

# The Impact of the Internationalization of Political Science on Publishing in Two Languages: The Case of Japan, 1971-2023

NISHIKAWA, Masaru  
nishikaw@tsuda.ac.jp

SAKAI, Daisuke  
d-sakai@e-mail.jp

MATSUI, Akira  
matsui-akira-zr@ynu.ac.jp

March 3, 2024

## Abstract

This study focuses on the internationalization trajectories of political science in Japan, specifically examining the publishing practices of Japanese political scientists in both English and Japanese languages. The study reveals a generational shift, where younger scientists, especially those working abroad, increasingly publish in English, aligning with global trends in English publications and co-authorship since the 2000s. This shift contrasts with those working in Japan, who predominantly publish in Japanese and have yet to adopt co-authorship significantly. This article also notes a decline in book publications in both English and Japanese among Japanese political scientists, indicating a broader preference for peer-reviewed articles over books due to professional pressures in Japan. The study uses descriptive statistics, text analysis, network analysis, and qualitative analysis to explore these trends, highlighting the influence of internationalization on Japanese political science publication strategies.

## 1 Introduction

Scientists have contributed to their discipline, community, and society for several decades, yielding scholastic publications. Owing to the recent advancement of both the data infrastructure and datasets of scientific publication or other related information, the research on bibliometrics and “science of science” have made new findings on scientific practices [1, 2, 3]: scientists have begun to discover scientific patterns such as the success and peak of a scientist’s career (“hot streaks”) [3], the correlation between scientific productivity and age [4], patterns of co-authorship and teamwork, the scientific impact, and citation.

There are studies of science of science in political science. For example, there has been a significant growth in the literature examining “the gendered nature of political science.” Those studies show that female political scientists are still underrepresented compared to their male counterparts [5, 6]. The studies deal with topics such as the leaking pipeline, the citation gap, invisibility and inclusion of women of color, and publication bias across various regional contexts [7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22]. However, scant attention has been paid to non-Western countries.

Moreover, there is a growing body of research on co-authorship in political science [23, 24, 25, 26, 9, 27, 28]. Co-authorship has been increased in many fields of science, including

political science [29]. The studies on co-authorship patterns aim to elucidate the characteristics of scientific networks, such as mutual trust, cooperation, exchange of ideas, and creativity. It also inquires about the amount of co-authorship across disciplines, nations, and languages. Language, geographical conditions, and sub-disciplines play a significant role in the co-authorship among political scientists. The studies suggested that different countries have different publishing strategies and publishing cultures. Also, authors' ages were related to productivity [30]. They were essential findings. However, the studies mentioned above exclusively focused on the cases of Western countries [31, 23, 25]. There is room for discussion on whether the findings of these studies can be applied to non-Western countries. Metz and Jäckle [24, p. 157] wrote:

“because focusing on leading journals means focusing on English-speaking journals, the role of scientists publishing predominantly in other languages or in specific national communities is certainly undervalued...”

Additionally, there are other themes in political science, such as the peer-review process [32], citation pattern [33], determinants of research productivity [34], publication bias [35, 36], the relationship between research productivity and reputation rankings [37], and international editorial board composition [38]. Again, the author would like to emphasize that the existing research is biased toward Western countries. Even if significant patterns and facts about the scientific work made by political scientists are discovered, it is still being determined whether they are also observed in non-Western countries.

Thus, it is the internationalization of political science that should be studied. In countries of the non-Anglophone sphere, scholars conduct academic activities not only in English but also in their primary languages [39]. Where this prevalent 'dual-language-world' scenario persists, how does academic research develop in pursuing bifurcated publishing realms? [40, 41] Given this fact, it is a pitfall in collecting bibliometric data. Major citation databases such as PubMed, Web of Science, and SCOPUS cover academic journals exclusively published in English. Therefore, if we want to comprehensively investigate the scientific practice of 'dual-language' within a social science discipline (e.g., political science), we must look into international non-English databases.<sup>1</sup> Since Japanese political scientists put weight on Japanese and English publications in pursuing their scientific careers, the scientific career trajectory of Japanese political scientists is a crucial case study of the internationalization of political science. The explication and scholarly scrutiny of the outcomes engendered by sustaining the 'dual realms' of English and native languages are paramount for the inception of a new research topic. Prospective comparative analyses will be anticipated to ascertain the applicability of this article's findings across diverse nations and interdisciplinary fields.

---

<sup>1</sup>Is there a discipline of political science with unique features localized by domestic context? For more on this point, see: [42].

## 2 Literature Review and Research Questions

How can we define “internationalization of political science?” Carammia simplified internationalization as an increase in the publication in international journals and an increase in international co-authorship [43, p. 565]. Just as Caramia, Breuning et al. also considered submissions and publications in international journals to be important indicators of internationalization. It is widely accepted that publishing articles from top-ranked international political science journals is a distinctive indicator of internationalization [44, pp.789-799]. However, as Norris defined internationalization of political science as an accelerated movement of people, communications, and labor, there should be other features that are related to internationalization [45, pp.127-157]: transnational mobility of scholars and students, adjustment of curriculum to international standards, research and teaching outside of a country of residence, the establishment of school branches and campuses outside the original country, obtaining supranational academic funds, and organizing international conferences [46, 47, 48, 49, 50].<sup>2</sup> While the authors are fully aware that the definition of internationalization is multifaceted, we adopt changes in journal publication patterns as an indicator of internationalization in this article. Hence, we do not deal with other indicators like student and faculty mobility, education, international strategies of colleges, and funding. The studies on internationalization of scientific activities in Japan were conducted from diverse aspects: expansion of co-authorship networks, diversification of faculty members, acceptance of international students, changes in international rankings, and governmental policies [51, 52]. However, those studies were not specific to the social sciences, and political science is out of the scope of consideration.

**Research Question:** Carammia’s research showed that international production and collaborative political science research had moved from Anglo-American countries to peripheral European countries [43]. Numerous studies on internationalization in Western Europe [43] and Central/Eastern Europe had done [53, 54, 48], however, only a tiny amount of research using reliable data had been done on non-Western countries, such as Japan.<sup>3</sup> How has this affected the Japanese political scientist’s publishing strategy in English and Japanese? Is the internationalization of political science in non-Western regions, e.g., Japan, progressing? It is our fundamental research question.

According to a review of the history of political science in Japan, there were two turning points in Japanese political science [57, 58]. The first occurred in 1945. It is said that a significant disconnect exists in terms of themes and methodologies between Japanese political science before and after World War II. While influenced by Western political science, postwar political science was founded upon critical reflection on the prewar period. The central research theme was the study of totalitarianism in prewar Japan [59, 60]. Furthermore, the second turning point happened in the 1980s, with the influx of American

---

<sup>2</sup>What are the causes for the internationalization of political science? Scholars pointed out the development of dense international networks, resources for international activity, and the existence of incentives for career paths [43, 46].

<sup>3</sup>There are some studies on non-Western countries like southern American countries or Turkey. However, they remain to be exceptional[55, 56].

political science into Japan. After the second turning point, tension and conflict emerged between the Japan-specific postwar political scientists and the more scientific, positivist political scientists.<sup>4</sup>

Some believed that Japanese political scientists had stayed the same since the prewar or postwar period. In the 1980s, scholarly attention was increased on the causes of Japan's economic growth, and many Japanese academics wrote research articles and books on Japanese politics in English. However, some say Japanese political scientists had not been educated abroad, had never taught at foreign institutions, and had not written in English. It was also said that Japanese political scientists tend to prioritize writing books in Japanese over articles written in English [61, 62]. A Japanese governmental institution pointed out the following:

"Japanese political scientists are domestically oriented. The percentage of participation in international political science conferences is low, as can be seen by comparing the number of political scientists by country. The incentive for internationalization (e.g., writing papers in English) is extremely low. This low incentive was underscored by the remark of the prominent political scientist at this meeting. Notably, there have been limited numbers of contributions to international journals from scholars who have returned to Japan even after they taught in the U.S. or in other foreign countries [63, pp.142-143]."

However, some scholars argued that within the social sciences and humanities in Japan, pressure to publish articles in international journals has loomed large [64]. According to them, articles and books written in Japanese had been disregarded as academic achievements: a Japanese political scientist asserted that "Japanese political science is becoming more like economics [65]."

After all, has the internationalization of Japanese political science advanced or stagnated? If internationalization has advanced, this should be "the third turning point" of Japanese political science. However, there needs to be more empirical research on Japanese political scientists' publication patterns in the context of internationalization. This article examines this issue using the original data collected by the authors. More detailed research questions are as follows:

**RQ1:** if the internationalization of Japanese political science has fallen behind, the number of publications in international journals has not been increased. Additionally, there have been no generational gap in the number of publications in international journals and domestic journals.

**RQ2:** if the internationalization of Japanese political science has fallen behind, international co-authorship has not been increased and has not differed from preceding generations.

---

<sup>4</sup>Sakai [57] examined from a bibliometric perspective whether these two historical turning points in Japanese political science existed. As a result, he clarified that there was a break with the prewar period in postwar Japanese political science. However, in contrast, Sakai found that even after the 1980s, there was no disconnection with earlier generations.

**RQ3:** if Japanese political science internationalization has fallen behind, there have been a systematic difference between the topics of articles published in international journals and domestic journals.

### 3 Data and Methods

#### 3.1 Data

We collected data from international and domestic political science publications. The authors identified the political scientists who published articles in international/domestic academic journals (book reviews were excluded from the data). So, the unit of observation was individual Japanese political scientists: if a scholar published a single-authored article, he/she was counted as a sample ( $n=1$ ). In the case of co-authorship among Japanese scholars, for instance, if the co-authors are Sato, Suzuki, Takahashi, and Tanaka, each was given a count as a sample ( $n=4$ ).

The authors referred to the 2018 journal ranking by Journal Citation Reports (JCR) and listed the top 50 political science journals from January 1971 until October 2023 (see Appendix 1 for the complete list). In addition, the authors collected data from six primary Japanese political science journals (see Appendix 1 for the complete list). The total sample size of our data is 3054, of which 442 were published in international journals, and 2612 were published in Japanese journals.

In the list of international journals, we identified Japanese political scientists. "Japanese political scientists" here were defined as those born in Japan and with Japanese nationality. Scholars who initially had Japanese nationality and renounced it later were also included in the data. However, foreign nationals who had resided and worked in Japan were not included, nor were those who were born in Japan but chose the nationality of their parent's country of origin (e.g., Michael D. Ward or Frances M. Rosenbluth).

After collecting all the data on publications, we assigned the authors' gender information, birth years, affiliations, citation counts, abstracts, the names of the co-authors, information on the book publications, positions, and where they obtained their jobs (overseas/Japan). The information was gathered from their personal, academic, and institutional web pages. Sometimes, the authors asked the scholars to provide their information.

#### 3.2 Methods

This study examines the degree of internationalization of Japanese political scientists using quantitative methods, computational social science methods, and case studies. To answer RQ1, descriptive statistical analysis was used: the authors used Python with the packages such as "json," "math," "pandas," "numpy," and "matplotlib."

