). These are basically quantitative methods but sometimes also used to get the qualitative picture of scientific activities (Bissar-Tadmouri and Tadmouri 2009). The application of visualization tools and techniques on bibliometric and scientometric study helps to understand the significance of data by placing it visually (Pradhan 2016). Several visualization software (BiblioTool, BibExcel, VOSviewer, CiteSpace, CitNet Explorer, R Studio) are available to analyze the bibliometrics data.

Several bibliometrics studies have been conducted addressing the issues related to political economy. Luis and Celma (2020) did the bibliometric analysis of circular economy research. Bahoo, Alon, and Floreani (2020) studied the corruption in economics, Netto and Tello-Gamarra (2020) of sharing economy, and Capobianco-Uriarte et al. (2019) of international competitiveness. Pan et al. (2020) studied the digitization business economy, and Yi, Luo, and Wubbenhorst (2020) researched political instability, uncertainty, and risk. Bibliometrics tools are also used to study the most significant aspects of the journals. For example, Wei (2018) developed a bibliometrics analysis of the top 5 economics journals, Beckmann and Persson (1998) studied 13 most cited journals in economics. Du and Teixeira (2012) did the bibliometric assessment of China Economic Review (CER), a prominent journal focusses on the Chinese economy. Some region-specific studies have also been done. For example, Uzun (1996) did a bibliometrics analysis of physics research in Middle Eastern Countries. Ronda-Pupo (2019) studied economics and business in Latin America, Bonilla, Merigo, and Torres-Abad (2015) also analyzed the economics research in Latin America, and Janmaijaya, Shukla, and Muhuri (2020) studied economics research in India. Chi (2012) measures the political cience research in Germany, and Gunasekaran, Batcha, and Sivaraman (2006) of chemical sciences research in India. Apart from a particular area of a subject, some subject-specific studies have also been done. For instance, Ozkaya (2018) did bibliometrics analysis of the mathematics publications, Gnewuch and Wohlrabe (2017) of economics research, Zhang et al. (2018) on economics and business publications, Fiala and Tutoky (2017) of computer science papers, Sahu and Parabhoi (2020) of library and information science publications. The literature suggests that there was no comprehensive attempt made by the scholars to bibliometrically evaluate the MPE literature in Canada. Therefore, the present study is an attempt to fill the research gap considering the significance of the

specific research area. The study specifically focuses on the following objectives:

1. To highlight the most productive and influential authors.
2. To examine the most influential institutions.
3. To analyse the titles of the most preferred journals used for the publications.
4. To understand the leading collaborative countries of Canada in MPE research.
5. To examine the top funding organizations for promoting research.
6. To Evaluate the dominant keywords in published papers.
7. To analyse ones are the top-cited research papers.

Data and Method

The data for the present study has been retrieved from the Scopus (www.scopus.com) database, which is one of the widely used databases for bibliometric studies. The search was conducted on 11/09/2020 by using the three key terms of Marxian political economy "Marx" OR "Marxism" OR "Capitalism" in combination with article title, abstract, and keywords. Subsequently, 52,900 publications were reported globally during the aforementioned period. After that Canada was selected from the list of countries to extract the publications of Canadian authors. As a result of this search query, 2669 records were retrieved for Canada. from the database. The document types of filters were applied, and only articles and reviews were considered for this study. The documents like book chapters, books, editorial, notes, conference papers, letters, short surveys were 716 in total. They were excluded after applying this filter because they do not go through a proper peer-review process.

