

Politics and Governance (ISSN: 2183–2463) 2023, Volume 11, Issue 3, Pages 120–133 https://doi.org/10.17645/pag.v11i3.6769

Article

From "Bangtan Boys" to "International Relations Professor": Mapping Self-Identifications in the UN's Twitter Public

Luis Aue 1,* and Florian Börgel 2

- ¹ Department of History, Humboldt University Berlin, Germany
- ² Leibniz Institute for Baltic Sea Research Warnemünde, Germany
- * Corresponding author (luis.caspar.aue@hu-berlin.de)

Submitted: January 31 2023 | Accepted: May 10 2023 | Published: 31 August 2023

Abstract

Digitalization and social media established world-encompassing publics that engage with international organizations. While scholarship has analyzed how international organizations communicate with such digital publics, this article determines who participates in these publics. We created a novel dataset to map the UN's digital public on Twitter and analyzed the bios of 243,168 accounts that have interacted with the UN. Members of this public provide self-identifications (such as researcher, consultant, or scientist) that indicate a professional interest in the UN. We analyzed clusters of users that self-identify with similar words. We find high heterogeneity in the UN's digital public: Clusters of professional, academic, and organizational users suggest that the technocratic history of international organizations reflects in the members of its digital public. At the same time, the digital public of the UN extends to very different groups (human rights activists and K-Pop fans feature in the UN's public on Twitter). We demonstrate for future research how multiple correspondence analysis can reveal clusters in unstructured biographical data. The article contributes the first analysis of self-identifications in digital publics of global politics.

Keywords

big data; international organizations; publics; Twitter; UN

Issue

This article is part of the issue "Publics in Global Politics" edited by Janne Mende (Max Planck Institute for Comparative Public Law and International Law) and Thomas Müller (Bielefeld University).

© 2023 by the author(s); licensee Cogitatio Press (Lisbon, Portugal). This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

1. Introduction

Social media promises to extend further the publics of international organizations (IOs). In the early 20th century, IOs communicated with elite segments of the broader public to keep control of global political dynamics (Seidenfaden, 2022). After World War II, IOs' communication efforts increased to gain broad public support (Ecker-Ehrhardt, 2018a). Since the 1990s, the opening up of IOs has accelerated, partly responding to the democratic standards of member states (Tallberg et al., 2013). Extending the reach of IOs even further, social media platforms such as Twitter, Facebook, and TikTok have enabled IOs to reach a potentially global communication space. Should IOs manage to reach out to these

broader publics, IOs' self-legitimation, and accountability could improve (cf. Mende & Müller, 2023). In response, research has started to analyze IOs' publics on social media (Bexell, Ghassim, et al., 2022). We contribute to such scholarship by asking: What groups participate in the digital public of IOs?

Established research maps publics of IOs with methods that depend on an ex-ante classification of identities and social groups. Researchers utilize surveys, survey experiments, and coding with preconceived items to map the participation of publics in global politics (Bexell, Ghassim, et al., 2022; Bexell, Jönsson, et al., 2022, pp. 12–15; see also Dellmuth et al., 2022; Ecker-Ehrhardt, 2012). Social media has established a new infrastructure for publics in global politics and provides us with valuable



data for analyzing publics. On social media, most users publish information to describe themselves. In accordance, Bexell, Ghassim, et al. (2022) have established a high share of citizens in IOs' digital publics just as a high share of elites, coding biographical information of Twitter users.

In contrast, we map the public of global politics more inductively without preconceiving characteristics of specific groups in a coding scheme. Our article contributes a different approach—a multiple correspondence analysis (MCA)—to identifying groups in unstructured biographical data, such as biographical information on social media. Such an approach makes it possible to empirically determine the self-identifications that distinguish groups on social media instead of presuming relevant self-identifications with a coding scheme. Researchers in medicine, health sciences, and finance utilize MCAs to find patterns in unstructured data sets. In the social sciences, sociologists of fields developed encompassing tool kits and sociological interpretations of MCAs (Bourdieu, 1984; Le Roux & Rouanet, 2004). We demonstrate how an MCA can detect different groups of users that self-identify with specific words.

We focus on the digital public of the UN on Twitter, the IO at the core of the current international liberal order (Lake et al., 2021). Moreover, the UN also represents the largest digital public of any IO on Twitter. Hence, our analysis focuses on the public of the UN on Twitter as a highly salient digital public of supranational politics. We reconstruct the UN's digital public delimiting different groups of users that interact with the UN on Twitter. We base our analysis on a rich but unstructured data set that includes biographical self-descriptions of 243,168 Twitter users who have retweeted a tweet from the UN Twitter account (https://twitter.com/UN) from January 1, 2021, to November 15, 2022. We conduct an MCA on the biographical self-descriptions of these users.

We find high heterogeneity of groups in the UN's digital public. We empirically identify distinct groups in the UN's Twitter public, such as K-pop fans and human rights activists. As we will argue in the discussion, this heterogeneity has the potential to support accountability and (self-)legitimation of IOs. Heterogeneity ensures that IOs can be held accountable by various subsections of society, and IOs' stances can be deliberated from multiple angles. At the same time, heterogeneity risks the integration of this public as one communicative space.

In the remainder, we discuss existing work on digital publics of global politics and introduce key concepts that underlie our article. Section 3 narrows in on the public we analyzed and presents our data set on the UN's public on Twitter. In Section 4, we discuss statistics on the demographic, professional, and political self-identifications of members of the analyzed public. Section 5 introduces our methods. We introduce the different clusters found in the UN's public. In the conclusion, we discuss the heterogeneity of the UN's digital public established in this article.

2. Digital Publics of Global Politics

The rise of social media changed the publics of international politics. IOs can communicate directly with a transnational and multifaceted public that can witness the same events worldwide (Mende & Müller, 2023). While scholars have started to analyze IOs' activity on social media, research has only started to detect and delimit the groups that constitute the digital public of international politics. We know about IOs' communication efforts (Ecker-Ehrhardt, 2018a, 2018b; Uhlin & Verhaegen, 2022), we know how representatives of IOs communicate on social media, we know about the content that IOs publish (Hofferberth, 2020; Özdemir & Rauh, 2022), and about the political effects of personalization on IO's social media accounts (Ecker-Ehrhardt, 2023). Still, the characteristics of users that constitute such digital publics remain largely in the shadows.