**Network Analysis:** to answer RQ2, the authors conducted a network analysis using R (R.4.3.2) and RStudio (2023.12.1). The author utilized the packages "igraph," "statnet," "signnet," and "rio." In articles authored by multiple individuals, we meticulously ana-

lyzed the co-authorship relationships. Initially, every co-authorship relation was extracted from the comprehensive dataset. Subsequently, the authors categorized this refined data into sub-datasets, each spanning distinct periods, and formatted them as edgelists. The periods demarcated were 1971-1980, 1981-1990, 1991-2000, 2001-2010, and 2011-2023 [66, 67]. Then, the authors calculated the critical indices of each graph within the framework of undirected graphs.

**Topic Modeling:** to examine RQ3, the authors conducted a textual analysis. The authors aimed to investigate the utilization of data extracted from the abstracts of both international and domestic journals. Their objective was to identify subjects within a corpus of texts and words that were intimately associated with those subjects. The abstracts, which formed the unit of analysis, were meticulously collected from a subcategory pertinent to political science journals.

In the methodology, a series of preprocessing steps were undertaken. These included tokenizing, complexity reduction (i.e., removing URLs, separators, symbols, punctuation, numbers, and stop words. Then the data were lower-cased and lemmatized), and creating the Document Feature Matrix. Following this preprocessing, the texts were categorized using Latent Dirichlet Allocation (LDA). The choice of LDA was strategic; it was selected due to its suitability for analyses that do not require the integration of covariates or structures. Consequently, other models such as Structural Topic Modeling (STM), Guided LDA, and keyATM were deemed unnecessary and, therefore, not utilized in this study [68]. The authors used R (R.4.3.2) and RStudio (2023.12.1) to implement the topic modeling. The authors used the R packages such as "tm," "ldatuning," "textstem," and "quanteda."

**Qualitative analysis:** lastly, the authors picked up 41 Japanese political scientists (see Appendix 2 for the questionnaire wordings) who published articles in international journals and sent them a questionnaire. The 36 out of 41 who responded to our survey were broadly divided into three groups: 1: those who received their doctoral degrees overseas and were employed by overseas universities (13 scholars), 2: those who received their doctoral degrees overseas and were employed by Japanese universities (14 scholars), and 3: those who received their doctoral degrees in Japan and were employed by Japanese universities (9 scholars). Those who obtained a doctoral degree in Japan and were positioned at overseas universities were almost non-existent and thus could not be included in the survey.

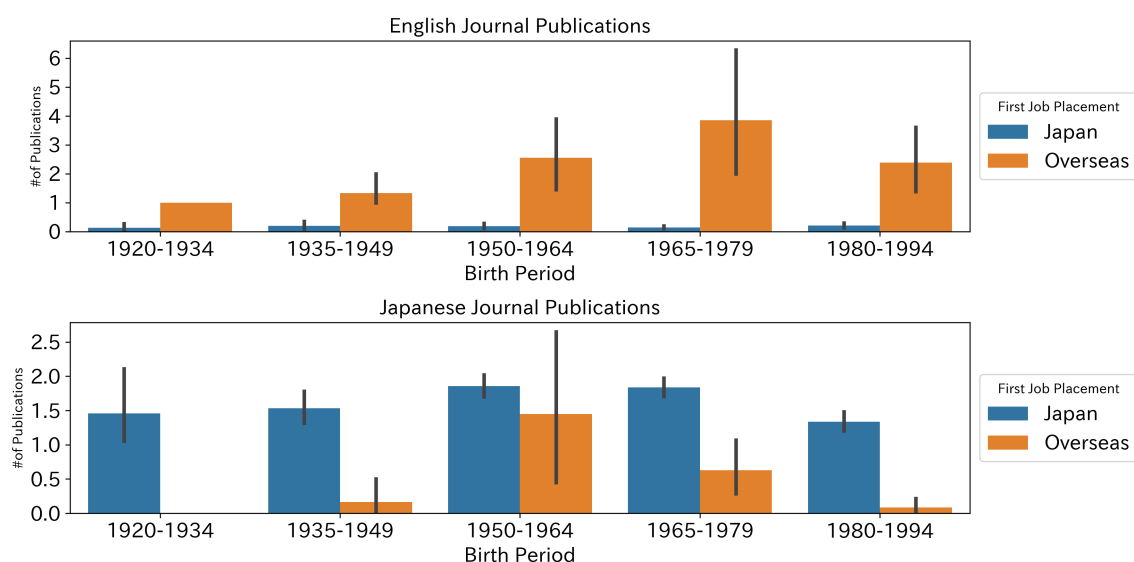
## 4 Results

**Answering the RQ1:** how have the numbers of English and Japanese publications changed over the past 50 years? Initially, the authors examined the number of publications by generation, considering that the number of publications is proportional to age and conditional on whether the first job of Japanese political scientists was in Japan or abroad. The number of publications in English varied by generation, with younger Japanese political scientists who could find employment abroad tend to publish more in English and tend not to pub-

lish in Japanese. This fact aligned with a qualitative survey conducted among Japanese political scientists, which will be discussed later in this article. For those working in foreign institutions, there was almost no incentive to publish in Japanese, which likely explained why they rarely did so. Conversely, Japanese political scientists who sought employment in Japanese universities tend to write few articles in English. They predominantly published in Japanese, and this tendency did not significantly vary across generations (Figure 1).

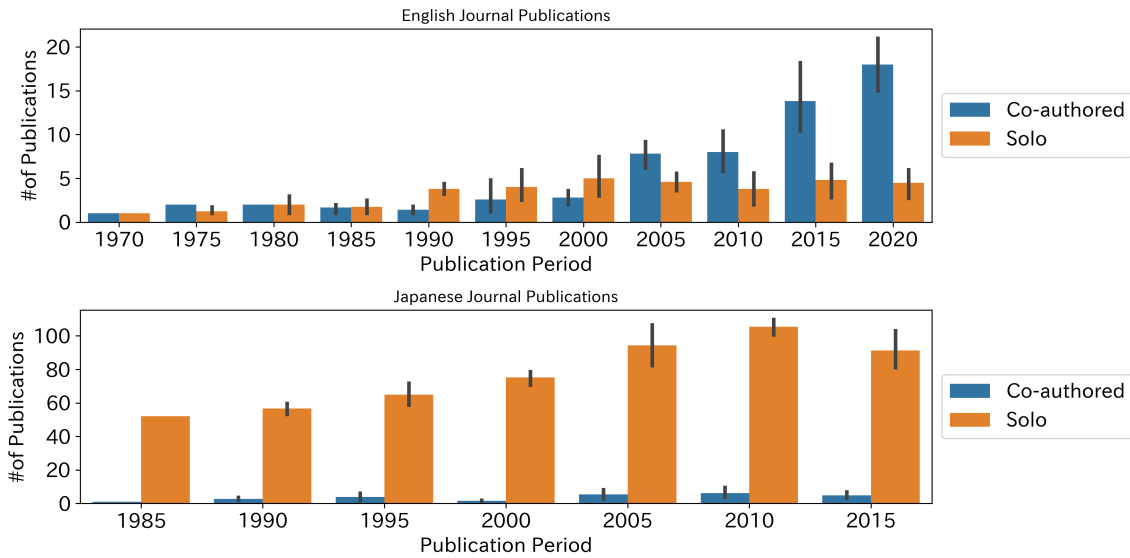
Regarding English publications by Japanese political scientists, the number of articles published through co-authorship had significantly increased since 2005. The increase in co-authorship in English articles was consistent with the fact that the co-authorship network of Japanese political scientists who publish in English had become more complex in recent years in the co-authorship network, as we see later in this article. Additionally, this fact completely matches Barabasi and Wang’s observation that, as a general trend in academia, co-authored publications have increased since the 2000s in various fields of natural sciences [1, p. 104]. In contrast, the number of single-authored English articles by Japanese political scientists had remained relatively high. Articles written in Japanese were overwhelmingly single-authored, and co-authored papers were rare (Figure 2). Therefore, it could be inferred from the data that co-authorship was either not valued in the domestic research community or at least single-authored research was preferred. This result suggests that domestic journals has followed a different trajectory from the international trend of increasing and establishing a culture of co-authorship.

Figure 1: Journal Publications by First Job



How have book publication patterns changed over the past 50 years? The authors calculated whether the percentage of publications in English by Japanese political scientists was above or below the average. And the authors assumed that if above average, his/her Dominant Publication Language (hereafter DPL) was English, and if below average, the DPL was Japanese. In other words, if more than 11 percent of all publications were in En-

Figure 2: Co-Authorship in English and Japanese



English, the DPL was English; otherwise, it was Japanese. Japanese political scientists whose DPL was English used to publish both English and Japanese books, but the number of books published by the younger generation had significantly decreased. Japanese political scientists whose DPL was Japanese seldom publish books in English, and there seems to be a declining trend in the number of books published in Japanese (Figure 4). This trend had remained unchanged even when conditioning the first job of Japanese political scientists as being in Japan or abroad (Figure 3).

What can we say from the fact that the Japanese political scientists have become to publish fewer books in either English or Japanese? It might be that there has been a shift among Japanese political scientists to count the publication of peer-reviewed articles as a more significant achievement than books<sup>5</sup>. This fact suggests that the academic activities of political scientists affiliated with domestic research institutions are also a result of their responses to incentives related to employment, promotion, salary increases, and job changes. In other words, they do not contribute to international journals and only publish monographs in Japanese in domestic journals, whether explicitly or implicitly, which can result from responding to incentives to gain recognition at their institutions and in their academic communities in Japan. As discussed in the interviews, the differences in the publication strategies of Japanese political scientists, both in Japan and abroad, can be explained by differences in incentives.

**Answering the RQ2:** in the initial phase (1971-1980), the scholarly output of Japanese academics was relatively limited, with a mere 11 articles published. Among these, 5 featured co-authorship, incorporating 2 combinations of dyadic international collaborations<sup>6</sup>.

<sup>5</sup>According to Sakai cite[32], the younger the Japanese political scientists, the more they choose peer-reviewed articles over non-refereed articles. Sakai suggests this is because young scholars are more pressured by competition to obtain jobs. Hence, the authors assume this is why younger political scientists prefer to publish peer-reviewed articles than books.