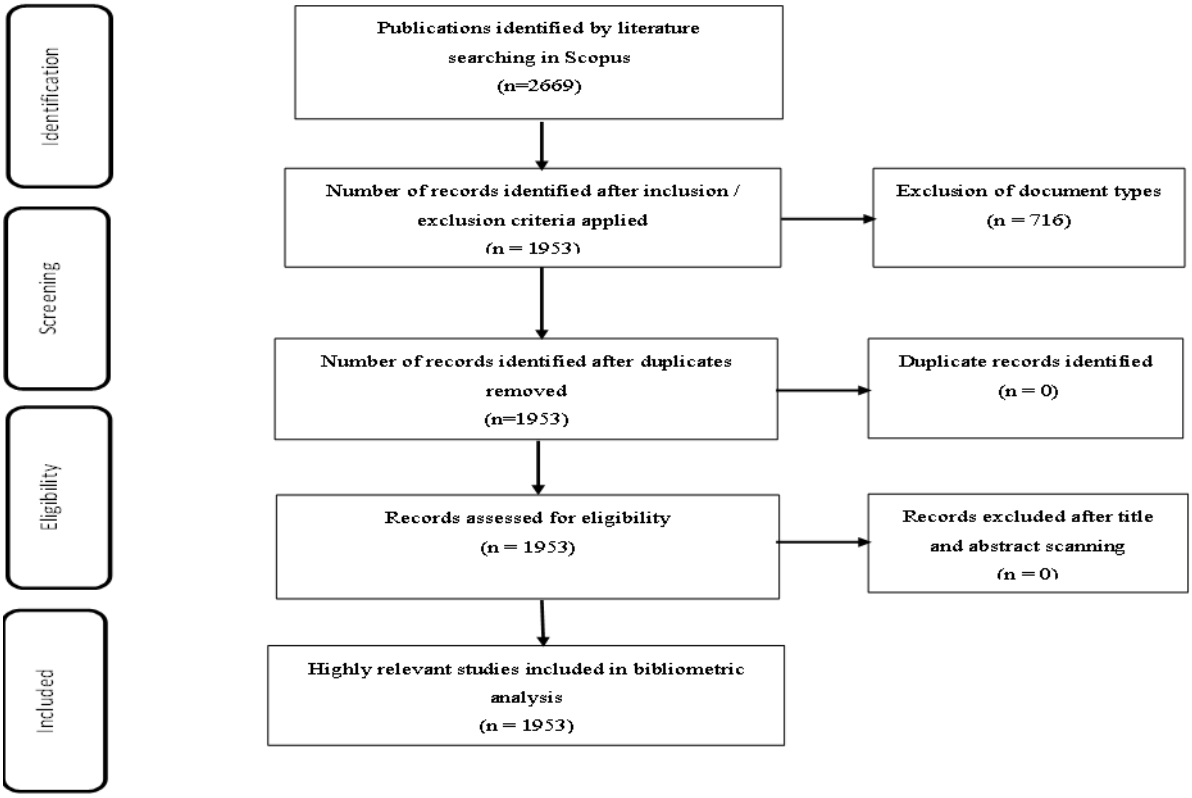

Figure 1: Four-phase flow diagram of data extraction and filtration from Scopus

A total of 1953 articles and reviews were retrieved for Canada after removing the other type of documents. The data was exported from Scopus in CSV, BibTex, and Plaintext formats with bibliographic details and indicators. The bibliographic information has been analyzed with MS-Excel, Bibliometrix package of R Studio, and Visualization of Similarities (VOS) viewer software (Van Eck and Waltman 2010).

Growth Rate of Publications and Citations Analysis

The quantitative analysis of the research output (authors, years) helps understand the development of a particular field (Jia, Dai, and Xinbiao 2013). A total of 1953 research papers were published on the MPE from 1948 to 2020 in Canada. These articles were written by 2081 authors, published by 922 journals, and received 24699 total citations. The majority of the articles (1897)

were written in english, while only 56 were reported in other languages. The year-wise growth rate of MPE research, along with the citation score, publications count, and cumulative percentage, is shown in Table 1. The first paper in this area was published in 1948 indexed in the Scopus database. During the period 1948 to1970, only ten articles were published in this specific area of research. The highest number of publications (N=143) occurred in 2019, while the highest number of citations (3869) appeared in 2010. The year-wise publications and citations trend is presented in Figure 2. It reveals that both publication count and citation score have gradually increased. The recent year's publications got fewer citations than the previous period because of the time factor, and citations increased with time only.

Table 1: Growth rate of political economy research during 1948-2020

Year	TP	CTP	TC	TC/TP	TC/CTP	% Of TP	% Of CTP
1948-1970	10	10	27	2.70	2.70	0.51	0.51
1971-1980	64	74	849	13.27	11.47	3.28	3.79
1981-1990	129	203	904	7.01	4.45	6.61	10.39
1991-2000	184	387	3246	17.64	8.39	9.42	19.82
2001	31	418	616	19.87	1.47	1.59	21.40
2002	22	440	405	18.41	0.92	1.13	22.52
2003	38	478	729	19.18	1.53	1.95	24.48
2004	39	517	961	24.64	1.86	1.99	26.47
2005	42	559	724	17.24	1.30	2.15	28.62
2006	34	593	725	21.32	1.22	1.74	30.36
2007	54	647	1379	25.54	2.13	2.76	33.13
2008	46	693	901	19.59	1.30	2.36	35.48

2009	56	749	1147	20.48	1.53	2.87	38.35
2010	92	841	3869	42.05	4.60	4.71	43.06
2011	77	918	1058	13.74	1.15	3.94	47.00
2012	87	1005	1553	17.85	1.55	4.45	51.46
2013	99	1104	1687	17.04	1.53	5.07	56.53
2014	89	1193	740	8.31	0.62	4.56	61.09
2015	114	1307	951	8.34	0.73	5.84	66.92
2016	94	1401	609	6.48	0.43	4.81	71.74
2017	136	1537	611	4.49	0.40	6.96	78.70
2018	135	1672	591	4.38	0.35	6.91	85.61
2019	143	1815	278	1.94	0.15	7.32	92.93
2020	138	1953	139	1.01	0.07	7.07	100.00

