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研究課題名（和文）Domestic and International Online Discourse on Polarized Issues: The Case of Japanese Whaling

研究課題名（英文）Domestic and International Online Discourse on Polarized Issues: The Case of Japanese Whaling

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研究成果の概要（和文）：日本の政治家及び彼らのフォロワーが利用しているツイッターアカウントのデータベースを構築した。それを使い、政治に関する日本のオンライン情報交換ネットワークの構造を明らかにし、そして政治家及びそのフォロワーの各政策課題に対する関心度や意見を調査することが可能になった。日本の南極海における「調査捕鯨」が2018年で終了した後、国内外におけるソーシャルメディアにおける日本の捕鯨に関する関心度が減少した。そのため、対立が激しい「慰安婦問題」、そして東京五輪開催の是非に関するオンライン論争も分析の対象にした。現在、２本の学術論文が編集段階にあり、今後、プロジェクト全体の成果をまとめる書籍を執筆する。

研究成果の学術的意義や社会的意義
This research offers insights into polarization in Japanese politics. It shows how international communication on polarized issues takes place on a micro-level, which has implications for cultural diplomacy. The database allows further investigation of online political communication.

研究成果の概要（英文）：I assembled a comprehensive database of Japanese politicians' and their followers' Twitter accounts. Using this database I was able to investigate the structure of Japan's online political population, the levels of interest and sentiment of politicians and their followers in polarized issues. The salience of Japanese whaling as an issue on social media has declined since Japan abandoned its "scientific" whaling programme in the Antarctic in late 2018. I therefore analyzed online discourse about the "comfort women" issue in addition to whaling. On the international side I analyzed how the "comfort women" issue has been written about on English Wikipedia, using network analysis to discover patterns of interactions between editors with conflicting views of history. One article for a refereed journal (on the Olympics) and one book chapter (on "comfort women") are currently in the final stages of editing. I am now planning a book that will introduce my findings across all three issues.

研究分野：political science

キーワード：social media　Twitter　political communication　whaling　comfort women　Tokyo Olympics　polarization　Japanese politics

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１．研究開始当初の背景 (BACKGROUND OF THE BEGINNING OF RESEARCH)

The widespread adoption of social media enables citizens and political elites to discuss political issues both domestically and internationally. Previous research has developed methods for mapping the ideological positions of Twitter accounts based on their followers, while other research has used retweet data to investigate political polarization. Some attempts have been made to do this for Japan, for example mapping follower ties between users following the leaders of Japan's major political parties. This research aims to achieve a more comprehensive overview of online political communication by expanding the coverage to include the Twitter activities of local as well as national politicians, and by collecting follower and tweet data over a longer period.

Much has been written about ongoing internationally controversial issues involving Japan, such as the country's whaling policy and the "comfort women." Other issues are more short-lived, such as the question of whether to go ahead with the delated 2020 Tokyo Olympics during the COVID-19 epidemic. However, most previous research on these issues has used in-depth qualitative methods; assembling a larger database of social media posts about these issues allows us to get a better perspective on how relatively salient these issues were for different parts of the political elite as well as the politically interested online population.

２．研究の目的 (PURPOSE OF RESEARCH)

This project investigated the structure and dynamics of online communication on political issues of international concern in Japan and internationally. Domestically, it sought to establish how the political elite and ordinary citizens use social media to communicate about controversial issues. Which political parties and politicians communicate about which issues, and what is the impact of their raising these issues online? To what extent do their expressions of concern reflect the concerns of their followers? This raises some related issues, such as how far the structure of politically interested Twitter users reflects the boundaries of domestic party politics.