<sup>6</sup>In this context, it is pertinent to elucidate the methodological approach employed for quantifying co-



Figure 3: Book Publications by First Job

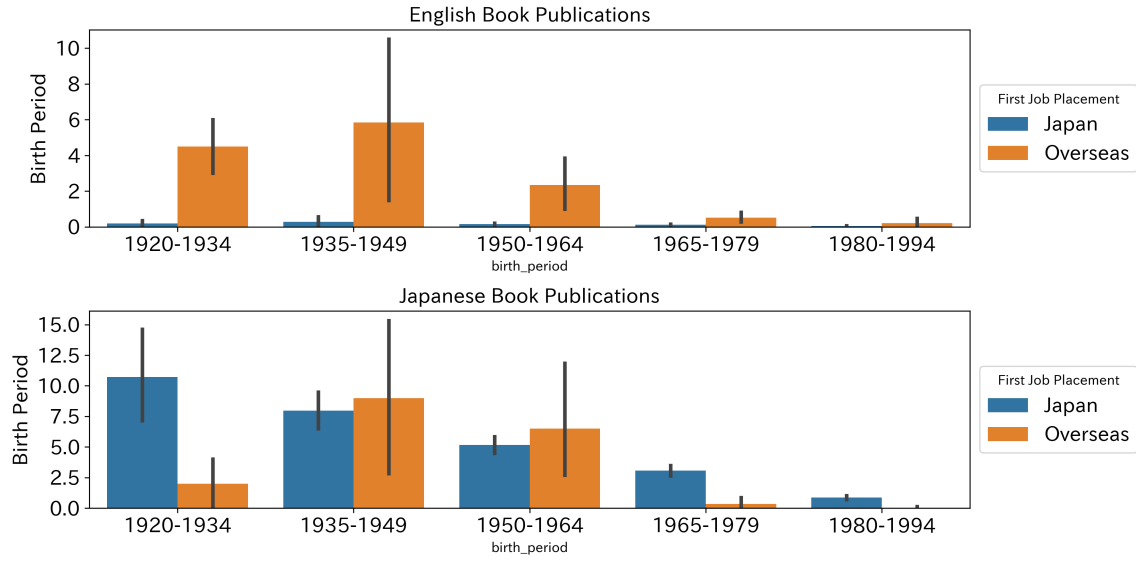
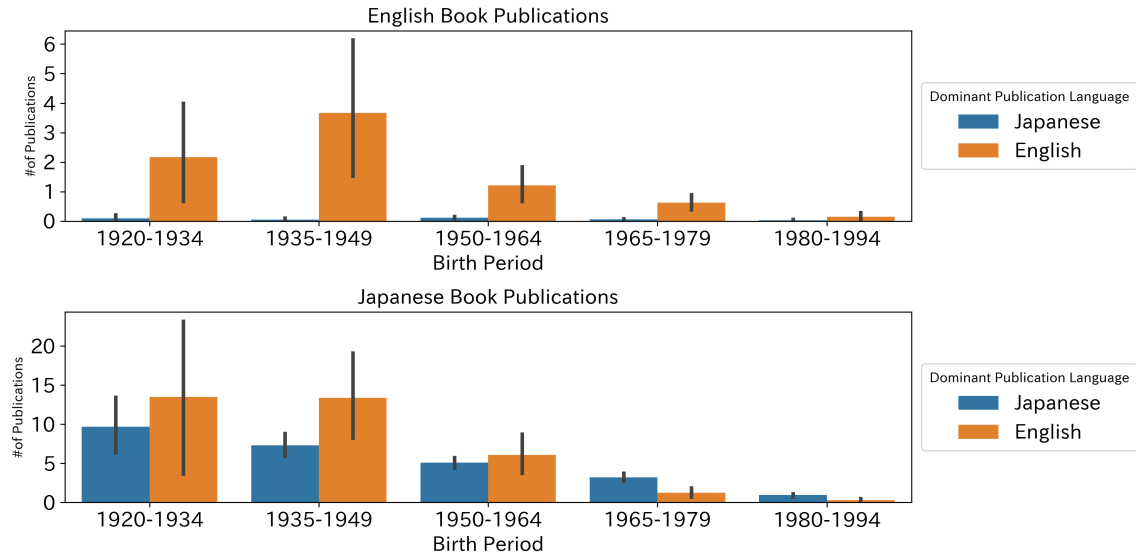


Figure 4: Book Publications by Dominant Publication Language



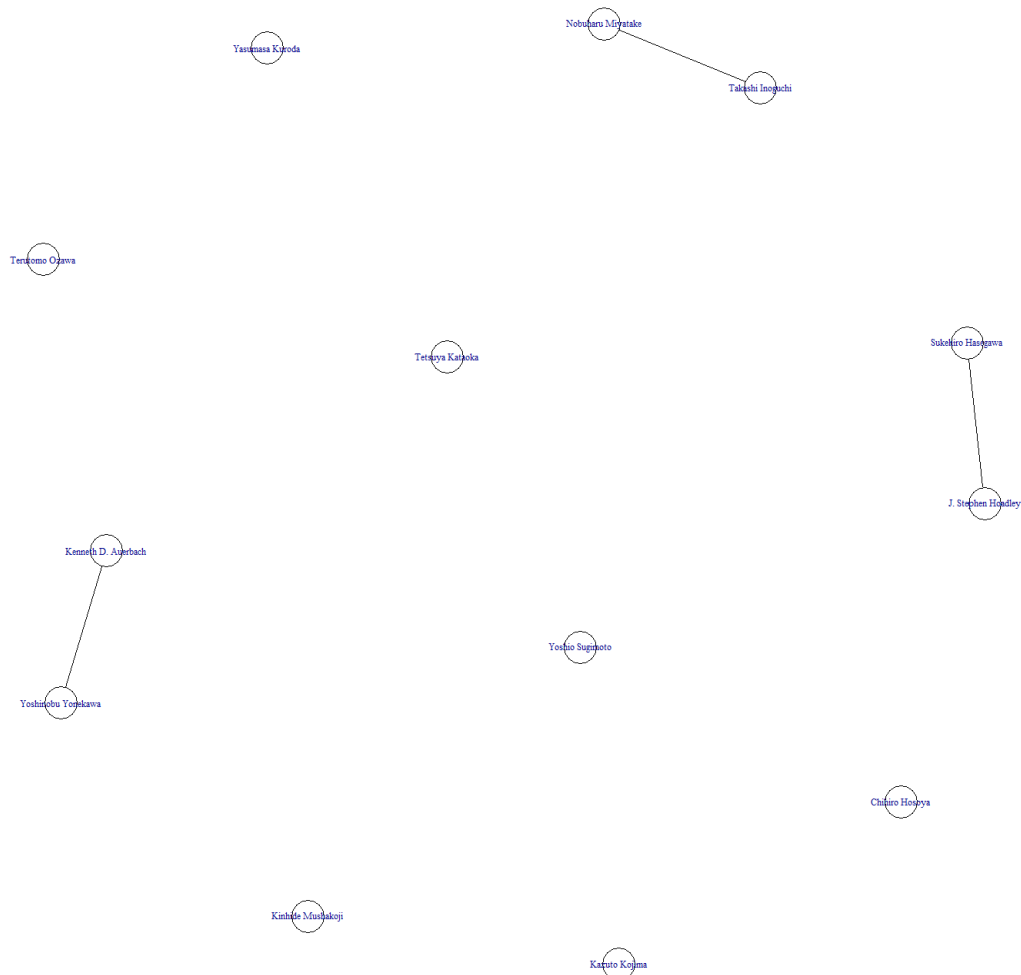
Progressing to the second phase (1981-1990), there was a discernible increase in international publication, totaling 24 articles. Of these, 10 were co-authored, encompassing 14 patterns of dyadic international collaborations. The third phase (1991-2000) witnessed a substantial augmentation in total publications, which soared to 69. 27 articles were co-authored within this publication, featuring 33 dyadic international collaborative patterns. The fourth phase (2001-2010) marked a significant escalation in scholarly production, with the total number of publications escalating to 127. In this period, 73 articles resulted from

authorship relationships. To illustrate, consider a scenario wherein Yamada, Tanaka, and Smith co-author a scholarly article. In such an instance, this particular publication is accounted for as a single instance. However, it encompasses two distinct dyadic international co-authorship relationships: one between Yamada and Smith and another between Tanaka and Smith.

co-authorship, including 62 dyadic international collaborations. Lastly, the fifth and final phase (2011-2023) saw an exponential growth in total publications, amounting to 269. Notably, this period was characterized by a substantial increase in collaborative efforts, with 208 co-authored articles, of which 209 involved dyadic international collaborative patterns.

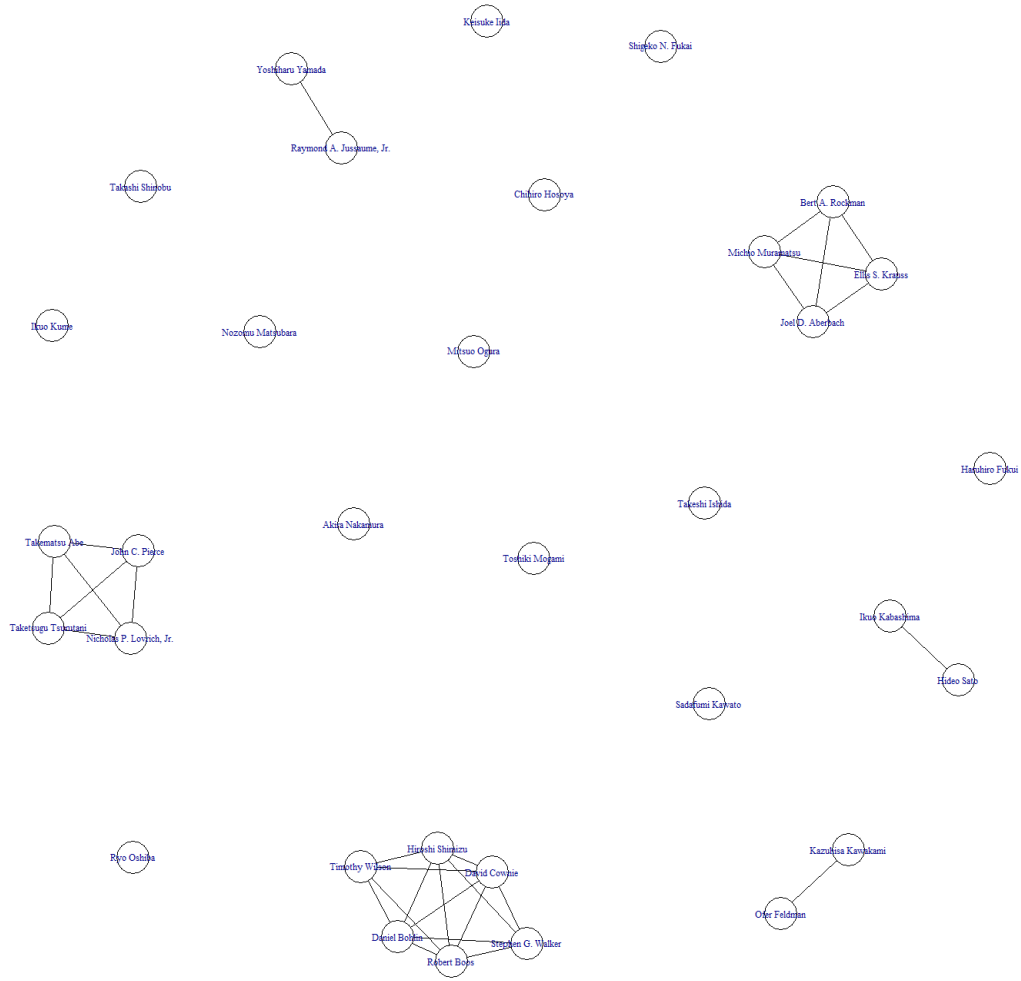
The proliferation of scholarly publications in English had escalated at a rate nearly twofold that of the preceding decade. This surge ostensibly was attributed to the rapid growth of Japanese political scientists. Contrarily, an examination of the membership trends within the Japanese Political Science Association since 1971 revealed a decelerating growth pattern, with the membership expansion ratios dwindling successively to 1.51, 1.33, 1.17, and 1.06 times per decade, respectively. Consequently, it was impossible to correlate the heightened frequency of English publications with a substantial escalation in the populace of Japanese political scientists.