The groups that constitute IOs' publics have the potential to hold IOs accountable. When IOs communicate transparently with the public, power holders and constituents affected by IOs' actions can assess whether IOs' practices meet shared standards (Mende & Müller, 2023). In democracies, constituents can consider changing voting patterns for sanctioning IOs (Buchanan & Keohane, 2006, pp. 415-416). When such formalized mechanisms of accountability are unavailable, publics can establish "public reputational accountability" (Grant & Keohane, 2005, p. 37). IOs are sanctioned by reputational loss when violating shared standards of practice. Such relationships of accountability depend on constituents accessing information about IOs. We delimit the groups of constituents that can hold IOs accountable; they engage with information about IOs as part of IOs' digital publics.

In addition, the groups that constitute publics matter for legitimizing IOs. On the one hand, IOs can self-legitimize by reasonably justifying and communicating their practices. Publics can manifest as public spheres where such communicative action occurs (Mende & Müller, 2023). For self-legitimation, the "logic of the big audience" (Steffek, 2003, p. 265) implies that a high diversity within these publics improves the self-legitimation of IOs. When challenged by various viewpoints and arguments, IOs can more successfully self-legitimize as they can convince a broader discourse about their practices. On the other hand, IOs' legitimation builds on the broader public's shared belief in the IO's legitimacy (Tallberg & Zürn, 2019). For such relationships of legitimation, the citizenry must know about IOs and their practices to establish beliefs about their legitimacy. Hence, the legitimation of IOs depends on citizens being part of the IOs' publics. We empirically detect the groups that can hold legitimate beliefs about IOs as they are part of IOs' publics.

Research on non-digital publics relies primarily on surveys to gain information about the groups that constitute publics of global politics (Bearce & Jolliff Scott, 2019;



Dellmuth et al., 2022; Ecker-Ehrhardt, 2012; Guisinger & Saunders, 2017). Survey designs have the disadvantage that preconceived items in the survey strongly guide respondents' self-identification. In contrast, social media makes it possible to assess self-identification in publics directly—without inferring identities from survey items. On Twitter, users offer self-identifications in their "bios" where they describe themselves. We regard these Twitter bios as "bundles of self-identification." Our focus on self-identification takes into account that identities are not stable pre-given entities. Individuals produce self-identifications affected by and for a social setting (Bucher & Jasper, 2017). Social media is one such social setting—highly salient for current global politics. This article proposes methods to find patterns in such bundles of self-identification produced for social media.

Bexell, Ghassim, et al. (2022) are closest to our approach in examining self-appointed Twitter audiences for IOs, including the Twitter public of the UN. They apply a coding scheme to distinguish profiles into different groups, differentiating between activists, civil society organizations, academic accounts, artists, media accounts, bloggers, business users, global governance institutions, representatives of governments, politicians, and citizens (defined as the residual category for users that do not fall into other categories; Bexell, Ghassim, et al., 2022, p. 204). They establish highly relevant insights on the UN's public as they find that "elites are indeed disproportionately represented" in digital publics (Bexell, Ghassim, et al., 2022, p. 188). While Bexell, Ghassim, et al. (2022) distinguish between groups in a coding scheme, we regard it as the goal of our article to empirically distinguish between groups with shared self-identification in the UN's Twitter public. We will assess to what extent our statistical method supports Bexell, Ghassim et al. (2022) identification of groups in IOs' publics.

We regard Twitter as establishing a digital public for the UN, defining and operationalizing "digital public" along the parameters provided by the editorial of this thematic issue. Mende and Müller (2023) distinguish between manifestations of publics as "audiences" that assemble "groups of actors that share a common attention focus." In addition, publics can manifest as public spheres that are "groups of actors that form communicative spaces" (Mende & Müller, 2023, p. 92). We locate digital publics-thus, in our case, publics mediated via social media—in between these two manifestations. On the one hand, digital publics can manifest as audiences when specific groups follow, listen, or read up on a shared item. We analyze users who retweeted content from the UN's Twitter account. Hence, these users share the same attention focus and constitute the public as an audience. On the other hand, digital publics can manifest as public spheres. Retweeting can constitute a communicative act as it invites other users to react to the retweet.

The technology of social media allows publics to easily shift from passive audiences to deliberating public

spheres (Hofferberth, 2020). We regard the oscillation between the audience and the public sphere as the specific characteristic of a digital public. Our focus on users who "retweeted" content from the UN allows us to capture this specificity of digital publics. Such a conceptualization implies that the boundaries of digital publics are fluid and can quickly include or exclude groups of users. Digital publics can easily disintegrate internally when communication concentrates or breaks up within or between specific groups.

3. The UN on Twitter

The UN's official Twitter account gets introduced as: "Official account of the United Nations. For peace, dignity & equality on a healthy planet." According to Nancy Groves (2018), head of the UN's social media team, social media was initially not regarded as a serious enough platform to distribute UN statements. In 2010, the UN's social media team was established and professionalized the UN's messaging on social media. The social media team shares content on Twitter previously approved by the UN and tries to maintain neutrality when member states differ in opinion (Groves, 2018; Vale, 2020). Social media has become an official communication channel for IOs, comparable to conventional means of communication such as reports, speeches, or statistics. The analyzed account has around 16,087,000 followers and was created in 2008. As analyzed by Hofferberth (2020), the UN uses this and similar organizational accounts mostly for information dissemination on security issues.

We analyzed the account from January 1, 2021, to November 15, 2022, resulting in 5,774 tweets, corresponding to roughly nine tweets daily. As such, the account is highly active and has the highest number of followers of all organizational UN accounts, followed by the World Health Organization, with around 11,900,000 followers (see the Supplementary File for a list of UN Twitter accounts). We analyzed all accounts that had retweeted one tweet of the UN in the analyzed period. With one tweet, we set the hurdle for inclusion into the data set as low as allowed by our conceptualization. We do so as some of the theorized political effects of publicssuch as reputational losses-do not depend on the strong engagement of publics with IOs. Hence, our analysis includes loosely connected users. To analyze selfidentifications in this public, we downloaded all tweets and stored all accounts of the users that retweeted these tweets, resulting in 1,568,874 users. After removing duplicate entries, our data set includes 243,168 accounts.