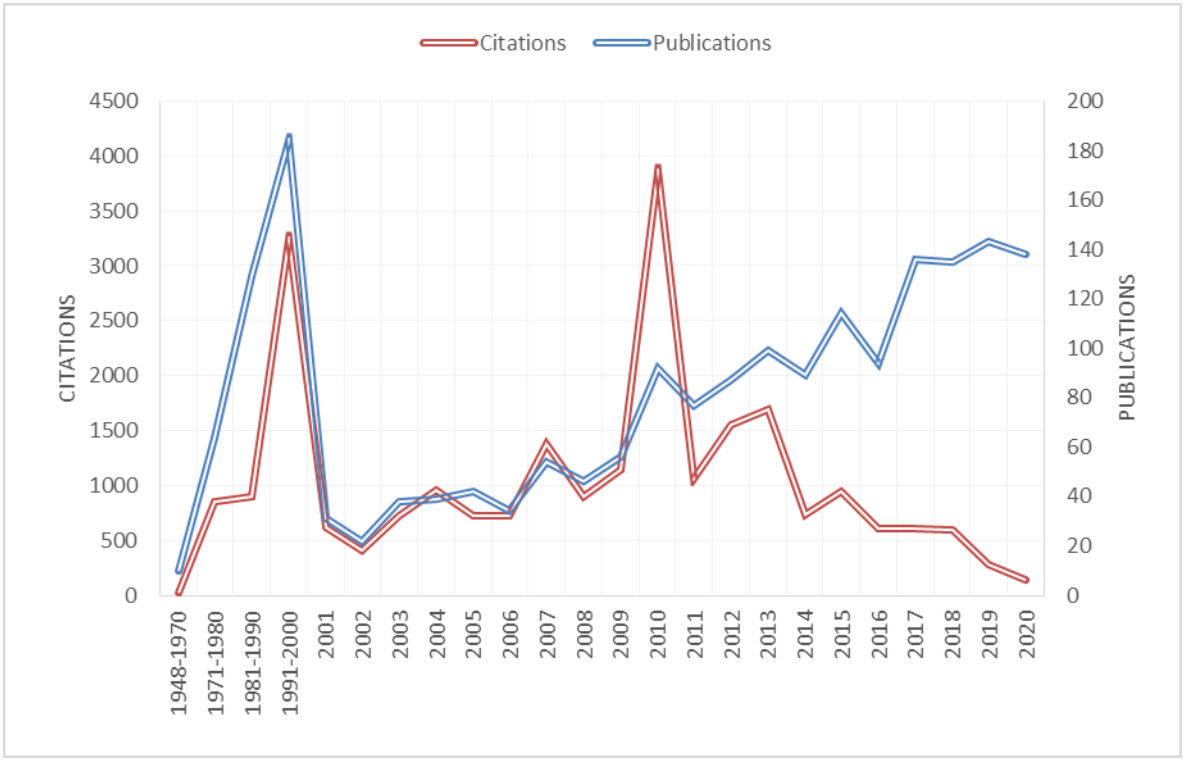

Figure 2. Publications and citations

Authors, Institutions and International Collaboration Analysis

A total of 2081 authors participated in the total research output (1953 articles) on MPE research during the period under study. The top 20 prolific authors and total publications, total citations, average citations per paper, and their affiliated institutes were identified and presented in Table 2. The top 20 authors produced 165 papers and received 3840 citations. Giroux, H A from McMaster University, was found to be the most productive author with 14 articles on this list. He got a TC of 166, ACCP of 11.86, and an h-index of 6. As per the data, Mann, G (13), Nielsen, K (13), Peck, J (8), Zwick, D (8), Carroll, W K (8), Gardiner, M E (8), Veltmeyer, H (8) and Andrew, E (8) got a consecutive position in the list.

Interestingly, Nielsen, K from the University of Calgary, grabbed third [place] in this list, but he has acquired 34 TC and ACPP of 2.62 only for his 13 papers. Peck, J from the University of British Columbia received the highest citations (1614) for his eight papers, and his average citations per paper was entirely above (201.75) other authors on the list. Interestingly, Glassman, J from the

University of British Columbia has only seven publications. Still, he was the second most influential author on the list with a TC of 502 and ACPP of 71.71. The comprehensive data of top prolific and influential authors are shown in Table 2. Figure 3 shows the most productive authors through time. Andrew, E from the University of Toronto was first among the top authors who produced the first paper in 1970. After that Veltmeyer, H and Nielsen, K started research in this field. Among the leading authors, Giroux H A, Gardiner M E, Peck J, Gill S, King JE, Glassman J, Noonan J, and Rioux S were more active in the recent past.

Table 2: Top 20 most productive and influential authors

Rank	Author	TP	TC	ACPP	H-index	Affiliation
1	Giroux, H A	14	166	11.86	6	McMaster University
2	Mann, G	13	279	21.46	6	Simon Fraser University
3	Nielsen, K	13	34	2.62	4	University of Calgary
4	Peck, J	8	1614	201.75	7	The University of British Columbia
5	Zwick, D	8	335	41.88	5	York University
6	Carroll, W K	8	206	25.75	7	University of Victoria
7	Gardiner, M E	8	97	12.13	4	Western University
8	Veltmeyer, H	8	91	11.38	4	Estudios del Desarrollo-Universidad Autónoma de Zacatecas
9	Andrew, E	8	33	4.13	3	University of Toronto

10	Glassman, J	7	502	71.71	6	The University of British Columbia
11	Gill, S	7	199	28.43	5	York University
12	Goonewardena, K	7	88	12.57	5	University of Toronto
13	Rioux, S	7	54	7.71	4	University of Montreal
14	Howard, M C	7	33	4.71	3	University of Waterloo
15	King, J E	7	33	4.71	3	University of Waterloo
16	Panitch, L	7	32	4.57	4	York University
17	Chattopadhyay, P	7	16	2.29	3	Université du Québec à Montréal
18	Heller, H	7	14	2	3	University of Manitoba
19	Nootens, T	7	8	1.14	2	Université du Québec à Trois-Rivières
20	Noonan, J	7	6	0.86	1	University of Windsor