Figure 5: Co-Authorship Network, 1971-1980



The network's temporal dynamics analysis revealed a considerable escalation in the

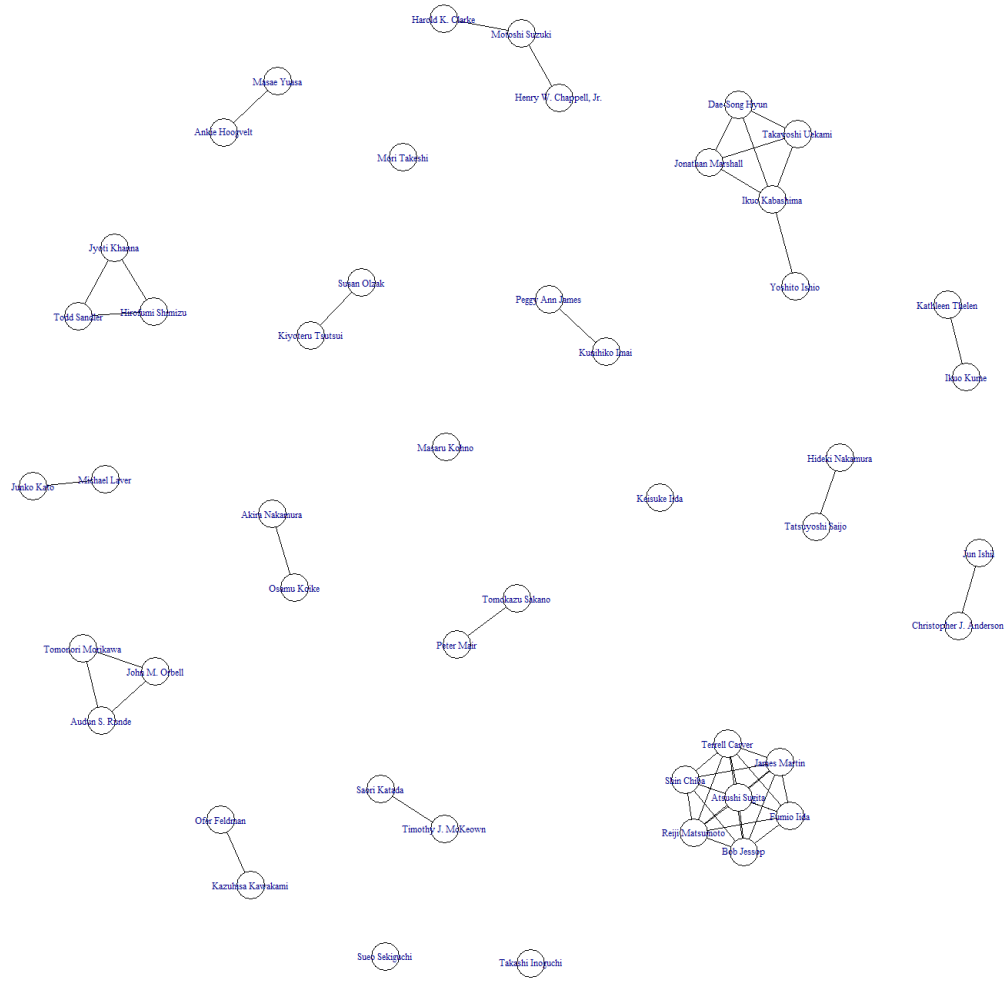
Figure 6: Co-Authorship Network, 1981-1990



number of nodes and edges, signifying a pronounced and rapid expansion of the network's structure over the observed periods (see Figure 1). Simply put, there had been a significant and progressive increase in the volume of scholarly publications and the extent of international collaboration among Japanese academics over the past five decades. The growth in international co-authorship highlighted a trend towards more globalized and interconnected research networks. This discernible trend can be more profoundly comprehended through the visualization of the networks (see Figure 5, Figure 6, Figure 7, Figure 8, and Figure 9 ).

The 1971-1980 and 1981-1990 networks exhibited a tendency to connect nodes of analogous degrees, resulting in a uniform distribution of coefficient of degree variations. However, the temporal fluctuations in degree correlations reflected an evolving pattern of inter-node connections within the network. Notably, the period from 2001 to 2010 marked a decline in degree correlations, indicative of the network's diversification and the flourish-

Figure 7: Co-Authorship Network, 1991-2000



ing of connections between nodes of varying degrees. This trend pointed to an enhanced heterogeneity within the network, characterized by a proliferation of diverse connections. Subsequently, the assimilation of new nodes and groups with distinct attributes into the existing network structure led to a resurgence in connections among nodes of similar degrees, culminating in a heightened degree correlation. Concurrently, the average clustering coefficient had been observed to diminish over time. This trend was likely attributable to the dilution of tight-knit clusters within the network due to its expansion and the integration of new nodes (Figure 1).

The analytical framework employed to dissect the network's architecture was grounded in modularity-based cluster analysis by the Louvain algorithm (Figures 10, 11, 12, 13, 14). In 1971, the network's nascent stage was characterized by a mere trifecta of clusters, each comprising only a duo of nodes. However, a temporal scan over the subsequent half-century revealed a marked cluster proliferation, which escalated to 19, 21, 66, and 91. This

Figure 8: Co-Authorship Network, 2001-2010

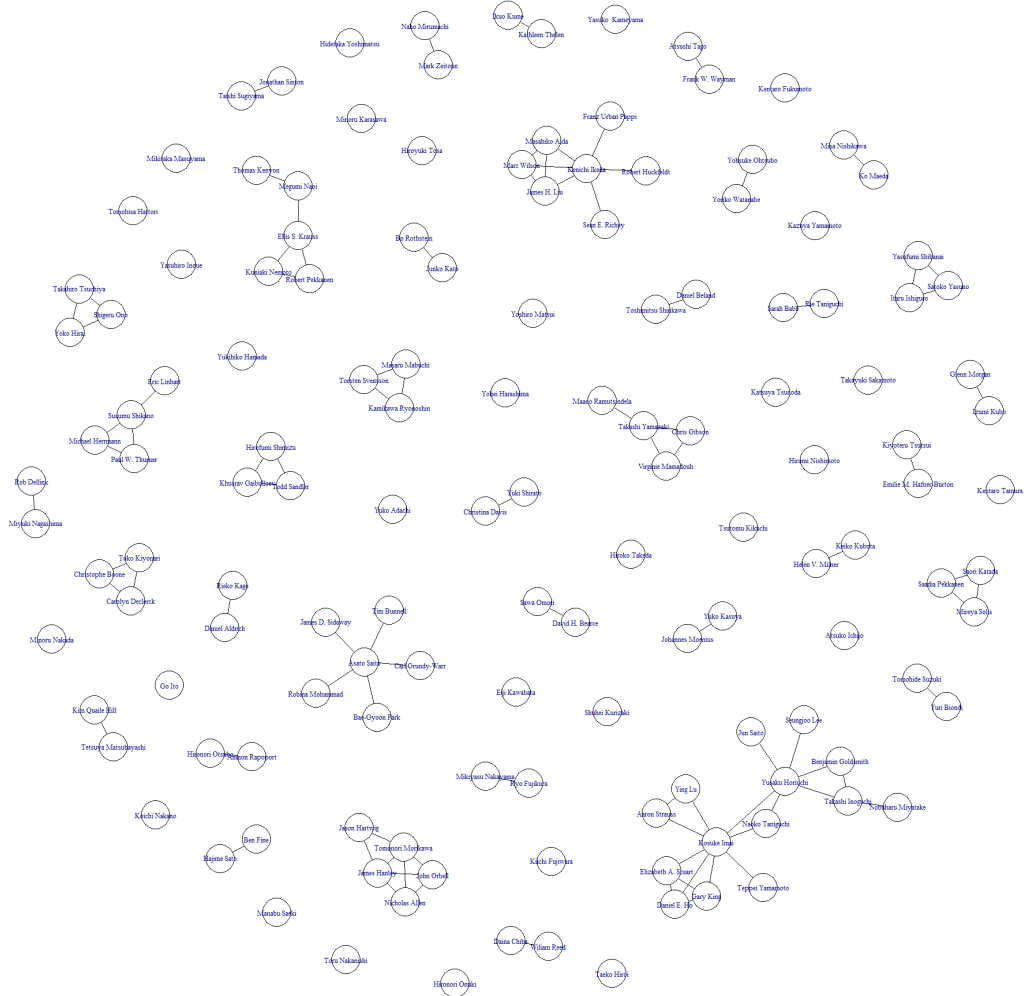
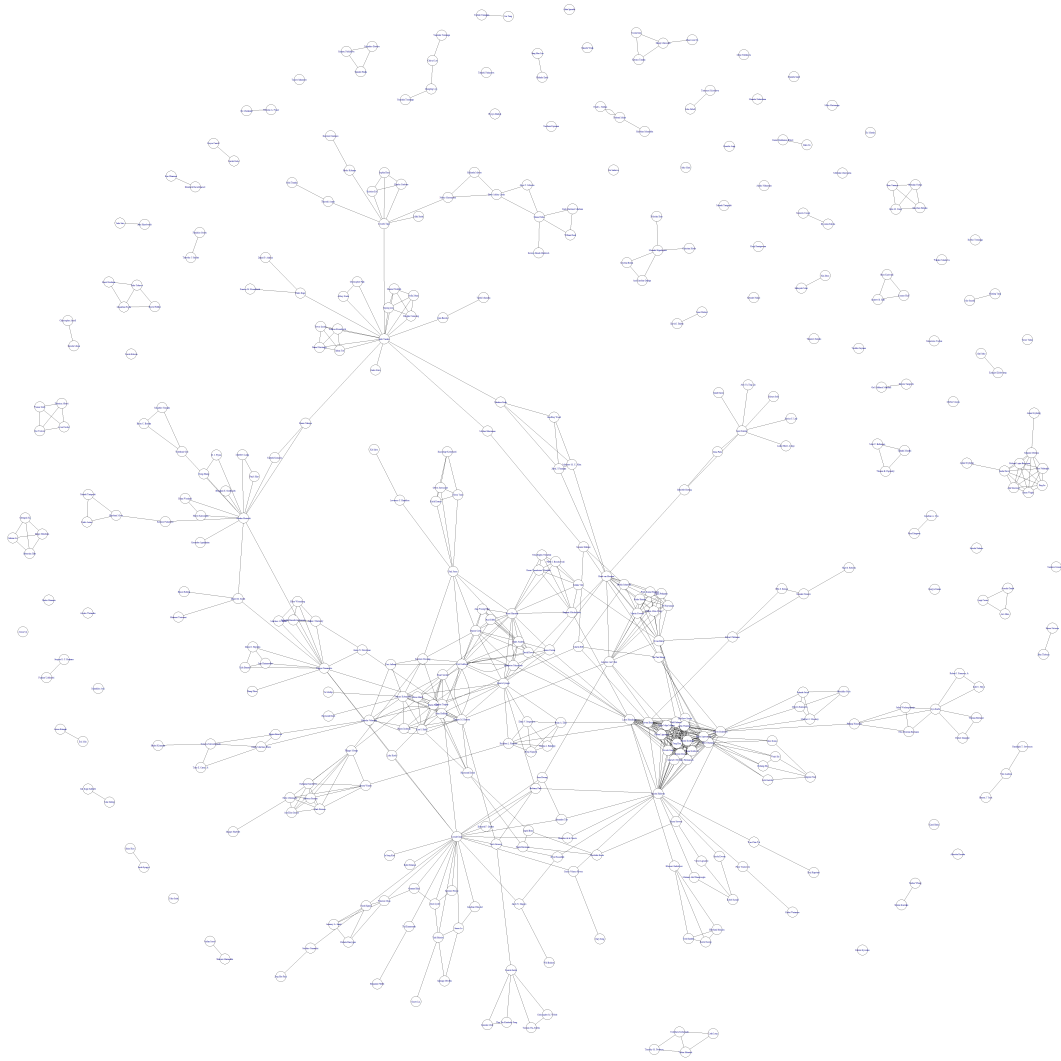