Twitter provides a unique possibility for mapping the self-identification of users. Users can publish a short self-description for their account, the so-called "Twitter bio." We downloaded all Twitter bios for the analyzed 243,168 users. We translated all entries into English with Google Translate and excluded stop words in accordance with convention in quantitative text analysis (de Vries et al., 2018; see the Supplementary File for a list of



the excluded words.) In our sample, 24% of users did not publish a Twitter bio. Twitter bios provide relatively uncensored self-descriptions. Besides a limit of 160 characters, Twitter does not demand specific content or provide templates for self-descriptions. On the help page, Twitter introduces the "bio" as follows:

Introduce yourself to the world with a bio. Use your bio to tell us a bit about you and what you love. Feeling stuck? This is your space. If you have writer's block, try looking at bios on your favorite accounts for some inspiration. The possibilities are endless. From your hobbies to a quote to your job—it's up to you. (Twitter, 2022)

Accordingly, we can assume some degree of homogeneity as Twitter users might get inspiration from other profiles. Furthermore, we can expect a focus on jobs and hobbies. At the same time, the bio hardly constrains the users on what self-identification they publish. Therefore, the bios should provide relatively unbiased bundles of users' self-identifications.

This advantage comes with methodological challenges. As we analyze self-identifications, users neither have to be truthful nor do we have comparable information over all accounts. Regarding demographic data, this means we only have data on how many users self-identify as "she/her." Furthermore, the data is highly unstructured. One account has the bio "Human," "she/her," and "Planet Earth Shalom—Shalom. Never Forget." Another user has the bio "Former Secretary-General of the United Nations. Am a South Korean politician and diplomat who served as the eighth secretary-general of the United Nations." Our article contributes a method for finding patterns in such unstructured biographical data. First, we

will describe the analyzed public regarding the 200 most utilized words in users' self-identification. Second, we will introduce and utilize MCA to map and cluster members of the public according to their Twitter bio.

4. Most Common Self-Identifications of the UN's Public

In the analyzed sample, we counted all words and compiled a list of the 200 most frequently utilized words in Twitter bios. As Figure 1 demonstrates, these words are highly diverse. 4.55% of all bios use "love" in their self-description. Here, users might be responding to the framing offered by Twitter to write about what they "love" (see, in the previous section, how Twitter introduces its bios). Other words are nominal self-identifications such as "student" (1.64%). Users self-identify with their interests ("music": 1.59%; "development": 1.59%; "health": 2.33%).

We identified the most commonly utilized words that provide information on demographic, professional, and political self-identification. First, 1.67% of users identify as "she/her" (Table 1). In contrast, 0.59% self-identify as "he/him." Arguably, these numbers provide information on the amount of female and male users who intend to normalize queer self-descriptions rather than information on gender distribution. Furthermore, profiles often reference family status, with 1.81% of users identifying as "mother" or "mom."

Second, profiles provide information on professional self-identification (Table 2). Most users identify as "student" (1.64%), followed by 3,036 profiles identifying as "writer." The list centers on academic occupations and on professions that conduct international politics. The high percentage of ambassadors (0.59%) reflects that ambassadors populate many sites of international policy-making

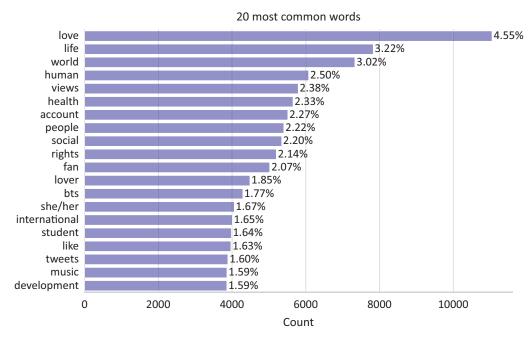


Figure 1. 20 most common words.



Table 1. Demographic self-identifications.

Word	Frequency	% of profiles
She/her	4,065	1.67
Mother	2,217	0.91
Mom	2,186	0.9
Father	1,606	0.66
Wife	1,479	0.61
He/him	1,439	0.59
Husband	1,229	0.51

(Neumann, 2008; Pouliot, 2016). We find reference to being a "consultant" among the most common self-descriptions as IOs outsource managerial decision-making and office work to consultants (Seabrooke & Sending, 2020). In addition, a high share of users works in academia, with 0.75% identifying as researchers, 0.66% as professors, and 0.57% as scientists.

Third, we find on the list of the 200 most utilized words of political self-identification (Table 3) that of these individuals, 0.59% identify themselves as human-

itarians. Self-description as "feminist" and "activist" are among the most common political self-identifications in the UN's public.

The reader might regard such percentage points as relatively low. Still, we did not code these self-identifications. These are self-identifications that users produce when asked to "introduce yourself to the world." Hence, a high variance of words is not surprising. At the same time, we can assume that such self-identifications—when delivered truthfully—are

Table 2. Professional self-identifications.

Word	Frequency	% of profiles
Student	3,984	1.64
Writer	3,036	1.25
Director	3,000	1.23
Teacher	2,795	1.15
Engineer	2,383	0.98
Journalist	2,251	0.93
Founder	1,932	0.8
Artist	1,879	0.77
Consultant	1,860	0.77
Researcher	1,827	0.75
Author	1,784	0.73
Professional	1,652	0.68
Manager	1,624	0.67
President	1,604	0.66
Professor	1,602	0.66
Lawyer	1,523	0.63
Ambassador	1,442	0.59
Specialist	1,432	0.59
Entrepreneur	1,394	0.57
Scientist	1,388	0.57
Retired	1,287	0.53
Expert	1,188	0.49
Editor	1,113	0.46

Table 3. Political self-identifications.

Word	Frequency	% of Profiles		
Activist	2,852	1.17		
Advocate	2,841	1.17		
Citizen	1,604	0.66		
Humanitarian	1,437	0.59		
Feminist	1,363	0.56		



important for users' identity constructions, as they are produced relatively uncensored and independent from external influences.

5. Mapping the UN's Digital Public on Twitter

5.1. Multiple Correspondence Analysis

The previous section introduced selected demographic, professional, and political self-identifications of the UN's digital public on Twitter. Our data consists of 200 binary variables on self-identifications for each user. These variables cover whether one of the most utilized 200 words

in the entire sample features in a user's Twitter bio (cf. Table 4). In the following section, we search for patterns in this data: Are there different groups of users that use a specific bundle of words for self-identification?