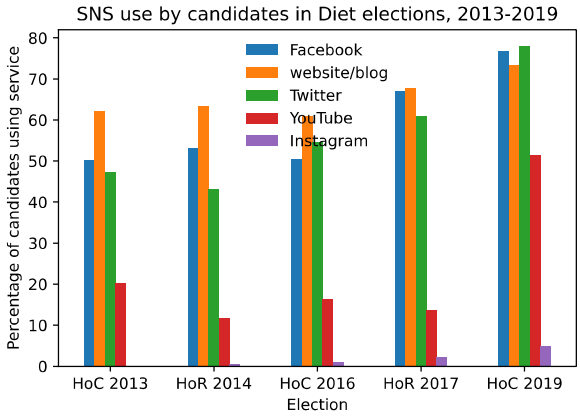
Although this project initially intended to focus on Japanese whaling policy in the wake of the Japanese government's decision to abandon its "scientific" whaling program in the Antarctic in late 2018, the data collected revealed that whaling has greatly lost salience, to the extent that it is very little discussed by politicians on social media. I found only 924 tweets mentioning whaling by the politicians in my dataset as of 6 May 2021, compared with 18,689 tweets mentioning "comfort women." The Tokyo Olympics also elicited much more interest on the part of politicians and their followers; between 1 January 2020 and 24 September 2021 they sent approximately 120,000 tweets about the Olympics. I therefore decided to focus my research on producing a solid database of politicians' and their followers' Twitter data which could be used to study communication on a variety of issues. Second, I would use that database to identify the structure of online Japanese political communication. Third, I would initially focus on the Tokyo Olympics and the "comfort women" issues.

Additionally, to widen the coverage beyond Twitter, I investigated how editors of the English and Japanese versions of the online encyclopedia Wikipedia collaborate to write about controversial issues involving Japan. To what extent do editors work on both language versions? On the English version, what is the reaction to edits expressing views at odds with those widely held outside Japan?

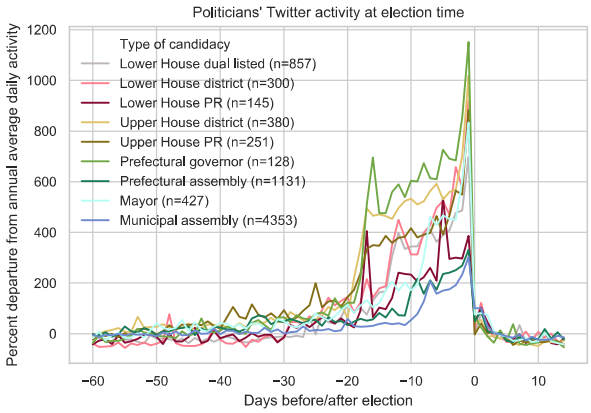
3．研究の方法 (RESEARCH METHOD)

Twitter

I first assembled a comprehensive database of the social media accounts of local as well as national Japanese politicians. By collecting data about when accounts were opened, I was able to track changes in politicians' platform adoption over time. For example, the graph below shows a steady increase in the online presence of candidates in Upper House elections:

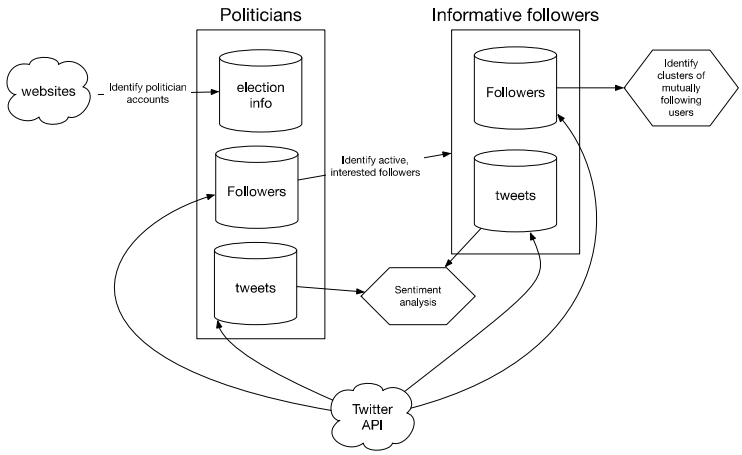


Twitter is the most researched social media platform in political communication research for two reasons: first it is widely used by politicians and their followers, and second, it makes information much more freely available through its API than do rival platforms such as Facebook. In this project I also used Twitter as my major data source. I tracked the tweets and followers of more than nine thousand Japanese politicians' Twitter accounts. The following graph shows that candidates for different offices all use Twitter more during election campaigns than at normal times, but that for municipal assembly members the gap between their regular use and their campaign use is much less than that for e.g. prefectural governors.