Table 1: Network Values, 1971-2023

Years	Nodes	Edges	Standardized.Degree.Centrality	Standardized.Betweenness.Centrality	Degree.Correlation	Clustering.Coefficient	Coefficient.of.Degree.Variation
1971-1980	13	3	0.461538500	0.0e+00	NA	NA	1.124
1981-1990	33	29	0.054924240	3.0e-05	0.910	0.97	1.046
1991-2000	48	47	0.041666670	3.9e-05	0.970	0.92	0.954
2001-2010	139	95	0.014541560	1.7e-02	0.086	0.84	0.928
2011-2023	383	740	0.005228998	5.8e-04	0.520	0.69	1.215

trajectory unmistakably mirrored the network’s evolution, underscoring its community structure’s pronounced maturation and refinement. In the data spanning 2011-2023, the five most prominent clusters manifested with a significantly enhanced node composition,

Figure 9: Co-Authorship Network, 2011-2023



boasting 42, 40, 31, 22, and 21 nodes, respectively. It indicated the emergence and consolidation of distinct groups, communities, or factions within the network, each coalescing around unique specializations and shared interests, thereby delineating a more sophisticated and specialized network topology.

Figure 10: Clusters: 1971-1980

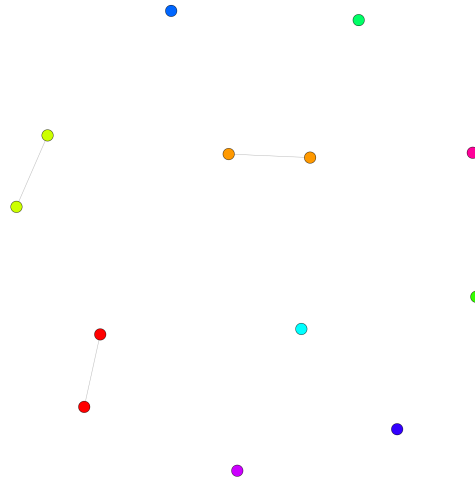
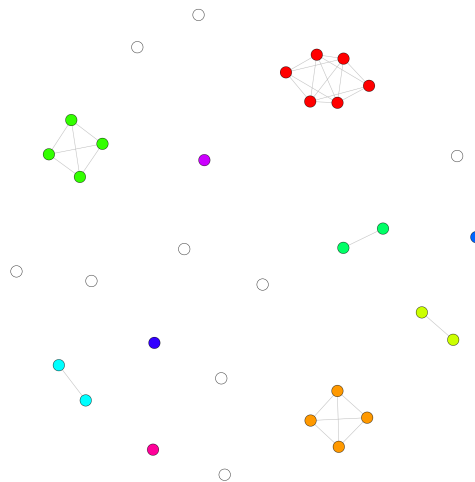


Figure 11: Clusters: 1981-1990



A detailed examination of the betweenness centrality for individual political scientists unveiled nuanced insights. Between 1971 and 1980, the betweenness centrality was registered at zero, suggesting a nascent or underdeveloped state of network interactions among political scientists. In subsequent periods, a discernible increment in centrality values was observed: for instance, Hiroshi Shimizu exhibited a centrality of 0.00025 during 1981-1990, Ikuo Kabashima 0.0014 in 1991-2000, and Motishi Suzuki 0.0013 from 1985 to 2000. The period 2001-2010 witnessed further increases, with Kosuke Imai registering a centrality of 0.0028, Yusaku Horiuchi 0.0024, and both Kenichi Ikeda and Takashi Inoguchi marking 0.00063, while Asato Saito stood at 0.00053. The most recent epoch, 2011-2023, saw Seiki Tanaka and Kosuke Imai achieving a centrality of 0.014 and Yusaku Horiuchi at 0.0095.

Figure 12: Clusters: 1991-2000

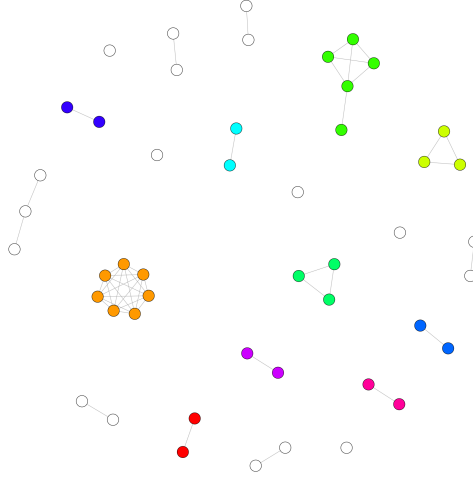
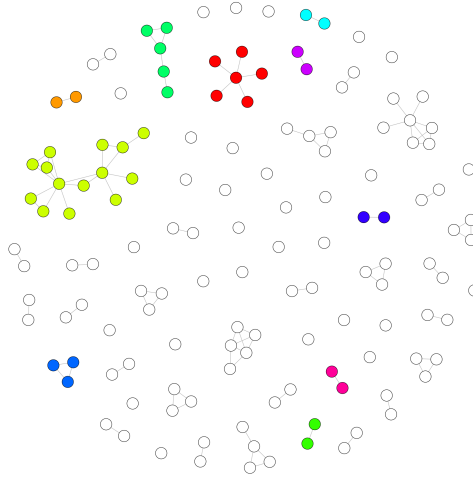


Figure 13: Clusters: 2001-2010



The emergence of nodes with elevated mediating centrality over time suggests that these political scientists had assumed pivotal roles in facilitating the flow of information and resources within the network, effectively acting as critical conduits that bridge disparate communities. These political scientists exhibited a pronounced propensity for accruing substantial citation counts, alongside notably elevated h-index and i10-index values, indicative of their significant scholarly impact and sustained contribution to the field (see Table 2). As Barabasi and Wang suggested [1], these authors might be more likely to have more collaborators than others by preferential attachment.

**Answering the RQ3:** the data for Japanese articles were taken from abstracts of Nenpo-Seijigaku, Leviathan, and Senkyo-Kenkyu (now named "group A"). On the other hand,



Figure 14: Clusters: 2011-2023

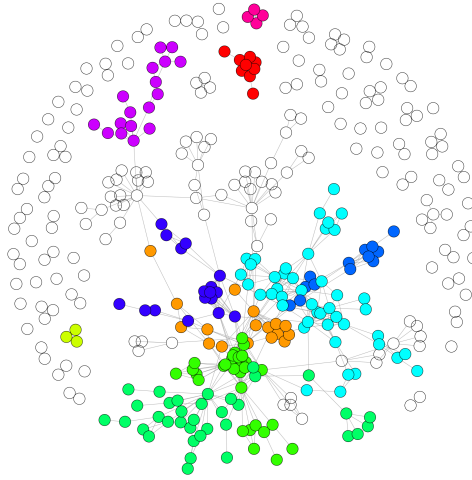


Table 2: Citations and Indexes

Names	Total.Citations	h.index	i10.index
Yusaku Horiuchi	3205	30	45
Ken'ichi Ikeda	15948	59	284
Kosuke Imai	39907	64	108
Takashi Inoguchi	6168	40	131
Motoshi Suzuki	490	9	9
Seiki Tanaka	412	11	11

the data for English publications were abstracts downloaded from the American Political Science Review, American Journal of Political Science, and Journal of Politics (named "group B"). For international relations, we extracted data from abstracts of Kokusai-Seiji (now named "group C"). Abstracts of English publications on international relations were extracted from International Organization, International Studies Quarterly, Journal of Conflict Resolution, and Journal of Peace Research (now named "group D"). In order to identify the right number of topics for extraction through LDA, we examined specific model comparison criteria from the R package ldatuning. These criteria were: "CaoJuan2009," "Arun2010," and "Deveaud2014." The "FindTopicNumer" command suggested optimal  $k=49$  for group A,  $k=14$  for group B,  $K=31$  for group C, and  $k=15$  for group D.

Subsequently, the researchers undertook a meticulous computation of the mean topic estimates across the corpus of documents, culminating in the identification and enumeration of the quintet of predominant topics for each designated group A, B, C, and D. The results are shown in the Figure 15. Next, the comprehension of each topic's essence was facilitated by analyzing words ranked at the upper echelons (i.e., top 10 words). By syn-

ergizing significant topics with their corresponding salient words, the authors could infer the core substance of the predominant discourse within the documents.

Figure 15: Mean Estimate of Topic Probability: Groups A, B, C, D

Group.A	Group.B	Group.C	Group.D
3(0.03910696)	13(0.124920225)	30(0.043821226)	11(0.1110443)
6(0.035523764)	6(0.1071031313)	26(0.043400814)	14(0.07407339)
19(0.03168803)	3(0.107100398)	23(0.042961188)	7(0.074071580)
9(0.026478434)	9(0.08927988)	27(0.040691721)	8(0.074069111)
10(0.026471)	10(0.071433846)	8(0.040425296)	1(0.07406818)
41(0.025738493)	2(0.071429381)	29(0.038849019)	3(0.074066207)
46(0.025621991)	11(0.071427921)	11(0.038629092)	15(0.07406514)
17(0.025609353)	1(0.071424408)	28(0.038224213)	10(0.07405802)
36(0.025364313)	4(0.053596637)	19(0.037177876)	6(0.0740551369)
21(0.02488966)	12(0.053587538)	21(0.036245919)	9(0.0555770293)

In an analysis contrasting group A with group B (Figures 16 and 17), it emerged that group A predominantly focused on aspects of the Japanese political system, encompassing voter behavior and policy development. Despite addressing similar empirical subjects within the political science domain, group B paralleled group A in its exploration of empirical phenomena, such as electoral processes and policy formulation. However, there was a pronounced prevalence of terminology associated with quantitative analysis in group B's discourse, including references to "data," "measurement," "causal," "mechanism," "experiment," "survey," and "statistical." We observed that Japanese political scientists contributing to internationally renowned journals, such as APSR, JoP, and AJPS, display a marked predilection for experimental methodology and causal inference, which contrast distinctly with those of their counterparts publishing articles within Japan. Upon generating stacked bar charts (Figure 18) that delineate the temporal progression of various themes, it was evident that empirical subjects about Japanese politics manifest with notable regularity within Group A. Conversely, in Group B, there was a discernible increase in the prevalence of themes related to causal inference and experimental methodologies, as indicated in Topics 3 and 6, survey-based research (Topic 10), and data-centric discussions (Topic 13) in recent times. Notably, empirical themes encompassing elections and democratic processes, highlighted in Topic 11, appeared to have experienced a decline in scholarly attention in the recent period.

