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Do Policy Actors Influence Political Communication on Refugee Protection in Social Media? A Comparison of the UNHCR and the EU on Twitter

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Do Policy Actors Influence Political Communication on Refugee Protection in Social Media? A Comparison of the UNHCR and the EU on Twitter

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Since 2016, the United Nation's High Commissioner for Refugees, the European Commission, the African Union, and many states endeavoring to follow suit, have been introducing new policies to bolster international collaboration on refugee protection. Amongst these are the UN's *Global Compact on Refugees* (GCR) and *Global Compact for Migration* (GCM), the European Union's evolving *Common European Asylum System* (CEAS), the European Commission's proposal on a *New Pact for Migration and Asylum* (the New Pact), and the UN Member States' *pledges made in the Global Refugee Forum*. Successful implementation of global policy depends on recognition by the international society, that is, international organizations, governments, parties, non-state organizations, and citizens. These new policy initiatives have, however, created controversy within the international society. A public site where this is the most visible is social media. Social media communication affects society's perceptions of refugees and international protection (Perez-Cepeda and Arias-Bolzmann 2021; Ahmed et al. 2021). Hence, in democratic societies where policymaking must rely on citizens' consent, social media communication has a potential to influence governments' and other policy actors' approaches to international protection (Mickoleit 2014; Hong and Kim 2016). On the other hand, social media also offers opportunities to policy actors to influence the public opinion.

In this paper, we study the impact of the UN, the EU, national states, political parties, and NGOs in public communication on Twitter during key international protection policy events. We study the periods around the UN General Assembly's adoption of the *New York Declaration for Refugees and Migrants* (19 September 2016), the UN General Assembly's affirmation of the *Global Migration Compact* and the *Global Refugee Compact* (19 December 2018), and the *First Global Refugee Forum* (17-18 December 2019), and the European Commission's announcement the *New Pact on Migration and Asylum* (23 September 2020). By using the tools of social network analysis (Wasserman & Faust, 1994), we compare the (i) *activity*, (ii) *popularity*, (iii) *bridging (control of communication flow)*, and (iv) *constraint (filling structural communication gaps)* of institutions from the UN, the EU, selected national governments, and NGOs on Twitter in connection with these important policymaking events.

By using the above-mentioned indicators, this paper identifies the public communication challenges encountered by global and transnational actors like the UNHCR and the European Commission. Which structural communication gaps are there in the global and European networks around the UN and EU institutions in social media? How can they be closed to reach and influence a broader spectrum of policy actors?

1. Policy Actors' Involvement and Influence in Social Media

The international refugee protection system is under pressure from governments seeking economic stability, populist parties, and nationalist and nativist movements in the current context of economic and migration crises. Policy actors in the international society have been forming new alliances, networks, and discourses around refugee protection and migration. Regarding citizen attitudes, the differences between citizen groups have become increasingly more outspoken and systemic, leading to the growth of new transnational political cleavages (Hooghe and Marks 2018) and transnational cleavage systems (Sicakkan and Heiberger 2022). On the other hand, the differences between governments on migration and refugee policy came to the forefront during negotiations on the GCM, GCR, and the New Pact, as well as during the First Global Refuge Forum, not to mention the foregoing government responses to mass refugee influxes between 2015 and 2018. The general pattern at all levels is an increased acceptance of strict immigration policies at the same time as a sharp dispute on the continuation of states' commitment to existing international legal instruments for the protection of human rights and refugees. The only area where the development towards stricter immigration control by states is challenged, is international refugee protection.

States are, thus, in squeeze between their international obligation to protect refugees and their national responsibility to control entry into their territory. This pressure is magnified by the growing nativist reluctance to distinguish between migrants and refugees as distinct categories, each of which poses different moral challenges and responsibilities. Consequently, especially in the current context of mass migrant and refugee influxes, governments have to engage increasingly more in information-spreading activity to persuade their citizens to support their international commitment to protect refugees.