We conducted an MCA to detect patterns in the data. MCA is a dimension-reduction technique that can be applied to explore and visualize large datasets. MCA represents the output subspace that best represents the data by maximizing the variance within the data. In that sense, MCA represents an objective method that allows the data to speak for themselves and does not need any a priori assumptions. MCAs have been applied across a range of fields, such as social sciences, marketing,

Table 4. Snapshot of the indicator matrix, showing the structure of the analyzed data set. Note: Each column represents one of the 200 most frequently used words and displays whether the individual Twitter user used this word in their description.

						Followers	Following	Tweet_		
	Love	Life	World	Human	Views	_Count	_Count	Cound	Location	
20	not.love	not.life	not.world	not.human	views	1028	575	4489	New York, NY	EN
21	not.love	not.life	world	human	not.views	2799	413	48790	San Salvador, El Salvador	ES
22	not.love	not.life	not.world	not.human	not.views	1042	4992	5519	Washington, DC, missing London	EN
23	not.love	not.life	not.world	not.human	views	6708	7897	22796	Istanbul, Türkiye	EN
24	not.love	not.life	not.world	human	not.views	243	1660	18026	Blue Earth Oxygen St	EN
25	not.love	not.life	world	not.human	not.views	561192	1446	34069	New York, NY	EN
26	not.love	not.life	not.world	not.human	not.views	24631	21335	802496	Ilfeld und ganz Europa	DE
27	not.love	not.life	not.world	not.human	not.views	423	4958	58732	United States	EN
28	not.love	not.life	world	not.human	not.views	1273	4982	22244	NE Amsterdam, Netherlands	EN
29	not.love	not.life	not.world	not.human	not.views	89	1302	41755	Vidisha, India	EN
30	not.love	not.life	not.world	not.human	not.views	18	4	626		EN
31	not.love	not.life	not.world	not.human	not.views	50	182	13620		TR
32	not.love	not.life	not.world	not.human	not.views	279	5000	133418	Newham Manor Park E12, London	EN
33	not.love	not.life	not.world	not.human	not.views	1036	2727	22253	Taksim - Beyoğlu - İstanbul	TR
34	not.love	not.life	not.world	not.human	not.views	151	248	3300	Islamabad	EN
35	not.love	not.life	not.world	human	not.views	34	342	417	Jakarta Selatan, DKI Jakarta	EN
36	not.love	not.life	world	not.human	not.views	5023	4299	45557	Geneve	SV
37	love	not.life	not.world	not.human	not.views	716	500	70245	Los Angeles, CA	EN
38	not.love	not.life	not.world	not.human	not.views	3521	1431	195208	London, England	EN
39	not.love	not.life	world	not.human	not.views	391	167	1542	Portugal	EN



health, psychology, educational research, political science, and genetics. (Fithian & Josse, 2017). In the social sciences, MCA is most closely connected with the work of Pierre Bourdieu (1984), who considered MCAs the appropriate statistical method to map social fields (Le Roux & Rouanet, 2004). In this article, we use MCA to find similarities between rows (Twitter user IDs) and columns (description of the individual Twitter user ID). The graphical visualization shows structural organization in the data and allows us to find patterns and associations between the investigated parameters (columns). The indicator matrix is constructed based on the categorical variables that represent the 200 most frequently used words in bio sketches of Twitter users that interact with the UN on Twitter.

More formally, MCA is an extension of correspondence analysis, which allows one to analyze the pattern of relationships between several categorical variables (Abdi & Valentin, 2007). MCA is obtained using a standard correspondence analysis on an indicator matrix X of type I×J with I as observations and J as categorical variables (see Table 4). The correspondence analysis will result in two sets of factor scores. The absolute numbers of the table are given by n, and hence the probability matrix can be computed as $Z = n^{-1}X$. The row total and column totals of Z are given by $r = Z1_i$, and $c = Z1_i$, and $D_r = diag(r)$, and $D_c = diag(c)$. The factor scores can be then computed by performing a singular value decomposition: $D_r^{-0.5} \left(Z - rc^T \right) D_c^{-0.5} = P \Delta Q^T$, with P whose columns are the eigenvectors, Δ as the diagonal matrix of the singular values, and Q^T containing the eigenvectors as columns $PP^{T} = QQ^{T} = I_{c}$. For a more detailed definition of the MCA, the reader is referred to (Abdi & Valentin, 2007; Izenman, 2008).

Only the first dimensions of an MCA have high explanatory power of the variance in the data set. Hence, interpretation is often limited to the first dimensions. We notice a nearly exponential decay in explained variance per dimension (Figure 2). Hence, we chose to retain only four dimensions. The following dimensions do not add much additional information. Still, the first 20 dimensions represent approximately 30% of the variability among users interacting with the UN's content. After 175 dimensions, the explained variance added tails off, reducing to zero. In general, we can summarize that the public interaction with the UN is diverse as no single dimension can be used to clearly separate groups with shared self-identification.

5.2. Results and Interpretation

Figure 3 depicts the first and second dimensions of the MCA. The colors represent how much each word contributes to a specific dimension. The first dimension singles out one very distinct cluster of users who selfidentify as K-pop fans, "Bts" stands for a Korean pop band, the Bangtan Boys. Their fans self-describe as the "army," meaning the "adorable representative M.C. for youth," and identify with "bts_twt" on Twitter. This community of fans accounts for 40 million followers on social media. BTS are advocates for the UN and have launched "the anti-violence Love Myself campaign with UNICEF." The band performed at the opening of the UN General Assembly in 2021, drawing attention to the Sustainable Development Goals (Lee, 2021). We see the "army" clustering in the third quadrant. Nearby, we also identify a clustering of "love" and "life." Figure 6 shows the words that contribute the strongest to each dimension. Here,

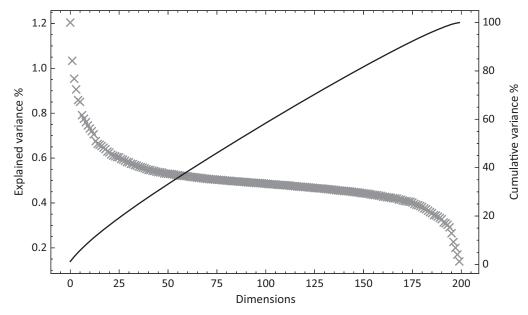


Figure 2. Plot of the MCA explained variance per dimension (grey marks) and cumulative % of explained variance/inertia (black line).