TP=Total Publications; TC=Total Citations; ACPP=Average Citations Per Paper

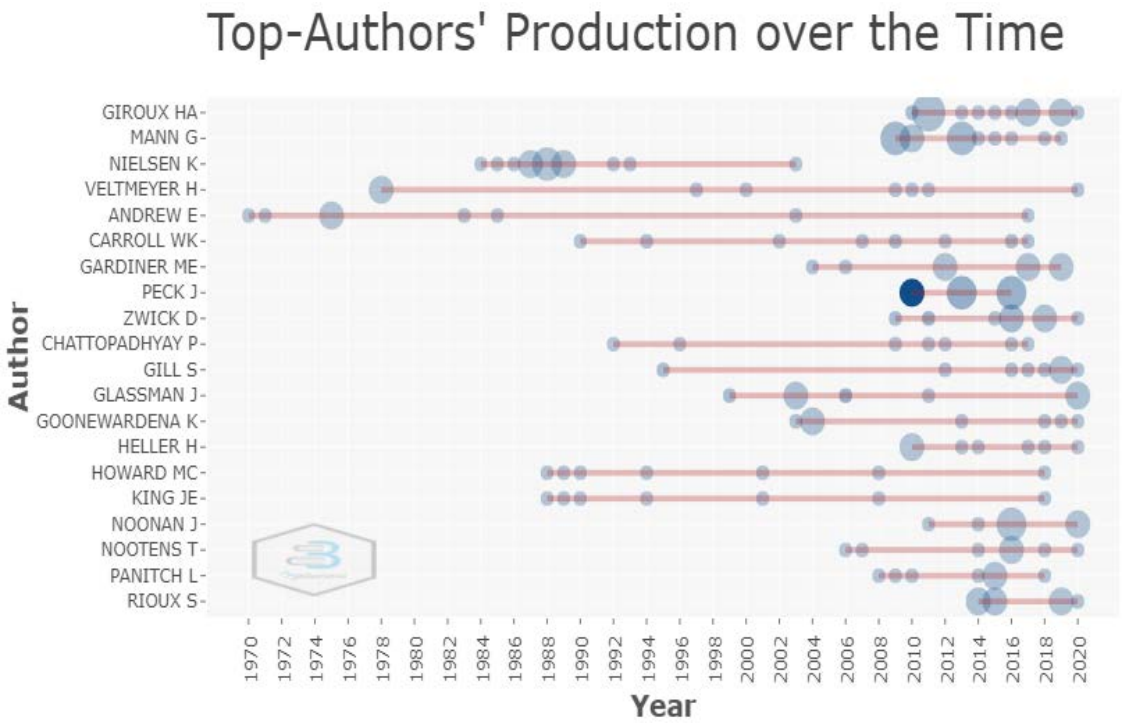

Fig. 3: Top authors' productivity over the time

The research output of different institutes is calculated by the affiliation of at least one author of the published paper. Among Canada's top 20 organizations on MPE research, nine were from Ontario, four from Quebec, three from British Columbia, two from Alberta, one each from Kingston and Manitoba. The University of Toronto grabbed the top place with 270 (14.80% of total output) papers. York University from Ontario got the second rank with 223 (11.8%) papers. The University of British Columbia 139 (7.11%), Simon Fraser University 98 (5.02%), Queen's University 87(4.45%), McGill University grabbed consecutive places in the list. The comprehensive data of the top 20 organizations is presented in Table 3.

Table 3: Top 20 leading organizations

Organization	TP	% Of 1953	Rank	Region
University of Toronto	275	14.08	1	Ontario
York University	223	11.42	2	Ontario
The University of British Columbia	139	7.11	3	British Columbia
Simon Fraser University	98	5.02	4	British Columbia
Queen's University	87	4.45	5	Kingston
McGill University	75	3.84	6	Quebec
University of Alberta	72	3.69	7	Alberta
University of Victoria	61	3.12	8	British Columbia
University of Ottawa	61	3.12	9	Ontario
McMaster University	56	2.87	10	Ontario
Western University	55	2.82	11	Ontario
Carleton University	53	2.71	12	Ontario
University of Waterloo	45	2.30	13	Ontario
Concordia University	43	2.20	14	Quebec
University of Calgary	42	2.15	15	Alberta
University of Manitoba	41	2.10	16	Manitoba
Université du Québec à Montréal	41	2.10	17	Quebec
University of Montreal	38	1.95	18	Quebec
Wilfrid Laurier University	36	1.84	19	Ontario
University of Windsor	30	1.54	20	Ontario

Table 4 presents the top 20 collaborative countries in MPE research with Canadian researchers and the publications count, total citations, and average citations per paper. The United States of America was the top collaborator in producing MPE papers (128) with Canada. Collaborative documents of these two countries also got a maximum of 3756 citations. The United Kingdom was the second leading collaborator with 70 papers. Australia (27), China (11), Germany (11), France (10), Netherland (10), Singapore (9), and Sweden (9) achieved consecutive positions in the list of top collaborator countries. The collaborative papers with Germany got the highest (61.73) average citations per paper.

The VOSviewer network map (Figure 4) of collaborative countries indicates the countries with five or more collaborative papers with Canadian researchers. The size of the circle in the map represents the number of documents. At the same time, the thickness of lines from the giant ring (Canada) to another represents the collaboration strength which is also evident in Table 4.

Table 4: Top 20 leading collaborative countries

Rank	Country	TP	TC	ACPP
1	United States	128	3756	29.34
2	United Kingdom	70	1643	23.47
3	Australia	27	378	14
4	China	11	102	9.27
5	Germany	11	679	61.73
6	France	10	192	19.2
7	Netherlands	10	447	44.7
8	Singapore	9	263	29.22
9	Sweden	9	261	29
10	Brazil	8	48	6
11	Spain	8	89	11.13
12	South Africa	7	43	6.14

13	Denmark	6	230	38.33
14	Finland	6	87	14.5
15	Ireland	5	40	8
16	Mexico	5	15	3
17	New Zealand	5	50	10
18	Israel	4	44	11
19	Italy	4	338	84.5
20	Norway	4	31	7.75