In this effort, media has been an effective tool in the postwar period. This influence channel has, however, been challenged since 2005 by micro-blogging platforms like Facebook, Twitter, Reddit, and YouTube because these platforms, which are not subject to strict fact-checks and

editor-scrutiny like conventional media, empower other policy actors with competing policy preferences. Social media has thus become a political communication site in which governments have a massive interest to be present (Gintova 2019; Mickoleit 2014). The broad use of social media platforms by governments and citizens alike also makes these platforms an attractive medium for IGOs, political parties, and NGOs where they can reach out with their messages as well as gathering information to improve their services.

This situation has prompted research on governments' and other policy actors' use of social media. Regarding NGOs, earlier research reports that "information sharing and dialogic relationship-building" (Rodriguez 2016) are the two main purposes of their involvement in social media. Also, "the two most important functions to an NGO are promoting the organization's image and fundraising" (Seo et al., 2009 cited in Rodriguez 2016). Political parties are, on the other hand, using social media platforms to reach out to voters with their messages as well as gauging voter sentiments and attitudes, and monitoring and communicating with competing parties (Praet et al. 2021; Raalte et al. 2021). In a case study of 2014 election campaigns in India, for instance, Ahmed et al. (2016) found that "the new-and-upcoming parties used Twitter for self-promotion and media validation, while established parties used it to supplement their offline strategies." This pattern is consistent with party behavior in the Global North. Governments, on the other hand, maintain their presence in social media for multiple purposes, ranging from sentiment monitoring, identifying needs, informing citizens, and developing services, to influencing political communication from a national perspective (cf. Mickoleit 2014). Indeed, Gintova (2019) documents how a government agency in Canada interacts with its followers, listing recommendations for adopting their methods of interaction to established social media conventions. Concerning IGOs, research conducted particularly on user interactions around the UNHCR twitter account (@Refugees) documented that "[…] UNHCR, along with its digital communication platform, has used social networks in order to expand its service coverage" (Perez-Cepeda and Arias-Bolzmann 2021).

Thus, earlier research shows that social media is a major means of influence for all of the above-mentioned types of policy actors. In social media, impact is achieved by increasing visibility and publicity through interactive communication with targeted groups. Achieving an elevated level of publicity is a greater challenge for global and transnational policy actors like the UNHCR and the EU, whose target groups are significantly more diverse than policy actors addressing national audiences. Their main challenge is to attract social media users into their own social networks from

a very fragmented social media space across all countries and parts of the world. At this point, there is a significant research gap. How can global and transnational policy actors reach out to a broader mass of social media users beyond national spaces of public communication? To answer this question, it is essential to identify the structural communication gaps in their social media networks and point to ways of filling them. We do this by network-analyzing the international protection-related interactions around particularly the UNHCR and the EU on Twitter.

2. Data and methods

The data was collected via keyword search on social media. We collected two sets of Twitter data to identify the "global" and "European" communication networks on Twitter and the involvement of global institutions, European authorities, states, and non-state organizations in regard to public communication on international protection. Two different sets of search keywords were used to extract the two data sets. Both keyword sets included groups who might need protection[1] and policy actors who are likely to be involved in international protection and policymaking on refugee and asylum matters. The two keyword sets differed from each other regarding which policy actors they contained. As to the global Twitter networks, we used the names of central global institutions like the UN and UNHCR as search words.[2] For European networks, we included the European Union and its supranational and intergovernmental institutions.[3] With this two-fold comparative network analysis, we take stock of the multilevel structure of global and regional political communication in social media around the UN and the EU.

Concerning the European network, from both keyword searches we respectively collected around 17 million tweets from about 7 million authors in thirteen European languages[4] in the years 2014 to 2020[5]. Concerning the global network, the corresponding numbers are 16.686.851 tweets and 7.234.574 authors. From this data basis, we extracted all communications that contained interaction, i.e., retweets and mentions, and were left with a total of 11.835.869 retweets and

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[1] Keywords used: refugee, migration/migrant, immigration/immigrant, asylum/asylum seeker

[2] Keywords used: United Nations, Global Compact, UNHCR, UN Foundation.