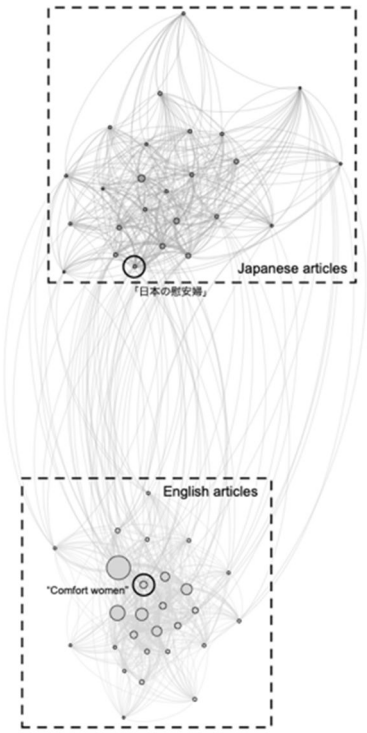
The diagram below shows the workflow for collecting and processing Twitter data. For each politician's Twitter account, I regularly collected their tweets and followers. The next step was to identify "informative users" among the politicians' approximately 7.5 million followers using a method similar to that employed in previous research on Twitter political communities. These were accounts that exhibited a clear interest in politics (followed at least three politicians), had at least 25 followers, had a profile written in Japanese (as a proxy for being Japanese), and were active (had sent at least 100 tweets, the most recent in 2021). 72,373 accounts met these criteria. I then collected the tweets sent by and the followers of these informative users.

I used sentiment analysis to investigate the attitude expressed to the issue at hand in the tweets themselves, first manually coding a sample of tweets and then using machine learning to assign a sentiment score to each tweet in the dataset.



Wikipedia

To identify pages on controversial topics involving Japan, used Japan-related pages appearing on the list of English pages protected due to edit wars. I collected details of revisions of the English and Japanese versions of these pages, and then used network analysis to see the extent to which editors worked on pages in both languages. The network diagram with two separate clusters shows that editors tended to work much more on pages in one language rather than in both.



To examine interactions between editors working on the same Wikipedia page I manually coded their agreements and disagreements. I then identified clusters of mutually collaborating editors using a community detection algorithm that accounts for both negative and positive edge values.

4．研究成果（RESULTS）

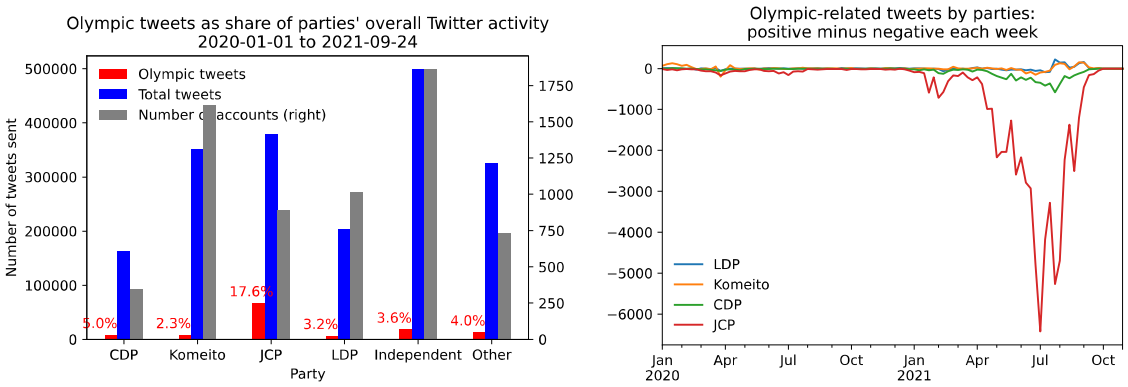
Structure of online political discussion