TP= Total Publications; TC =Total Citations; ACPP=Average Citations Per Paper

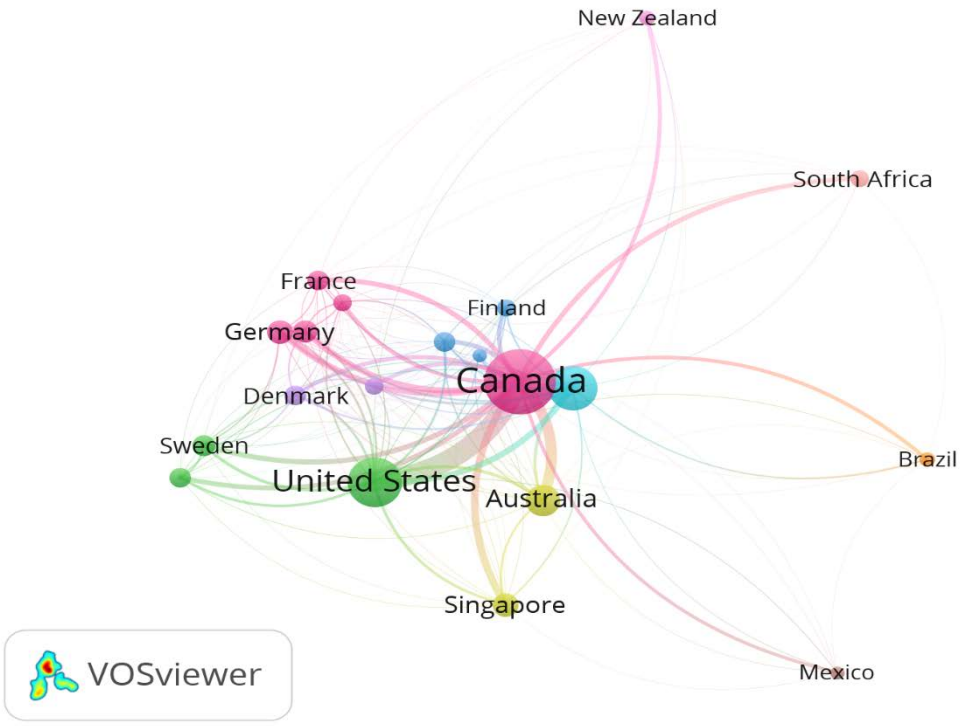

Fig. 4: Network map of top collaborative countries

Top Twenty Journals Titles Used for Publications

Journals are considered to be the primary source of light on research results and academic activities (Hu et al. 2019; Xie et al. 2020). The total research output of MPE research, i.e., 1953 papers, was published in 922 journals. Table 5 summarizes the top 20 journals with other indicators such as complete publications, citations, average citations per paper, publisher, country, and h-index. The top 20 journals have produced 366 articles (18.74%) of the total publications, and the top 5, 10, 15, 20 journals published 146 (7.48%), 231 (11.83%), 303 (15.51%), 366 (18.74%) of the 1953 total publications, respectively. The *Historical Materialism* was the most productive journal with 41 papers, 373 citations, 9.10 average citations per paper, and a ten h-index. Among the top journals, *Critical Sociology* was second most productive with 38 papers, followed by *Antipode* (25), *Canadian Review of Sociology* (23), *Geoforum* (19), *Third world quarterly* (19), and *Triplec* (18). In this list, *Antipode* of Wiley-Blackwell Publishing Ltd, United Kingdom, received the maximum of 1181 total citations for its 25 papers and the highest average

citations per paper (47.24) and h-index (12). It can be seen that *Progress in Human Geography* of Sage Publications Ltd, United States was the second most influential journal; it has received 42.54 average citations for its 13 papers.

Table 5: Top 20 most favored Journals

Rank	Journal	TP	TC	ACPP	H-index	Publisher	Country
1	Historical Materialism	41	373	9.10	10	Brill Academic Publishers	Netherlands
2	Critical Sociology	38	336	8.84	10	SAGE Publications Ltd	United Kingdom
3	Antipode	25	1181	47.24	12	Wiley-Blackwell Publishing Ltd	United Kingdom
4	Canadian Review of Sociology/Revue Canadienne De Sociologie	23	222	9.65	8	Canadian Sociology and Anthropology Association	Canada
5	Geoforum	19	482	25.37	11	Elsevier BV	United Kingdom
6	Third World Quarterly	19	371	19.53	9	Routledge	United Kingdom
7	Triplec	18	147	8.17	7	Unified Theory of Information Research Group	Austria
8	Canadian Journal of Political Science	17	103	6.06	5	Cambridge University Press	United Kingdom

9	Globalizations	16	593	37.06	6	Taylor and Francis Ltd.	United States
10	Capitalism, Nature, Socialism	15	89	5.93	5	Taylor and Francis Ltd.	United Kingdom
11	Review of Radical Political Economics	15	154	10.27	7	SAGE Publications Inc.	United States
12	Science and Society	15	133	8.86	4	Guilford Publications	United States
13	Environment and Planning d: Society and Space	14	135	9.64	6	SAGE Publications Inc.	United Kingdom
14	Journal of Business Ethics	14	220	15.71	9	Springer Netherlands	Netherlands
15	Review of International Political Economy	14	370	26.42	9	Routledge	United Kingdom
16	International Journal of Health Services	13	160	12.30	6	SAGE Publications Inc.	United States
17	New Political Economy	13	198	15.23	7	Routledge	United Kingdom
18	Progress in Human Geography	13	553	42.54	9	SAGE Publications Ltd	United States
19	Capital and Class	12	48	4	4	SAGE Publications Inc.	United States

20	Economic and Political Weekly	12	10	0.83	2	Economic and Political Weekly	India

TP=Total Publications; TC=Total Citations; ACPP=Average Citations Per Papers

Subject Area and Funding Organizations Analysis

Scopus has its subject categories, and a single paper may fall into multiple subjects (Bapte & Gedam 2018). Therefore, several articles in different subject categories can be much more than actual 1953 data considered for the study. As per the data, the total research output on MPE falls in 26 different Scopus subject disciplines. The highest 1486 articles were found in Social Sciences. Next to this was Art and Humanities, with 705 articles. It was followed by Economics, Econometrics and Finance (290), Business, Management and Accounting (170), Environmental Science (144), and Medicine (86). The comprehensive data of the top ten subject disciplines is presented in Table 6.