[3] Keywords used: European Union, European Commission, European Parliament, European Council, Council of the European Union, European Court of Justice, Frontex, Europol, EASO, ECHO, EU-LISA.

[4] Because the data is not reliably geo-referenced, it is not possible to collect data only pertaining to a certain country. The selection of certain languages however makes it possible to gather data that is of importance in the national discourse.

[5] The year 2020 is only contained until November.

4.733.476 mentions for the EU keyword search and 13.089.939 retweets and 5.560.326 mentions for the UN keyword search. Mentions are tweets that contain the twitter handle anywhere in the body of the text (Twitter 2021a). Retweets are tweets that are shared by one Twitter user where the author is a different Twitter user (Twitter 2021b).

The second step was to select actors that are important in the overall international refugee protection system: policy actors from different governance levels such as national political parties, national governments and heads of states, regional and international authorities, global institutions as well as non-governmental and civil society organizations (NGOs and CSOs). While the selection of the other policy actors is straightforward, identifying national and international NGOs and CSOs that focus on migrant- and refugee matters is less so. We therefore employed multiple strategies to find relevant organizations in a systematic fashion: A search of newspaper articles on *the Eventregistry platform*,[6] a database containing newspaper articles from a wide variety of countries, was matched with organizations found on Wikipedia, thus resulting in NGOs and CSOs that were most active for the time period in traditional media. In order to avoid a potential selection bias, especially in countries with little communication activity on Twitter, we checked whether there were more internationally active CSOs via a structured keyword-based search on Wikipedia – following the same idea that relevant organizations are likely to have Wikipedia pages. Here, only English-language searches were conducted to identify and include the NGOs and CSOs that are internationally active on global and European scales. Therefore, member organizations from global and European NGO networks were also added. These NGO's and CSO's were then matched with their Twitter handles and compared to the actors contained in the retweets and mentions in our data, resulting in the final set of actors for the social network analysis. Of those, we found 680 actors in the global networks, and 683 in the European network.

Applying a network methodology to our two data sets, we endeavor to assess whether and how different policy actors have been influencing or trying to influence political communication about international protection during key policy events. For this purpose, we use a range of network-analytical indicators: We are using retweets and mentions as the basis of our social network analysis as these are indicators of interactive communication. That is, we construct policy actor networks based on how much they retweet and mention each other. More technically, the

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[6] https://eventregistry.org/

nodes of the directed, weighted network are the accounts of the selected actors, and its edges (or ties) are the number of interactions by retweets and mentions.

From this, we construct several established metrics to assess actors' centrality in the network.[7] Based on their outgoing retweets and mentions of other actors, we measure different policy actors' *activity* in the network. A policy actor's activity is measured as the number of its outgoing communication links (outdegree). Similarly, based on other actors' retweets and mentions of them, we measure policy actors' *popularity* within the network. Popularity is, then, the number of incoming links to a policy actor (indegree). Both are normalized by the network's size. Further, we measure each actor's ability to control the information flow in the network by measuring its bridging activity. In technical terms, this is the number of times a policy actor serves as a bridge on the shortest path between two other policy actors (betweenness centrality). Finally, we compare actors' ability to fill structural holes in the communication network by measuring how constrained they are. Policy actors with low levels of constraint on themselves fill structural communication gaps by linking unconnected parts of the network with each other that would otherwise remain disconnected. We measure the constraint on each policy actor "with respect to the immediate network of discussion partners, composed of anyone the manager [policy actor] cited as a discussion partner and anyone who cited the manager [policy actor]" (Burt 2004).