The comparison of group C and group D yielded insightful observations into the thematic orientations of Japanese political scientists specializing in international relations. Researchers within group C exhibited a pronounced inclination toward regional studies including Japan, the United States, Vietnam, Russia, Korea, and China. This regional emphasis was further accentuated by their engagement with topics such as nuclear weaponry and deterrence strategies (Figure 19). Conversely, group D, which comprised Japanese

Figure 16: Average Topic Estimate and the Top 10 words: group A

Topic:3	Topic:6	Topic:19	Topic:9	Topic:10	Topic:41	Topic:46	Topic:17	Topic:36	Topic:21
election	system	local	groups	media	house	model	political	party	japan
party	electoral	government	interest	news	turnout	governors	study	new	political
ldp	party	governments	political	social	elections	political	japan	political	policy
candidate	parties	japan	japan	tv	parties	districts	opinion	legislators	korea
house	systems	policy	organizations	deliberation	voter	japanese	policy	parties	reform
voters	representation	central	party	cabinet	lower	changes	policies	system	paper
general	proportional	japanese	group	political	japanese	ratio	social	article	public
dj	new	decentralization	change	study	rate	paper	public	electoral	article
votes	election	medical	survey	model	upper	two	ideological	paper	countries
voting	coalition	fiscal	one	party	information	policy	japanese	reform	ldp

Figure 17: Average Topic Estimate and the Top 10 words: group B

Topic:13	Topic:6	Topic:3	Topic:9	Topic:10	Topic:2	Topic:11	Topic:1	Topic:4	Topic:12
data	democratic	causal	electoral	survey	cooperative	economic	observers	violence	advantage
media	political	policy	support	error	dispositions	voters	national	election	electoral
partisan	article	war	effects	political	show	election	indirect	effects	allocation
preferences	framework	preferences	democratic	democratic	southerners	experiments	experiment	causal	party
regimes	conditions	data	states	disagreement	per	house	religious	models	systems
central	causal	statistical	election	opinions	electoral	elections	vote	area	powers
dominant-party	endogeneity	proposed	coalition	citizens	equalization	survey	candidates	political	portfolio
article	foreign	experiments	crises	measurement	capita	across	irregularities	unit	parties
find	party	methods	attitudes	differential	number	rationality	evidence	fixed	within
neighbors	effects	mechanisms	can	different	results	macroeconomic	effect	using	portfolios

political scientists publishing in international journals, demonstrates a broader thematic scope. Their scholarly contributions were characterized by exploring more universal subjects, as indicated by references to audience costs, sanctions, violence, interdependence, and peacekeeping (Figure 20). This divergence in focus suggested a greater inclination within group D towards the investigation of overarching global phenomena, as opposed to the regional specificities that preoccupy their counterparts in group C. The stacked bar charts of the longitudinal trends in topic prevalence within Groups C and D revealed a distinctive pattern (Figure 21). Specifically, in Group C, there had been a notable uptick in the frequency of themes focusing on Japan's security / war dynamics (Topic 27) and gender issues within the context of international politics (Topic 29). This trend contrasted sharply with the diminished occurrence of topics related to NATO and Russia (Topic 11), the Cold War (Topic 26), and the Vietnam War (Topic 28), which had seen a relative decline in recent years. Meanwhile, in Group D, there was a discernible decrease in the treatment of topics concerning Japan (Topic 7) and the concept of interdependence (Topic 3). Conversely, empirical subjects such as analyzing audience costs (Topic 8) and peacebuilding (Topic 9) were increasingly prominent.

**Qualitative analysis:** lastly, the authors executed qualitative interviews engaging the pertinent Japanese political scientists. Refer to Appendix 2 for a comprehensive enumeration of the respondents (n=36). It is essential to note that individual comments were anonymized to maintain the confidentiality of the participants.

Japanese political scientists who had secured employment internationally frequently attributed it to superior research environments. Additionally, in certain instances, opportunities overseas aligned more closely with their professional qualifications (e.g., higher payment and fewer chores), or personal circumstances, such as spousal commitments or other factors, necessitated relocation outside Japan. Japanese researchers who had acquired doctoral degrees from foreign universities, ventured into international job markets, secured opportunities at universities abroad, or undergone tenure reviews concurred writ-

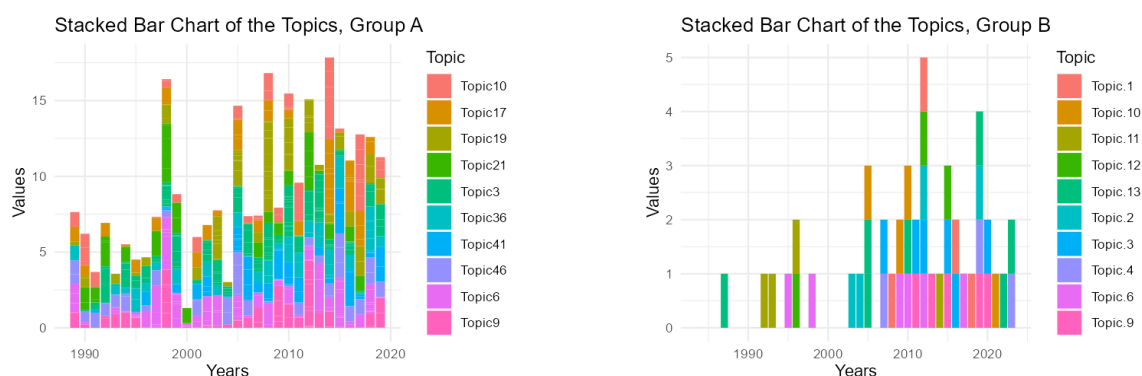


Figure 18: Stacked Bar Chart of the Topics, Group A and Group B

Figure 19: Average Topic Estimate and the Top 10 words: group C

Topic 30	Topic 26	Topic 23	Topic 27	Topic 8	Topic 29	Topic 11	Topic 28	Topic 19	Topic 21
international	s	party	us	japanese	international	war	china	security	nuclear
ngos	u	political	japan	japan	political	russia	political	regional	policy
development	war	soviet	s	s	women	british	chinese	international	weapons
society	united	regime	japanese	defense	system	government	vietnam	states	united
global	states	iraq	military	government	society	soviet	korea	framework	war
relations	world	authoritarian	u	military	social	nato	south	multilateralism	soviet
system	security	parties	asia	war	politics	states	relations	development	deterrence
civil	international	countries	relations	japan's	new	europa	policy	asean	states
order	cold	democratic	government	u	gender	policy	economic	process	disarmament
actors	policy	communist	war	army	paper	countries	military	organizations	defense

Figure 20: Average Topic Estimate and the Top 10 words: group D

Topic 11	Topic 14	Topic 7	Topic 8	Topic 1	Topic 3	Topic 15	Topic 10	Topic 6	Topic 9
undp	threat	power	audience	ethnic	protests	community	trade	cooperative	peacebuilding
states	cooperation	political	costs	countries	interdependence	new	states	incentives	powers
conflict	international	labor	sanctions	global	relative	one	domestic	external	major
information	security	japan	leaders	results	football	development	rights	behavior	protests
un	oda	system	foreign	leadership	games	subject	who	trust	policies
contributions	behavior	role	firms	food	gains	volunteer	electoral	article	can
domestic	japanese	tax	treaty	groups	cooperation	argue	article	countries	global
trials	can	international	likely	violence	contribution	time	international	bloc	support
citizens	policy	japan's	state	peripheral	can	democratic	political	supporters	conflict
bargaining	study	since	relations	support	close	relationship	world	value	diplomatic

ing in English was an imperative choice. Institutions abroad appeared to predominantly recognize and reward remarkable articles and books published in English. For instance, the Research Excellence Framework (REF) has been a pivotal performance evaluation system for researchers in the United Kingdom. Responses indicated that continuous contributions in English were essential as they significantly influence the researchers' professional acknowledgment within the REF system. In addition, some scholars indicated that the acquisition of academic grants was potentially hindered if academic publications written in English were not published in a journal of reputable standing.

Why do individuals who had earned their doctoral degrees from Japanese universities and subsequently secured employment in these academic institutions selected to write and publish in English? The rationale extended beyond mere circumstantial necessities; it was fueled by a fervent passion for scientific exploration and a dedication to enriching the body of social science literature. The scholars articulated that global academic communi-

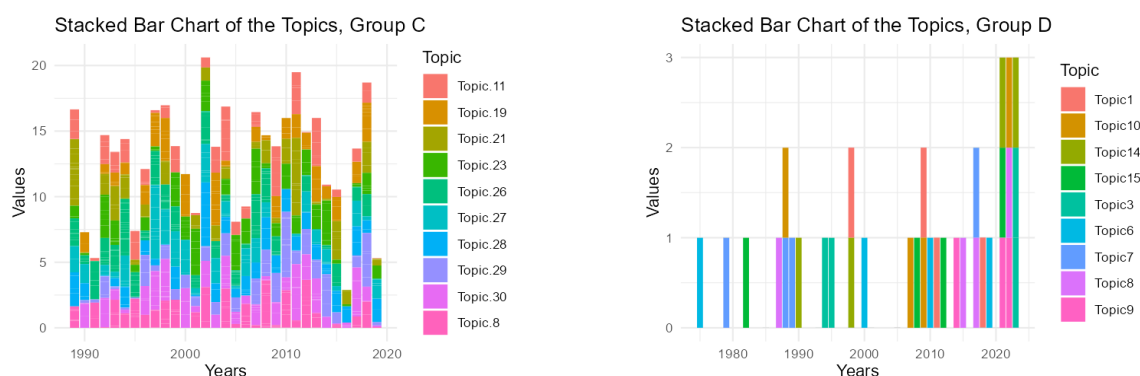


Figure 21: Stacked Bar Chart of the Topics, Group C and Group D

ties could facilitate broader audiences and foster more profound discussions on research subjects. There was a discernable eagerness to demonstrate that doctoral degrees conferred by Japanese institutions were universally valid and respected. Nevertheless, Japanese research institutions typically do not bestow rewards for publications articulated in English with few exceptions, and financial incentives do not ostensibly serve as a paramount motivation. The influential impact of academic advisors, senior researchers, and collaborative authors who encouraged the adoption of English for academic writing also played a significant role in language preference. Furthermore, it was observed that departments of Japanese universities with a closer affinity to economics, or those in which a significant proportion of colleagues were economists, appeared to exhibit a heightened motivation for composing scholarly works in English.