Table 6: Top 10 subject categories

Rank	Subject Categories	TP
1	Social Sciences	1486
2	Arts and Humanities	705
3	Economics, Econometrics and Finance	290
4	Business, Management and Accounting	170
5	Environmental Science	144
6	Medicine	86
7	Earth and Planetary Sciences	77
8	Psychology	56
9	Computer Science	47
10	Decision Sciences	18

The data shows that the top 10 organizations have funded 160 (8.19 %) papers in the list of top funding organizations. As per the Scopus data, the Social Sciences and Humanities Research Council of Canada has funded a maximum of 125 (6.40%) papers in the MPE research domain. At the same time, the Canadian Institute of Health Research got second place by providing funding to 6 research papers, followed by International Development Research Centre (5), National Science Foundation (4), World Bank Group (4), and York University (4). The comprehensive data of the top 10 funding organizations can be seen in Table 7.

Table 7: Top 10 funding organizations

Organization	TP	Rank
Social Sciences and Humanities Research Council of Canada	125	1
Canadian Institutes of Health Research	6	2
International Development Research Centre	5	3
National Science Foundation	4	4
World Bank Group	4	5
York University	4	6
Economic and Social Research Council	3	7
Ford Foundation	3	8
Irish Research Council for the Humanities and Social Sciences	3	9
National Institutes of Health	3	10

Keywords and Top Cited Papers Analysis

The analysis of keywords provides a description of research topics and emerging trends in a specific area. Table 8 displays the top 20 most frequently used author keywords, index keywords, and all keywords. There were 4123, 2160, and 5789 keywords, author keywords, index keywords, respectively

Table 8: Top 20 co-occurrence of author keywords, index keywords, and all keywords

Rank	Author Keywords	Occurrences	Index Keyword	Occurrences	All Keyword	Occurrences
1	Capitalism	168	Capitalism	311	Capitalism	449
2	Neoliberalism	101	Neoliberalism	76	Neoliberalism	146
3	Marxism	90	Political Economy	70	Marxism	126
4	Marx	62	Human	65	Political Economy	99
5	Globalization	43	Canada	64	Canada	80
6	Political Economy	43	Article	55	Globalization	68
7	Class	29	United States	52	Human	65
8	China	26	Humans	50	Marx	62
9	Democracy	25	Marxism	49	United States	57
10	Ideology	25	Theoretical Study	38	Article	55
11	Development	22	Globalization	31	Humans	50
12	Varieties Of Capitalism	22	Female	29	Ideology	39
13	Financialization	20	Governance Approach	27	China	38
14	Labor	20	Economics	25	Democracy	38
15	Canada	19	North America	25	Theoretical Study	38
16	Critical Theory	19	Political	25	Politics	36

			System			
17	Socialism	19	Economic Development	24	Economics	34
18	Colonialism	18	Politics	24	Class	33
19	Imperialism	18	China	23	Socialism	32
20	Crisis	17	Social Movement	23	Colonialism	31

Figure 5 highlights the network map of all keywords that were created through VOSviewer. The keywords with a minimum occurrence of five were selected for this map. Of 5789 all keywords, only 394 met the threshold. The node's size represents the frequency of occurrence of keywords, with larger nodes indicating more frequently used keywords. It can be verified from Table 8. The distance between two keywords means the association among them; two words are nearer because of their frequent appearances together in several papers. The keywords are divided into 8 clusters; each cluster has a different color and represents a specific area of research. The cluster marked with red was the largest, mainly about capitalism, neoliberalism, ideology, nationalism, imperialism, modernity and feminism. The cluster marked with green was the second-largest cluster, primarily related to governance, empire, corporate governance, political geography and party politics. Figure 6 shows the three-factor analysis of authors, keywords, and sources; it demonstrates authors' areas of research and journals in which they publish their papers (Aria and Cuccurullo 2017).