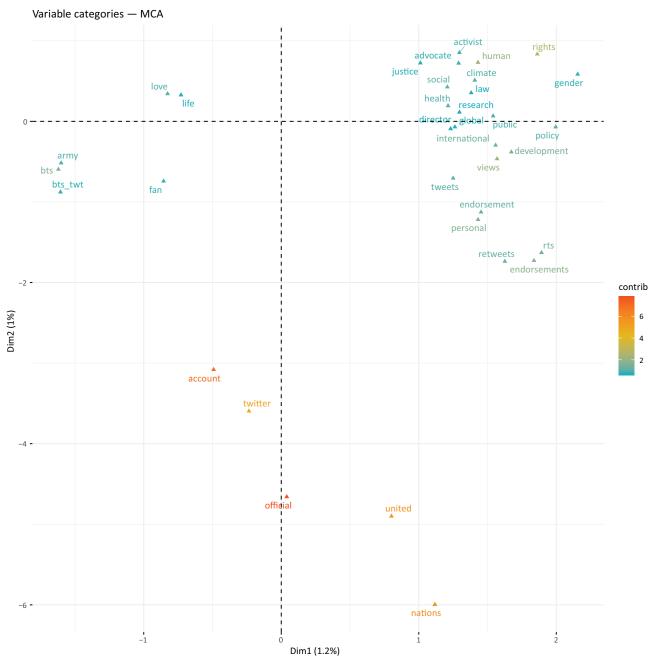


Figure 3. The first and second dimensions of the MCA.

we see that words such as "international," "human," "rights," "views," and "endorsement" contribute positively and strongly to the first dimension. We interpret these clusters as distinguishing between social mediasavvy/ broadcasting groups of users. Social groups that organize around K-pop bands are known for their innovative social media campaigns and their activism for progressive causes. Minority groups feature strongly among K-pop fans. They use social media for community building, self-organization, and collective campaigns (Bruner, 2020). In contrast, the words "views" and "endorsement" in the fourth quadrant indicate a broadcasting use of social media on the other end of the first dimension. Here, users regard social media as a vehicle to broadcast their opinion and readings. Still, the broadcasting

users signal more identification with the UN, as they use words in their bios that feature prominently in UN jargon ("development," "international," "global," and "policy").

The second dimension singles out a cluster of users who self-identify with words such as "united," "nations," "official," "Twitter," and "account." These words contribute negatively to the second dimension. At the same time, we see negative contributions of the words "advocate," "activist," "human," and "rights." We interpret this dimension as distinguishing between organizational accounts/representatives of the UN and private users. This organizational/private dimension explains 1% of the variance in our dataset. As Figure 3 indicates, an account that identifies as organizational does not self-identify with words such as "justice" or "gender." Here,



we see a sense of neutrality that characterizes organizational UN accounts; they do not use words interpreted as political.

The third dimension (Figure 4) visualizes a cluster of users who use words specific to Twitter for self-identification: "retweets," "endorsement," "personal," "views," and "opinions" clusters in quadrant three. With such words, users typically convey that they do not endorse their retweets. They tweet their personal views and opinion but do not represent their employer on Twitter. We interpret this dimension as distinguishing between reserved/outspoken users. There is further support for this interpretation: Users who self-identify with "united" "nations" cluster in the second quadrant and contribute positively to this dimension. In this cluster,

we find the official UN accounts that distribute officially approved messages and therefore do not distance themselves from their tweets. In the first quadrant, a group of users identifies with words such as "equality," "human," "rights," and "activist." Arguably, here we see users who identify as human rights activists: they are outspoken and do not present themselves as reserved. Hence, we show that some groups participate in the digital public while maintaining a reserved stance towards this public.

This result qualifies arguments of this thematic issue: Mende and Müller (2023) argue in the editorial that negotiating the public/private distinction is a key characteristic of publics. Indeed, we see a specific group of users that cares about privacy issues and clusters in the third square. Still, this group identifies with words

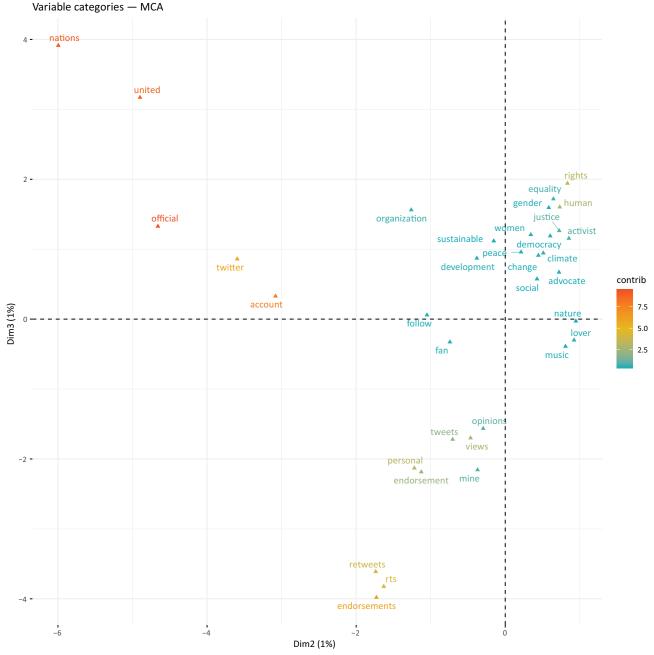


Figure 4. Second and third dimensions of the MCA.



that indicate that they do not tweet their private opinion ("retweet," "is not," and "endorsement") and the opposite ("personal," "views," "my," and "own"). Hence, groups differ not so much concerning whether they consider themselves private or public communicators; rather, they differ in presenting themselves as reserved or outspoken.