Individuals persistently engaging in English academic writing displayed a diminished inclination towards opting for Japanese as a medium of written communication. Some scholars emphasized that the pervasive international acclaim of their English publications diminished the necessity for Japanese written contributions. Certain researchers expressed apprehensions regarding writing in Japanese, attributing this to their limited experience and proficiency. Japanese was predominantly utilized when the objective was to disseminate information or cultivate knowledge amongst the broader populace within Japan, underscoring a lack of perceived value in composing academic articles or books in the Japanese language.

Despite these inclinations, numerous respondents continued encountering challenges in composing or presenting in English. It is essential to acknowledge that even eminent scholars holding tenured positions at prestigious universities in the United States and having extensive citation counts and elevated h-indexes reported challenges in composing academic writings in English: only a limited number reported an absence of difficulties. The majority expressed encountering obstacles in navigating research endeavors conducted in English, often needing help crafting engaging sentences and being limited to mundane expressions. Some scholars articulated their perplexity regarding the employment of precisely definite articles, as well as the application of various tenses and the rules governing pluralization in the English language. They experienced diminished writing

and reading speeds compared to their native English-speaking counterparts. Additionally, some revealed feeling disadvantaged due to accent-related comprehensibility issues and challenges in casual English communication. For instance, a respondent articulated a necessity to demonstrate exceptional proficiency in English writing, surpassing native English-speaking colleagues, to attain a commensurate level of professional regard.

Also, there appeared to be a substantial divergence between the sub-disciplines of political science, as evidenced by observations noting the particularly stringent requirements for English language proficiency in political theory. Conversely, a researcher specializing in formal theory responded that writing in English was "relatively easier, attributing this to the extensive use of mathematical formulas in my field and the lack of reliance on a specific regional context." The subsequent remark by a Japanese political scientist was notably profound: despite acknowledging his limited proficiency in English, this scholar does not perceive this linguistic barrier as an impediment. He analogized his experience by stating, 'Athletes do not complain about gravity,' implying that challenges, much like the natural force of gravity for athletes, were inherent and not grounds for grievance in academic pursuits.

Lastly, many Japanese political scientists diligently strived to align with prevailing international academic trends. Many actively engaged in academic pursuits such as regularly reviewing academic journals, participating in international conferences, and utilizing digital platforms for academic advancements, demonstrating a robust commitment to cultivating international academic networks and collaborations.

## **5 Conclusion and Discussion**

In considering the research questions (RQs), several observations emerged. As for RQ1, over the past 50 years, publication patterns among Japanese political scientists had shifted significantly. Younger scientists working abroad tended to publish more in English and less in Japanese, aligning with a global trend of increased English publications and co-authorship since the 2000s. In contrast, those working in Japan primarily published in Japanese and had not significantly adopted co-authorship. Book publication patterns also changed; Japanese political scientists publishing predominantly in English had decreased their book publications, while those publishing mainly in Japanese showed a declining trend in English and Japanese book publications. This fact reflected a broader shift towards prioritizing peer-reviewed articles over books, influenced by employment and academic pressures in Japan.

Regarding RQ2, the number of articles published in international journals had experienced a marked and rapid escalation, with the prevalence of international co-authorship also witnessing a substantial and noteworthy augmentation. The landscape of co-authorship networks had undergone profound and noteworthy transformations over the past half-century. Contemporary networks were characterized by network structures that were highly developed, complex, and contain many clusters, and the prominent presence of cer-

tain political scientists exhibited exceptionally high betweenness centrality. Those political scientists played a pivotal role in propagating and distributing resources and intellectual concepts.

About RQ3: a textual analysis of summaries within political science and international relations journals unveiled variances in the interests and methodologies between researchers publishing in international versus domestic Japanese journals. The disparity in themes and methodologies between Japanese domestic journals and their international counterparts, even when authored by the same Japanese political scientists, indicated a divergence between the two scholarly communities. Research indicated that scientists' selection of research topics was impacted by social identities, including gender and race [69]. Similarly, the extent of internationalization among Japanese politicians might also exert a comparable influence on their choices of topics and methods.

From qualitative analysis, those holding doctoral degrees from foreign institutions and working overseas were driven by extrinsic motivation. They accentuated the indispensability of English for academic writing and professional advancement. They were substantially influenced by international recognition, professional evaluation frameworks such as the United Kingdom's Research Excellence Framework (REF), and broader engagement opportunities within global academic communities. On the contrary, those who obtained doctoral degrees from Japanese universities, worked in Japan, and published English articles were driven by intrinsic motivation. The motivations transcended mere professional or institutional mandates, such as a profound dedication to scientific exploration and a desire to contribute substantially to social science literature, which was instrumental in cultivating a preference for English. Despite the apparent inclination towards English, challenges such as linguistic proficiency, expression versatility, and comprehension due to accents were prevalent. Additionally, the influence of academic mentors and an aspiration to align with prevailing international academic trends significantly contributed to the preference for English, even as it led to a diminished proclivity for utilizing Japanese in academic writing.

An analytical juxtaposition of scholarly articles disseminated in international and national journals revealed a marked bifurcation of scholarly pursuits. The process of internationalization within Japanese political science had advanced; however, this progression might have accentuated the dichotomy among Japanese political scientists. Even among the same Japanese political scientists, the academic interests, motivations, and methodologies of those who publish in Japanese and those who publish in English seemed to differ significantly. Does the current dichotomy between scholars who publish in English and those who publish in their native languages represent a transient stage in the process of internationalization? Specifically, will this bilingual academic landscape ultimately consolidate into a monolingual one, resulting in a convergence of scholarly interests, motivations, and methodologies? Alternatively, will this bifurcation persist, fostering distinct and stable research trajectories? The situation parallels the ongoing debate in political science between quantitative and qualitative methodologies [70]. A comparative investigation will

be imperative to ascertain if analogous trends manifest in other non-anglophone nations, especially other Asian countries such as China, South Korea, or Taiwan, and academic disciplines.

## **A Appendix 1: The list of international and domestic journals**

The complete list of the 50 international journals are as follows: International Organization, American Journal of Political Science, Political Communication, British Journal of Political Science, Policy Studies Journal, Annual Review of Political Science, American Political Science Review, Environmental Politics, Journal of Democracy, Governance, West European Politics, Journal of European Public Policy, Journal of Public Administration Research and Theory, Global Environmental Politics, World Politics, Socio-Economic Review, Public Opinion Quarterly, Comparative Political Studies, Political Psychology, New Political Economy, European Journal of Political Research, Political Geography, International Journal of Press-Politics, Review of International Political Economy, Regulation and Governance, Geopolitics, JCMS-Journal of Common Market Studies, Territory Politics Governance, Party Politics, European Union Politics, Public Administration, Government and Opposition, Political Analysis, Political Behavior, Journal of Peace Research, Journal of Politics, Journal of Conflict Resolution, South European Society and Politics, Perspectives on Politics, International Environmental Agreements-Politics Law and Economics, Politics and Society, British Journal of Politics and International Relations, Post-Soviet Affairs, African Affairs, International Studies Quarterly, Policy and Politics, Social Movement Studies, Policy and Society, New Left Review, International Political Sociology.

The complete list of the domestic journals are: Nenpo-Seijigaku (Japanese Political Science Association); Kokusai-Seiji (The Japan Association of International Relations); Senkyo-Kenkyu (Japanese Association of Electoral Studies); Leviathan; Nihon-Hikaku-Seijigakkai-Nenpo (Japanese Association of Comparative Politics); Seijisiso-Kenkyu (The Japanese Conference for the Study of Political Thought). Leviathan ceased publication in 2018, so the data on the journal ends in 2018.

## **B Appendix 2: The questionnaire wordings and the list of the respondents**

(The questionnaire wordings were originally in Japanese)

1: When you published your first article in English, what made you to choose to write and publish English?

2: What were your reasons for deciding whether to get work for a Japanese research institute or an overseas research institute?

3: Why did you write and publish in English? Please provide any specific reasons.

4: If your institution has explicitly or implicitly encouraged you to write and publish in English, please tell us about it. (This can be in the form of performance reviews, direct



encouragement, etc.)

5: What is your language preference for writing in future?

6: When writing in English, have you felt any difficulty or inconvenience in working in English? If possible, we would appreciate it if you could tell us what specific difficulties or inconveniences you are experiencing.

7: In addition to writing, have you felt any hindrance or inconvenience working in English in any other academic-related activities (e.g., reading, presenting, giving lectures, meeting with co-authors, applying to conferences, chatting with other scholars, posting on social media or blogs, etc.)? If possible, we would appreciate it if you could tell us what specific obstacles or inconveniences you have experienced.

8: Do you consciously adopt different themes and methods when writing papers or books in English than when writing in Japanese?

9: Do you make any conscious effort to keep up with overseas research trends (e.g., to go to overseas academic conferences, attend online seminars, check academic journals regularly, follow overseas academic journals and scholars on social media, etc.)?

**The list of respondents:** Kenya Amano, Susumu Annaka, Masahiko Asano, Yuki Atsusaka, Daina Chiba, Naofumi Fujimura, Kentaro Fukumoto, Masataka Harada, Masaru Kono, Kyosuke Kikuta, Hirokazu Kikuchi, Daiki Kishishita, Tetsuro Kobayashi, Yoshiharu Kobayashi, Azusa Katagiri, Akira Igarashi, Kosuke Imai, Airo Hino, Kei Hiruta, Yusaku Horiuchi, Ko Maeda, Tetsuya Matsubayashi, Hirofumi Miwa, Naho Mirumachi, Isamu Okada, Nobutaka Otohe, Kentaro Sakuwa, Yu Sasaki, Yuki Shiraito, Jun Sudduth, Seiki Tanaka, Atsushi Tago, Kohei Suzuki, Michio Umeda, Teppei Yamamoto, Yuki Yanai

## References

- [1] Wang, D. & Barabási, A.-L. *The Science of Science* (Cambridge University Press, 2021).
- [2] Fortunato, S. *et al.* "Science of Science. *Science* **359**, eaao0185 (2018).
- [3] Liu, L., Dehmamy, N., Chown, J., Giles, C. L. & Wang, D. "Understanding the Onset of Hot Streaks across Artistic, Cultural, and Scientific Careers". *Nature Communications* **12** (2021).
- [4] Sinatra, R., Wang, D., Deville, P., Song, C. & Barabasi, A.-L. "Quantifying the Evolution of Individual Scientific Impact". *Science* **354** (2016).
- [5] Saraceno, J. "Disparities in a Flagship Political Science Journal? Analyzing Publication Patterns in the Journal of Politics, 1939–2019". *The Journal of Politics* **82**, e45–e55 (2020).
- [6] Teele, D. L. & Thelen, K. "Gender in the Journals: Publication Patterns in Political Science". *PS: Political Science and Politics* **50**, 433–447 (2017).
- [7] Johnson, C. "Hard Heads and Soft Hearts: The Gendering of Australian Political Science". *Australian Feminist Studies* **29**, 121–136 (2014).
- [8] Briggs, J. & Harrison, L. "The Status of Women in UK Political Science". *European Political Science* **14**, 105–115 (2015).
- [9] Williams, H., Bates, S. & Jenkins, L. "Gender and Journal Authorship: An Assessment of Articles Published by Women in Three Top British Political Science and International Relations Journals". *European Political Science* **14**, 116–130 (2015).
- [10] Savigny, H. "Women, Know Your Limits: Cultural Sexism in Academia". *Gender and Education* **26**, 794–809 (2014).
- [11] Briscoe-Palmer, S. & Mattocks, K. "Career Development and Progression of Early Career Academics in Political Science: A Gendered Perspective". *Political Studies Review* **19**, 42–57 (2021).
- [12] Abels, G. & Woods, D. "The Status of Women in German Political Science". *European Political Science* **14**, 87–95 (2015).
- [13] Ballen, C., Lee, D., Lakner, L. & Cotner, S. "Politics a 'Chilly' Environment for Undergraduate Women in Norway". *PS: Political Science Politics* **51**, 653–658 (2018).
- [14] Bates, S. & Savigny, H. "Introduction: Women in European Political Science". *European Political Science* **14**, 75–78 (2015).
- [15] Bates, S. & Savigny, H. "Conclusion: Women in European Political Science". *European Political Science* **14**, 75–78 (2015).