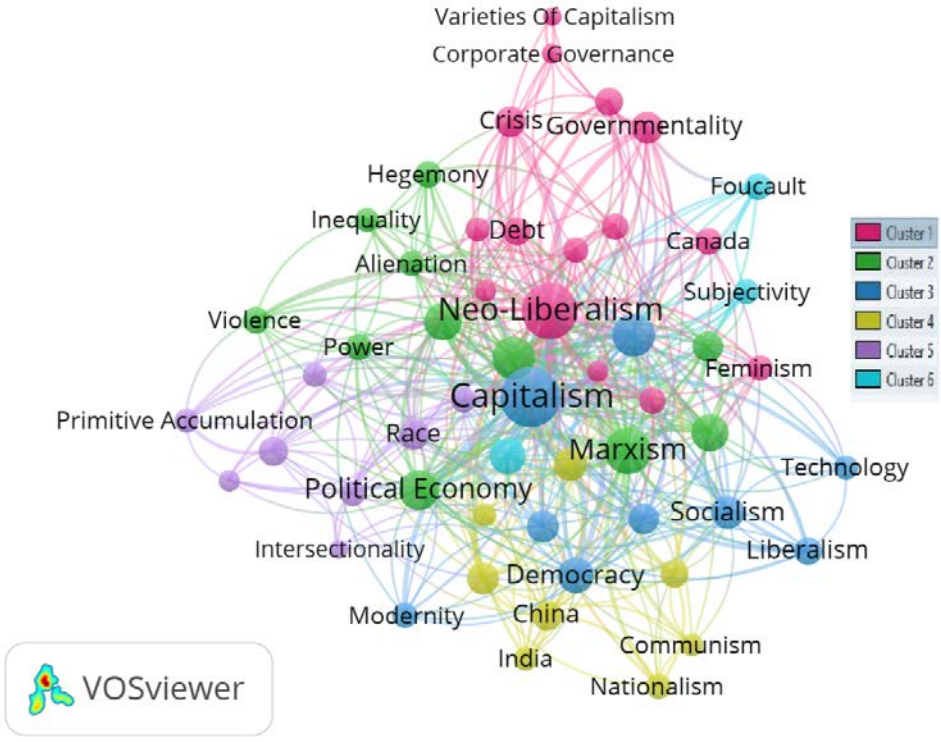

Figure 5: VOSviewer co-occurrence network map of all keywords

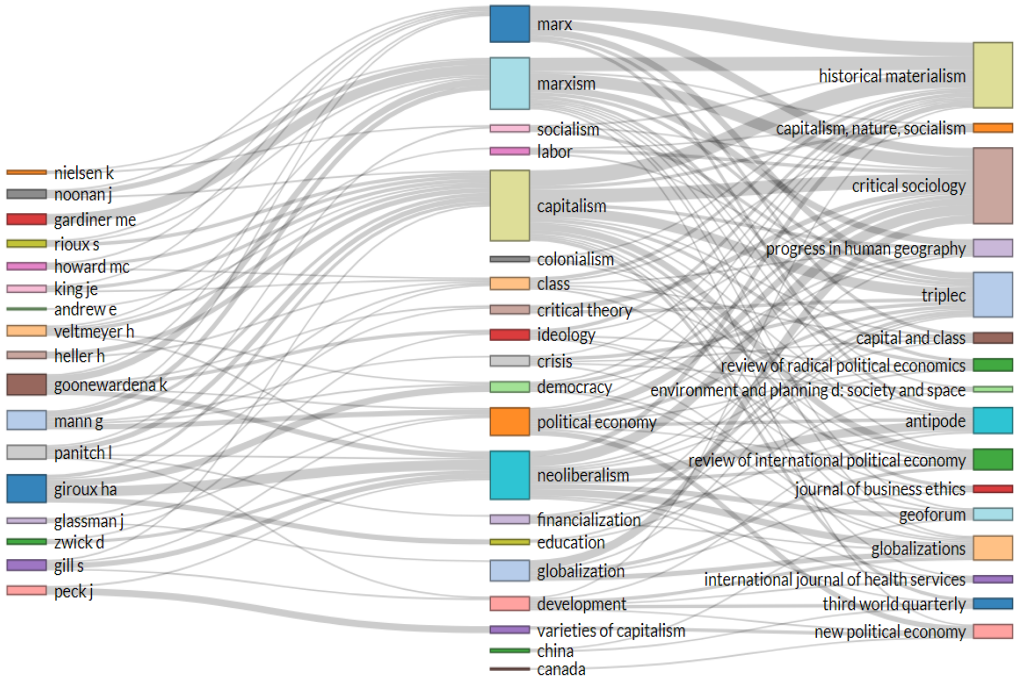

Figure 6: Three-Fields analysis of the relationship among Authors(left), Keywords (Middle), and Sources (Right)

The 20 highly cited papers are shown in Table 9, along with author, journal, publication year, volume, total citations, and citations per year. The article entitled "*Variegated neo-liberalization: Geographies, modalities pathways*" grabbed the highest 988 citations as well as the highest average citations per year (98.8). It was a collaborative effort of 3 authors (Brenner N, Peck J & Theodore N) and was published in the journal Global Network in 2010. The second place of maximum cited articles was "*Corporate social responsibility and institutional theory: New perspective on private* governance," with 397 citations. It was authored by Brammer S, Jackson G & Matten D, and was published in the journal Socio-Economic Review (2012). The article entitled *After Neoliberalization?* (2010) got third place with 356 citations. Out of the three top-cited articles, 2 were collaborative efforts of Brenner N, Peck J & Theodore N. The research paper "*Political power and renewable energy futures: A critical review*" by Burke M J & Stephens J C achieved the second-highest

average citations per year (77.5) and was published in journal Energy Research and Social Science in the year 2018.

Table 9: Top 20 highly cited papers

Rank	Title	Author	Journal	PY	Volume	Pages	TC	CPY
1	Variegated neo-liberalization: Geographies, modalities, pathways	Brenner N., Peck J., Theodore N.	Global Networks	2010	10 (2)	182-222	988	98.8
2	Corporate social responsibility and institutional theory: New perspectives on private governance	Brammer S., Jackson G., Matten D.	Socio-Economic Review	2012	10(1)	2-28	397	49.63
3	After neo-liberalization?	Brenner N., Peck J., Theodore N.	Globalizations	2010	7(3)	327-345	356	35.6
4	Primitive accumulation, accumulation by dispossession, accumulation by 'extra-economic means	Glassman J.	Progress in Human Geography	2006	30(5)	608-625	306	21.86
5	Obstacles to the Development of a Capitalist Agriculture	Mann S.A., Dickinson J.M.	The Journal of Peasant Studies	1978	5(4)	466-481	304	7.24
6	Acculturation to the global consumer culture: Scale development and research paradigm	Cleveland M., Laroche M.	Journal of Business Research	2007	60(3)	249-259	289	22.23
7	The commodification of language	Heller M.	Annual Review of Anthropology	2010	39	101-114	275	27.5
8	Rules of the game: The place of institutions in regional economic change	Gertler M.S.	Regional Studies	2010	44(1)	1-15	246	24.6
9	The nature of produced nature: materiality and knowledge construction Marxism	Castree N.	Antipode	1995	27(1)	12-048	231	9.24