In Figure 5, we plot self-identifications with the first and fourth dimensions of the MCA. We interpret the fourth dimension as distinguishing between professional/lay users. In the fourth quadrant, we see a cluster of users who self-identify with their professional, academic, and occupational credentials ("consultant," "researcher," "PhD," "professor," "management," and "director"). The words "international" and "relations"

feature in this cluster. They signal scholars and practitioners with a background in the discipline of IR. This group indicates that the technocratic legacy of international politics partly translates into its digital public (Steffek, 2021). Possibly, these users engage with the UN based on their professional interests. Interestingly, rather politicized concepts of international politics such as "equality," "human," rights," "justice," or "gender" do not feature in the self-identifications of these users. This group of professional users appears interested in maintaining a rather apolitical stance on Twitter. In contrast, the words "human," "rights," "activist," and "endorsement" contribute positively to the first dimension. Activists and other individuals cluster in this group, which does not strongly identify with professional and academic credentials.

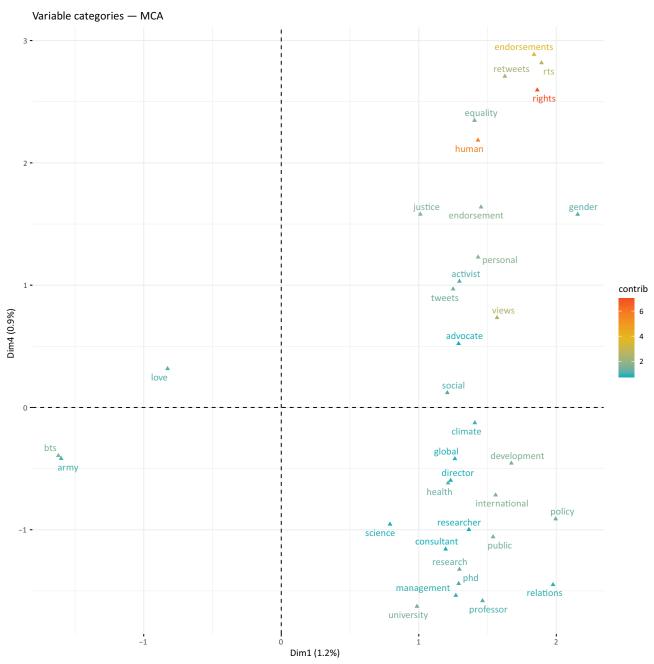


Figure 5. First and fourth dimensions of the MCA.



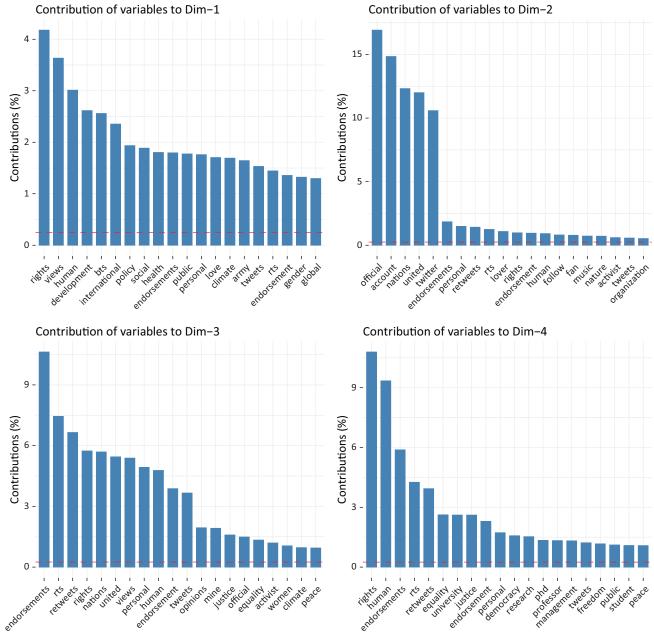


Figure 6. Contributions to the different dimensions.

6. Conclusion and Discussion

With the rise of social media, publics of global politics have been transformed (cf. Mende & Müller, 2023). IOs can directly communicate with transnational publics. In addition, social media provides detailed information about the users that constitute such digital publics. In response, this article has explored who participates in these new and salient publics of global politics. We focused on the Twitter account of the UN and analyzed the bios of 243,168 Twitter users who retweeted a tweet from the UN Twitter account from January 1, 2021, to November 15, 2022. We demonstrate for future research the potential of MCA to analyze such "bundles of self-identification" (Bucher & Jasper, 2017).

The analysis provided dimensions that distinguish between clusters of users that use similar words to self-identify, allowing us to interpret the first four dimensions meaningfully. The MCA revealed high heterogeneity in the UN's digital public. In our interpretation of the MCA, we first distinguish between social mediasavvy/broadcasting users. One cluster of users strongly identify with the Korean pop band (Bangtan Boys): these users conduct coordinated social media campaigns on progressive political issues. Other users utilize social media to broadcast their opinion. Second, we distinguish between groups of organizational/private users. One cluster of users strongly self-identified with UN organizations, while other self-identifications hinted that they related to the private use of Twitter. Third, we



differentiated between groups of reserved/outspoken users. One group strongly identified as activists and as concerned with human rights issues. Users on the other end of the dimension presented themselves as neutral on social media. Finally, we could differentiate between users along a professional/lay dimension. Some groups of users strongly stress their professional and academic credentials: we find those who self-identify with academia in this cluster.

These results partly support the coding scheme developed by Bexell, Ghassim, et al. (2022) to distinguish between groups in IOs' Twitter publics. We can find similar groups by clustering words in self-descriptions, such as activists and academics (Bexell, Ghassim, et al., 2022). Still, we could not identify clusters of business actors, artists, or politicians. This indicates that these groups might be less distinct in their self-descriptions than other groups. Bexell, Ghassim, et al. (2022) define "citizens" as the residual category of profiles that do not fit one of their codes, including the majority of members of the UN's Twitter public (51%). For such users, we offer a distinction between groups that use social media differently or that share pop cultural identification.

There are limitations to our approach. First, Twitter is a social media platform frequented by specific users. Professionals such as journalists, politicians, and researchers utilize Twitter frequently. Still, this specificity makes our results on the plurality in this public beyond professional elites even more surprising and convincing. Second, our approach detects different clusters of users inductively that use the same words for self-identification. In contrast to established research, we avoided preconceived survey items to analyze who participates in this public. Still, this approach has a drawback: 23% of users did not publish a Twitter bio and were excluded from our analysis.