After establishing a dataset of politically interested Twitter users (see above), I identified users in this group who were following each other. These mutual following ties could then be used to make a network and find clusters of users with many connections. Five major clusters

were found. For each cluster I counted which politicians were followed by more than 50% of the accounts in the cluster. The result was one cluster without any notable politician following, two clusters of users following Shinzo Abe, Taro Kono and (one cluster only) Toru Hashimoto, one cluster following liberal opposition politicians such as Taro Yamamoto and Mizuho Fukushima, and one cluster following eleven LDP politicians. No CDP politician was followed by more than 50% of any cluster, pointing to the lack of a clear CDP community in online political debate.

Twitter/Tokyo Olympics

The two graphs below illustrate the energy invested by the JCP in online opposition to the Olympics. No fewer than 17.6% of the tweets sent from 893 JCP accounts during the period 1 January 2020 to 24 September 2021 were related to the Olympics. In contrast only 5% of CDP tweets were Games-related. And the sentiment analysis shows that JCP politicians tweeted overwhelmingly negatively about the Olympics.



I found that users who followed Komeito politicians were much less interested in the Olympics (measured by the percentage of their tweets that were Olympic-related) than were users who followed Liberal Democratic Party politicians. Komeito politicians reflected this to some extent by tweeting less about the Olympics than their LDP counterparts, but were still less in tune with their followers on the issue than were the LDP politicians. This suggests that the Olympics offers a promising case of political communication problem for minority coalition partners caught between their followers' interests or attitudes and those of their majority partner.

Using the clusters of politically interested users, I found that the cluster following liberal opposition politicians was as expected vocal, and negative, about the Olympics. The other clusters kept rather quiet, with the interesting exception of the "LDP" cluster described above, which became more vocal and enthusiastic about the Games when they started. This offers more evidence that the Japanese public tended to identify the Olympics with the LDP.

Wikipedia/comfort women

My analysis found that editors with a broadly cosmopolitan view of history continue to dominate the "Comfort Women" page on English Wikipedia. Some active non-Japanese editors are more flexible, but they tend to give way to the more intransigent cosmopolitan editors.

５．主な発表論文等

〔雑誌論文〕　計1件（うち査読付論文　0件／うち国際共著　0件／うちオープンアクセス　1件）

１．著者名 Jonathan Lewis	４．巻 51(1)
２．論文標題 Identifying New Gatekeepers in Social Media Networks	５．発行年 2020年
３．雑誌名 Hitotsubashi Journal of Social Studies	６．最初と最後の頁 77-86
掲載論文のDOI（デジタルオブジェクト識別子） 10.15057/30981	査読の有無 無
オープンアクセス オープンアクセスとしている（また、その予定である）	国際共著 －

〔学会発表〕　計2件（うち招待講演　0件／うち国際学会　2件）

１．発表者名 Jonathan Lewis
２．発表標題 Contesting Memories Online: The Case of the “Comfort women” page on English Wikipedia
３．学会等名 Contesting Memorial Spaces in the Asia-Pacific（国際学会）
４．発表年 2020年

１．発表者名 Jonathan Lewis
２．発表標題 Online Political Communication about the Tokyo Olympics
３．学会等名 Online Workshop “Post-Olympics Japan: Renewal or Failure?” 7-8 Oct 2021. German Institute for Global and Area Studies / University of Zurich / German Association for Social Science Research on Japan（国際学会）
４．発表年 2021年

〔図書〕　計1件

１．著者名 足羽 與志子（編集），ジョナサン・ルイス（編集）	４．発行年 2021年
２．出版社 彩流社	５．総ページ数 336
３．書名 グローバル・スタディーズの挑戦	

〔産業財産権〕

〔その他〕

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６．研究組織

	氏名 （ローマ字氏名） （研究者番号）	所属研究機関・部局・職 （機関番号）	備考

７．科研費を使用して開催した国際研究集会

〔国際研究集会〕　計0件

８．本研究に関連して実施した国際共同研究の実施状況

共同研究相手国	相手方研究機関