10	A spectacular eco-tour around the historic bloc: Theorizing the convergence of biodiversity conservation and capitalist expansion	Igoe J., Neves K., Brockington D.	Antipode	2010	42(3)	486-512	183	18.3
11	The accelerating biophysical contradictions of industrial capitalist agriculture	Weis T.	Journal of Agrarian Change	2010	10(3)	315-341	170	17
12	Indigeneity, Capitalism, and the Management of Dispossession	Murray Li T.	Current Anthropology	2010	51(3)	385-414	166	16.3
13	Land Grabbing and Global Governance: Critical Perspectives	Margulis M.E., McKeon N., Borras Jr. S.M.	Globalizations	2013	10(1)	1-23	161	23
14	Critical perspectives on consumers' role as 'producers': Broadening the debate on value co-creation in marketing processes	Cova B., Dalli D., Zwick D.	Marketing Theory	2011	11(3)	231-241	158	17.56
15	A variety of capitalism with Chinese characteristics?	Peck J., Zhang J.	Journal of Economic Geography	2013	13(3)	357-396	156	22.29
16	Political power and renewable energy futures: A critical review	Burke M.J., Stephens J.C.	Energy Research and Social Science	2018	35	78-93	155	77.5

17	Depleted communities and community business entrepreneurship: Revaluing space through a place	Johnstone H., Lionais D.	Entrepreneurship and Regional Development	2004	16(3)	217-233	146	9.13
18	Removing the veil? Commodity fetishism, fair trade, and the environment	Hudson I., Hudson M.	Organization and Environment	2003	16(4)	413-430	146	8.59
19	Spectacular Beijing: The conspicuous construction of an Olympic metropolis	Broudehoux A.-M.	Journal of Urban Affairs	2007	29(4)	383-399	145	11.15
20	State power beyond the 'territorial trap': The internationalization of the state	Glassman J.	Political Geography	1999	18(6)	669-696	142	6.76

PY=Publication Year; TC=Total Citations; CPY= Citations Per Year

Discussion

After the collapse of the Soviet Union, Fukuyama (1989) coined a vague ideological notion of 'end of history' as the end of Marxian ideology. However, the above analysis shows, after the 1990s, the MPE has become more prevalent in Canada. The findings of the study highlight that Marxian intellectuals are not concentrated in one or two universities or disciplines in Canada but are spread over the universities and fields. One weakness that the present research highlighted was the lack of international collaboration of Canadian political economists with researchers of developing countries. The majority of collaborative research by the Canadian Marxian political economists among the top 20 countries were with the United States and the United Kingdom. As Marxian political economists are critical of the system, they always lack the financial resources to conduct their research. To get funding for their research, they have to work much harder than those doing pro-system research. The study found that out of a total of 1953 publications, from 1947 to 2020, only 160 publications were funded by the top 10 funding organizations. Among the top 10 funding agencies, nine agencies have funded only 35 research during the above period. The merit of the Marxian political economists is that their methodology of analysis is critical. This is well reflected in their keywords

which were dominated by the words such as capitalism, neoliberalism, global capitalism, financial crisis, colonialism, ideology, etc.

Capitalism as a system promotes the marketization of everything. A critical criterion that capitalism has evolved to measure the utility and impact of research is citation and impact factor. In the contemporary scenario, if Marxist political economists have to compete with the anti-Marxist or pro-capitalist intellectual discourse, they must follow the same tact and techniques such as the impact factor publications, citations, etc. This is important to attract young researchers and students to research and enroll in MPE courses. In this context, the role of journals that challenge the mainstream intellectuals' discourse is quite crucial. Marxian political economists have collaborated with the big publishing houses to enhance Marxian political economy research space in the last couple of decades. This is quite clear from the study's finding that renowned publishing houses publish the top 20 journals that publish the Marxian political economy research with substantial readership worldwide.

Conclusion

Though MPE research in Canada is visible from 1948 in the present Scopus-based study, only significant growth has been noticed from 2000 onwards. The top 20 prolific authors contributed 8.45% of papers. Giroux, H A from McMaster University grabbed first place with 14 papers. Peck, J from the University of British Columbia is most influential among the top authors; he received the highest total citations (1614) and average citations per paper (201.75) for his eight papers. The top 20 organizations contributed 80.43% of the papers. The University of Toronto, Ontario, got the first rank with 275 (14.8%) papers. It was found that the United States is a leading collaborator in producing political economy papers with Canada. The top 20 journals contributed 18.74% of papers. The Journal of *Historical Materialism* grabbed first place by contributing 41 papers, while *Antipode* got the maximum total citations (1181) for 25 papers. The word capitalism (among all keywords) grabbed the first rank with 449 occurrences, followed by neoliberalism (146), Marxism (126), political economy (99), Canada (80), globalization (68), human (65), and Marx (62). The top 20 cited papers received a total of 5120 citations. The highly cited article is *Variegated neo-liberalization: Geographies, modalities, pathways* with 988 citations, published in Global Networks journal (2010).

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