What does the heterogeneity of the UN's Twitter public mean for global politics? How does it affect digital publics' potential to broker accountability and legitimation of IOs? The heterogeneity of digital publics can support the legitimation and accountability of IOs. In digital publics, IOs engage directly with diverse groups such as media-savvy users, activists, other UN organizations, and academics. Theories of deliberative democracy suggest that such diversity can potentially improve the self-legitimation of IOs, as IOs can potentially convince a wide range of people who have a variety of arguments and stances about their practices (Steffek, 2003). Established literature on IOs' public spheres regards diplomats, expert circles, and NGOs as part of transnational deliberation. Citizenry was represented by NGOs in global politics (Agné et al., 2015; Anderl et al., 2021; Nanz & Steffek, 2004). We show how digital publics are populated by further groups, such as those that share pop-cultural self-identification. IOs can engage with a broader range of arguments and positions on social media; they can convince broader groups about their practices.

Still, IOs might find it challenging to self-legitimize with the same messages in front of such a heterogeneous publics. Institutions with heterogeneous publics muffle their messages to include broad and heterogenous audiences (Stroup & Wong, 2017). Other institutions delimit different parts of their audiences strategically and only engage with supportive groups in their public (Anderl et al., 2019). With regard to the Twitter public of the UN, the UN could easily opt for similar strategies of ignoring some groups of its public, such as the cluster of justice-concerned human rights activists. In contrast to other publics (cf. Mende & Müller, 2023), digital publics do not have formalized mechanisms to ensure that institutions are responsive to all members of the public.

The high heterogeneity might even endanger the manifestation of this public as a public sphere as groups approach this communicative space differently. Some groups use Twitter to broadcast their opinions and engage professionally with IOs, while others regard it as a space for activism. Such heterogeneity can undermine communication between these groups and the UN as they lack a shared notion of the goals of communication on Twitter. For example, some groups are outspoken about their normative goals, while others maintain a reserved stance and avoid words such as "equality" or "justice" in their bios. To ensure deliberation, groups might have to engage in second-order clarification about the purpose of communicative acts on Twitter—such as the appropriateness of normative statements (Deitelhoff & Müller, 2005, p. 168). Still, empirical research has established that such second-order communication in transnational contexts demands several rounds of discussion over longer periods (Deitelhoff, 2009). Social media platforms like Twitter do not support such recursive rounds of justification. Users can easily disconnect and leave a specific site of deliberation, as users can be connected by just one Tweet that catches both of their attention. Here, the Twitter public entails significant differences to the coffee house as the archetypical space of deliberation (Habermas, 1990). As such, social media embodies notions of democracy that regard publics as an ever-evolving and democratic process as open to an ever-changing membership (Laclau & Mouffe, 2001; Näsström, 2007). Still, this openness of digital publics challenges repetitive rounds of communication necessary for the successful deliberation of such heterogeneous publics.

Future research should explore the interaction of these groups with IOs to thoroughly assess the effects on the accountability or legitimation of IOs. Scholarship should analyze how engagement with IOs on Twitter affects legitimacy beliefs or how users try to hold IOs accountable. Furthermore, research should explore how users change their opinions about IOs when engaging with them on Twitter, improving the self-legitimation of IOs. We provided the first important step for such future work in delimiting the different groups that engage with IOs on Twitter.



Acknowledgments

This article is part of a project that has received funding from the European Research Council under the European Union's Horizon 2020 Research and Innovation Programme (Grant agreement No. 949639).

Conflict of Interests

The authors declare no conflict of interest.

Supplementary Material

Supplementary material for this article is available online in the format provided by the authors (unedited).

References

- Abdi, H., & Valentin, D. (2007). Multiple correspondence analysis. *Encyclopedia of Measurement and Statistics*, 2(4), 651–657.
- Agné, H., Dellmuth, L. M., & Tallberg, J. (2015). Does stakeholder involvement foster democratic legitimacy in international organizations? An empirical assessment of a normative theory. *The Review of International Organizations*, 10(4), 465–488. https://doi.org/10.1007/s11558-014-9212-6
- Anderl, F., Daphi, P., & Deitelhoff, N. (2021). Keeping your enemies close? The variety of social movements' reactions to international organizations' opening up. *International Studies Review*, 23(4), 1273–1299. https://doi.org/10.1093/isr/viaa103
- Anderl, F., Deitelhoff, N., & Hack, R. (2019). Divide and rule? The politics of self-legitimation in the WTO. In F. Anderl, C. Daase, N. Deitelhoff, V. Kempf, J. Pfister, & P. Wallmeier (Eds.), Rule and resistance beyond the nation state: Contestation, escalation, exit (pp. 49–58). Rowman & Littlefield.
- Bearce, D. H., & Jolliff Scott, B. J. (2019). Popular nonsupport for international organizations: How extensive and what does this represent? *The Review of International Organizations*, 14(2), 187–216.
- Bexell, M., Ghassim, F., & Verhaegen, S. (2022). Audiences of (de)legitimation in global governance: A comparative overview. In M. Bexell, K. Jönsson, & A. Uhlin (Eds.), Legitimation and delegitimation in global governance: Practices, justifications, and audiences (pp. 187–214). Oxford University Press. https://doi.org/10.1093/oso/9780192856111.003.0009
- Bexell, M., Jönsson, K., & Uhlin, A. (Eds.). (2022). *Legitimation and delegitimation in global governance: Practices, justifications, and audiences* (1st ed.). Oxford University Press.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Harvard University Press.
- Bruner, R. (2020, July 25). How K-pop fans actually work as a force for political activism in 2020. *Time*. https://time.com/5866955/k-pop-political