- [16] Elizondo, A. "The Status of Women in Spanish Political Science". *European Political Science* **14**, 96–104 (2015).
- [17] Kantola, J. "Political Science as a Gendered Discipline in Finland". *European Political Science* **14**, 79–86.
- [18] Rocha Carpiuc, C. "Women and Diversity in Latin American Political Science". *European Political Science* **15**, 457–475 (2016).
- [19] Sawyer, M. & Curtin, J. "Organising for a more Diverse Political Science: Australia and New Zealand". *European Political Science* **15**, 441–456 (2016).
- [20] Hill, K. Q. & Hurley, P. A. "New evidence on the Relative Scholarly Productivity of Male versus Female Political Scientists". *PS: Political Science and Politics* **55**, 788–792 (2022).
- [21] Simien, E. & Wallace, S. "The Impacts of Exclusion and Disproportionate Service on Women and Faculty of Color in Political Science". *PS: Political Science Politics* **56**, 291–294 (2022).
- [22] Michelson, M. & Lavariega, M. J. "Elusive Inclusion: Persistent Challenges Facing Women of Color in Political Science". *PS: Political Science Politics* **54**, 152–157 (2021).
- [23] Metz, T. & Jäckle, S. "Koautorenschaften in Der Deutschsprachigen Politikwissenschaft, Eine Netzwerkanalyse Auf Basis von Fachzeitschriftenartikeln". *Politische Vierteljahresschriif* **54**, 256–291 (2017).
- [24] Metz, T. & Jäckle, S. "Patterns of Publishing in Political Science Journals: An Overview of Our Profession Using Bibliographic Data and a Co-authorship Network". *PS: political science politics* **50**, 157–165 (2017).
- [25] Leifeld, P. & Ingold, K. "Co-authorship Networks in Swiss Political Research". *Swiss Political Science Review* **22**, 264–287 (2016).
- [26] Leifeld, P., Wankmüller, S., Berger, V., Ingold, K. & Steiner, C. "Collaboration patterns in the German Political Science Co-authorship Network". *PLOS ONE* **12**, e0174671 (2017).
- [27] Forrester, J. "Public Administration Productivity: An Assessment of Faculty in PA Programs". *Administration Society* **27**, 537–566 (1996).
- [28] Plümper, T. & R, C. "Publish or Perish? Publications and Citations of Italian Political Scientists in International Political Science Journals, 1990-2002". *Journal of European Public Policy* **11**, 1112–1127 (2004).
- [29] Henriksen, D. "The Rise in Co-authorship in the Social Sciences (1980–2013)". *Scientometrics* **107**, 455–476 (2016).

- [30] Bernauer, T. & Gilardi, F. "Publication Output of Swiss Political Science Departments". *Swiss Political Science Review* **16**, 279–303 (2011).
- [31] Arzheimer, K. & Schoen, H. "Isoliert oder out Vernetzt? Eine Vergleichende Exploration der Publikationspraxis in der PVS". *Politische Vierteljahresschrift* **50**, 604–626 (2009).
- [32] Sakai, D. "Who is Peer Reviewed? Comparing Publication Patterns of Peer-reviewed and Non-peer-reviewed Papers in Japanese Political Science". *Scientometrics* **121**, 65–80 (2019).
- [33] McGuigan, G., Morçöl, G. & Grosser, T. "Using Ego-network Analyses to Examine Journal Citations: a Comparative Study of Public Administration, Political Science, and Business Management". *Scientometrics* **126**, 9345–9368 (2021).
- [34] Djupe, P., Hill, K. Q., Smith, A. M. & Sokhey, A. E. "Putting Personality in Context: determinants of Research Productivity and Impact in Political Science". *Scientometrics* **124**, 2279–2300 (2020).
- [35] Berinsky, J., Adam, Druckman, J. N. & Yamamoto, T. "Publication Biases in Replication studies". *Political Analysis* **29**, 370–384 (2017).
- [36] Gerber, A. S., Green, D. & Nickerson, D. "Testing for Publication Bias in Political Science". *Political Analysis* **9**, 385–392 (2017).
- [37] Garand, J., Qi, D. & MagañaGerber, M. "Department Research Productivity in 19 Scholarly Political Science Journals, 1990–2018". *PS: Political Science and Politics* 1–13 (2023).
- [38] Nisonger, T. E. "The Relationship between International Editorial Board Composition and Citation Measures in Political Science, Business, and Genetics Journals". *Scientometrics* **54**, 257–268 (2002).
- [39] Flowerdew, J. & Li, Y. "English or Chinese? The Trade-off between Local and International Publication among Chinese Academics in the Humanities and Social Sciences". *Journal of Second Language* **18**, 1–16 (2009).
- [40] Elnathan, R. "English is the language of science-but precision is tough as a non-native speaker". *Nature* (2021).
- [41] Curry, M. J. & Lillis, T. "Multilingualism in academic writing for publication: Putting English in its place". *Language Teaching* 1–14 (2022).
- [42] J.R., T. "Between Sinification and Internationalization: Chinese Political Science in the Post-Reform Era". *Chinese Political Science Review* **1**, 199–208 (2016).
- [43] Carammia, M. "A Bibliometric Analysis of the Internationalisation of Political Science in Europe". *European Political Science* **21**, 564–595 (2022).

- [44] Breuning, M. *et al.* "How International is Political Science? Patterns of Submission and Publication in the American Political Science Review". *PS: Political Science Politics* **51**, 789–798 (2018).
- [45] Norris, P. "The World of Political Science: Internationalization and Its Consequences". In Boncourt, T., Engeli, I. & Garzia, D. (eds.) *Political Science in Europe: Achievements, Challenges, Prospects*, 127–157 (2020).
- [46] Kostova, D., Smyrl, M., Erkkilä, T. & Dvořáková, V. "Determinants and Diversity of Internationalisation in Political Science: The Role of National Policy Incentives". *European Political Science* **21**, 596–609 (2022).
- [47] Tronconi, F. & Engeli, I. "The Networked Researcher, the Editorial Manager, and the Traveller: the Profiles of International Political Scientists and the Determinants of Internationalisation". *European Political Science* **21**, 627–640 (2022).
- [48] Pietrzyk-Reeves, D. "English-taught Degree Programs and the Internationalization of Political Science in Poland". *PS: Political Science Politics* **55**, 592–594 (2022).
- [49] Knight, J. "Internationalization Remodeled: Definition, Approaches, and Rationales". *Journal of Studies in International Education* **8**, 5–31 (2004).
- [50] Leask, B. "Internationalizing the Curriculum in the Disciplines—imagining New Possibilities". *Journal of Studies in International Education* **17**, 103–118 (2013).
- [51] Ninomiya, K. J., A. & Watanabe, A. "The Past, Present, and Future of Internationalization in Japan". *Journal of Studies in International Education* **13**, 117–124 (2009).
- [52] Brotherhood, H. C. D., T. & Kim, Y. "towards an actor-centered typology of internationalization: a study of junior international faculty in japanese universities". *Higher Education* **79**, 497–514 (2009).
- [53] Rothstein, B. "Perspectives about the Difference in the Relevance of American and European Political Science". *PS: Political Science Politics* **49**, 834–838 (2016).
- [54] Jokić, M., Mervar, A. & Mateljan, S. "The Development of Political Science in Central and Eastern Europe : bibliometric Perspective, 1996–2013". *European Political Science* **18**, 491–509 (2004).
- [55] Cansun, S. & Arik, E. "Political Science Publications about Turkey". *Scientometrics* **115**, 169–188 (2018).
- [56] Freidenberg, F. & Malamud, A. "Politólogos on the Run: Contrasting Paths to Internationalization of Southern Cone Political Scientists". *Latin American Politics and Society* **55**, 1–21 (2013).
- [57] Sakai, D. "Nihon-seijigaku-shi-no-futatsu-no-tenkan: Seijigaku-kyokasho-no-inyou-no-kokokromi". *Nenpo-Seijigaku* **68** (2017).

- [58] Watanabe, J. *Gendai-Nihon-Seiji-Kenkyu-to-Maruyama-Masao* (Keiso Shobo, 2010).
- [59] Ohtake, H. *Sengo-Seiji-to-Seijigaku* (The University of Tokyo Press, 1994).
- [60] Ohtake, H. *Koudo-Seichoki-no-Seijigaku* (The University of Tokyo Press, 1999).
- [61] Hasegawa, K. "Shakaigaku-ni-okeru-kokusaika-no-igi". *Sociological Theory and Methods* **28** (2013).
- [62] Inoguchi, T. *Seiji-Riron* (Minerva-Shobo, 2015).
- [63] "Political science in japan". In JSPS (ed.) *Jinbun-Shakaikagau-no-Kokusaika-ni-Tsuite (On Internationalization of Humanities and Social Science in Japan)*, 141–163 (Japan Society of the Promotion of Science, 2011).
- [64] Machidori, S. "Gakujiyutu-gengo-toshitenonihongo". *Asteion* **88**, 188–205 (2018).
- [65] Soga, K. "'Gendai-nihon-no-kanryosei'-no-atogaki-no-atogaki". *UP* **46**, 1–6 (2015).
- [66] Borgatti, S. P., Everett, M. G., Johnson, J. C. & Agneessens, F. *Analyzing Social Networks Using R* (Sage, 2022).
- [67] Mencer, F., Fortunato, S. & Davis, C. A. *A First Course in Network Science* (Cambridge University Press, 2020).
- [68] Grimmer, J., Roberts, M. E. & Stewart, B. M. *Text As Data: A New Framework for Machine Learning and the Social Sciences* (Princeton University Press, 2022).
- [69] Kozlowski, D., Lariviere, V., Sugimoto, C. R. & Monroe-White, T. "intersectional inequalities in science". *Proceedings of the National Academy of Sciences* **119**, e2113067119 (2022).
- [70] Goertz, G. & Mahoney, J. *A Tale of Two Cultures: Qualitative and Quantitative Research in the Social Sciences* (Princeton University Press, 2012).