- Buchanan, A., & Keohane, R. O. (2006). The legitimacy of global governance institutions. *Ethics & International Affairs*, 20(4), 405–437. https://doi.org/10.1111/j.1747-7093.2006.00043.x
- Bucher, B., & Jasper, U. (2017). Revisiting "identity" in international relations: From identity as substance to identifications in action. *European Journal of International Relations*, 23(2), 391–415.
- de Vries, E., Schoonvelde, M., & Schumacher, G. (2018). No longer lost in translation: Evidence that Google Translate works for comparative bag-of-words text applications. *Political Analysis*, 26(4), 417–430.
- Deitelhoff, N. (2009). The discursive process of legalization: Charting islands of persuasion in the ICC case. *International Organization*, *63*(1), 33–65. https://doi.org/10.1017/S002081830909002X
- Deitelhoff, N., & Müller, H. (2005). Theoretical paradise— Empirically lost? Arguing with Habermas. *Review of International Studies*, *31*(1), 167–179. https://doi.org/10.1017/S0260210505006364
- Dellmuth, L., Scholte, J. A., Tallberg, J., & Verhaegen, S. (2022). The elite–citizen gap in international organization legitimacy. *American Political Science Review*, 116(1), 283–300.
- Ecker-Ehrhardt, M. (2012). Cosmopolitan politicization: How perceptions of interdependence foster citizens' expectations in international institutions. *European Journal of International Relations*, *18*(3), 481–508. https://doi.org/10.1177/1354066110391823
- Ecker-Ehrhardt, M. (2018a). International organizations "going public"? An event history analysis of public communication reforms 1950–2015. *International Studies Quarterly*, 62(4), 723–736.
- Ecker-Ehrhardt, M. (2018b). Self-legitimation in the face of politicization: Why international organizations centralized public communication. *The Review of International Organizations*, 13(4), 519–546. https://doi.org/10.1007/s11558-017-9287-y
- Ecker-Ehrhardt, M. (2023). Public legitimation by "going personal"? The ambiguous role of international organization officials on social media. *Politics and Governance*, 11(3), 213–225.
- Fithian, W., & Josse, J. (2017). Multiple correspondence analysis and the multilogit bilinear model. *Journal of Multivariate Analysis*, 157, 87–102. https://doi.org/10.1016/j.jmva.2017.02.009
- Grant, R. W., & Keohane, R. O. (2005). Accountability and abuses of power in world politics. *American Political Science Review*, *99*(1), 29–43. https://doi.org/10.1017/S0003055405051476
- Groves, N. (2018). *My advice to the class of 2018*. Medium. https://medium.com/digital-diplomacy/my-advice-to-the-class-of-2018-f5dcbdc2a058
- Guisinger, A., & Saunders, E. N. (2017). Mapping the boundaries of elite cues: How elites shape mass opinion across international issues. *International Studies Quarterly*, *61*(2), 425–441.
- Habermas, J. (1990). Strukturwandel der Öffentlichkeit:



- Untersuchungen zu einer Kategorie der bürgerlichen Gesellschaft [The structural transformation of the public sphere: An inquiry into a category of bourgeois society]. Suhrkamp.
- Hofferberth, M. (2020). Tweeting to save succeeding generations from the scourge of war? The UN, Twitter, and communicative action. In C. Bjola & R. Zaiotti (Eds.), Digital diplomacy and international organisations: Autonomy, legitimacy and contestation. Routledge.
- Izenman, A. J. (2008). Modern multivariate statistical technique: Regression, classification and manifold learning. Springer.
- Laclau, E., & Mouffe, C. (2001). Hegemony and socialist strategy: Towards a radical democratic politics. Verso.
- Lake, D. A., Martin, L. L., & Risse, T. (2021). Challenges to the liberal order: Reflections on international organization. *International Organization*, 75(2), 225–257.
- Le Roux, B., & Rouanet, H. (2004). *Geometric data analysis: From correspondence analysis to structured data analysis*. Springer.
- Lee, M. Y. H. (2021, September 20). More than 1 million people watched the U.N. General Assembly online—When K-pop band BTS took to the podium. *Washington Post*. https://www.washingtonpost.com/world/2021/09/20/bts-at-unga
- Mende, J., & Müller, T. (2023). Publics in global politics: A framing paper. *Politics and Governance*, 11(3), 91–97.
- Nanz, P., & Steffek, J. (2004). Global governance, participation and the public sphere. *Government and Opposition*, *39*(2), 314–335. https://doi.org/10.1111/j.1477-7053.2004.00125.x
- Näsström, S. (2007). The legitimacy of the people. *Political Theory*, *35*(5), 624–658. https://doi.org/10.1177/0090591707304951
- Neumann, I. B. (2008). The body of the diplomat. European Journal of International Relations, 14(4), 671–695.
- Özdemir, S., & Rauh, C. (2022). A bird's eye view: Supranational EU actors on Twitter. *Politics and Governance*,

- 10(1), 133-145.
- Pouliot, V. (2016). *International pecking orders: The politics and practice of multilateral diplomacy*. Cambridge University Press.
- Seabrooke, L., & Sending, O. J. (2020). Contracting development: Managerialism and consultants in intergovernmental organizations. *Review of International Political Economy*, *27*(4), 802–827. https://doi.org/10.1080/09692290.2019.1616601
- Seidenfaden, E. E. (2022). The League of Nations' collaboration with an "international public," 1919–1939. Contemporary European History, 31(3), 368–380.
- Steffek, J. (2003). The legitimation of international governance: A discourse approach. *European Journal of International Relations*, 9(2), 249–275.
- Steffek, J. (2021). *International organization as technocratic utopia*. Oxford University Press.
- Stroup, S. S., & Wong, W. H. (2017). *Authority trap: Strategic choices of international NGOs*. Cornell University Press.
- Tallberg, J., Sommerer, T., Squatrito, T., & Jönsson, C. (2013). *The opening up of international organizations*. Cambridge University Press.
- Tallberg, J., & Zürn, M. (2019). The legitimacy and legitimation of international organizations: Introduction and framework. Springer.
- Twitter. (2022). How to create your Twitter profile/ Twitter Help.
- Uhlin, A., & Verhaegen, S. (2022). Practices of (de)legitimation in global governance. In M. Bexell, K. Jönsson, & A. Uhlin (Eds.), Legitimation and delegitimation in global governance: Practices, justifications, and audiences (pp. 49–73). Oxford University Press. https://doi.org/10.1093/oso/ 9780192856111.001.0001
- Vale, A. (2020). [Interview] How the UN uses Twitter to bring the world together one tweet at a time. Audiense. https://resources.audiense.com/blog/interview-case-study-how-the-un-united-nations-uses-twitter-social-media-to-bring-the-world-together-one-tweet-at-at-time

About the Authors



Luis Aue is a postdoctoral researcher at the Humboldt University Berlin and part of the European Research Council project Socialist Medicine: An Alternative Global Health History (SOCMED). His research focuses on the history of global and international health and combines scholarship from history, political science, and science, and technology studies.



Florian Börgel is a postdoctoral researcher at the Leibniz Institute for Baltic Sea Research Warnemünde. His research focuses on how long-term variability in the atmosphere and ocean affects Northern Europe and the Baltic Sea.