3. An overview of communication activity around the UN and EU

Fig.1: Weely Number of Tweets and Retweets in the Global Twitter Network*
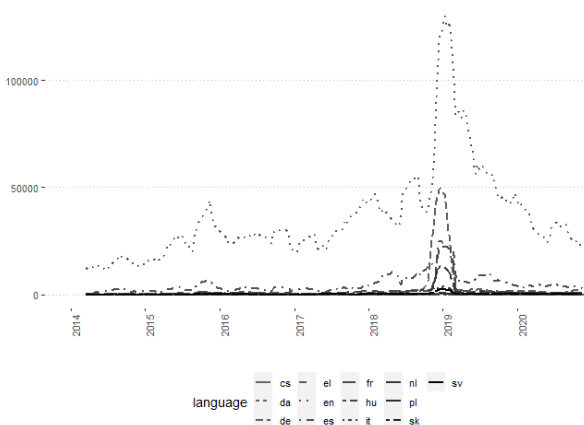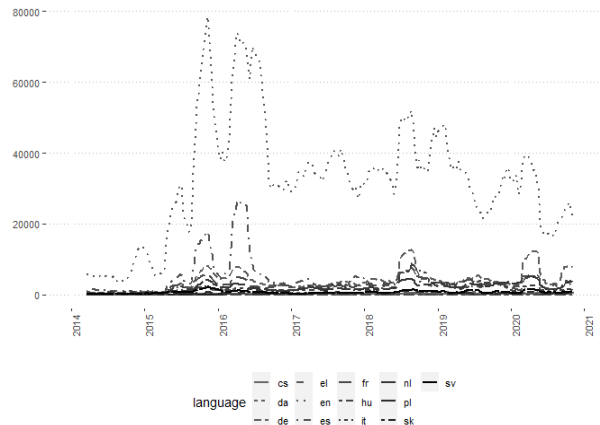
Fig.2: Weekly Number of Tweets and Retweets in the European Twitter Network*

* Figure 1 and Figure 2 use a 12 week moving average to smooth out short-term fluctuations and highlight longer-term trends or cycles

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[7] A comprehensive explanation of the centrality metrics is given in the seminal paper of Freeman (1979).

The activity on Twitter varies significantly over time and across languages, be it for the global or European networks. Figure 1 displays the frequency analysis for the weekly tweets in the global network. While there appears to be significant differences across languages, the trend follows a similar pattern with increased frequencies of tweets relating to migration at the end of 2015 and, more visibly, towards the end of 2018, which corresponds to the adoption of the Global Compacts for migration and refugees. As our data derives from transnational networks, the frequency of tweets in the English language is much higher than that in any other languages and peaked at about 125,000 tweets on migration and asylum in a week.

The results from the European network yield a different picture, with much higher frequencies at the beginning of the period, as shown in Figure 2. These occur in a period of drastic increase of asylum influxes to Europe during what has been called the "refugee crisis". The frequencies remain high over the entire timespan with sizable increases at the end of 2018 and in the spring of 2020.

Thus, figures 1 and 2 show already at this stage that the global and European Twitter spheres are triggered by different events: In the European Twitter networks, Twitter interactions around refugee and migration issues reached its climax during the European migration crisis (2015-2017) whereas, in the global Twitter network, Twitter activity makes peaks after the UN General Assembly's affirmation of the GCR and GCM in December 2018 and around the First Global Refugee Forum in December 2019.

Out of the raw data presented above, we identified the organizations and movements that form communication networks in the social media. Table 1 summarizes the data on which this article is based. The analyses from here and onwards are based on the largest component in the global and European networks. The number of nodes (policy actors) and edges (connections between them) are comparable between the two networks. The prominence of the actors in the global and European networks are significantly different. Regarding the UN network, the UNHCR is clearly one of the most prominent actors. It is among the most active (outgoing communication activity), most popular (incoming communication activity), most bridging (linking other actors with each other), and least constrained (filling in structural communication gaps emerging from other actors that are weakly connected among themselves).

Table 1: Description of the UN and EU Networks

	Global network	European network
Number of actors (nodes)	680	683
Number of links (edges)	1278	1757
Most active (outdegree)		
1st ranking	UN	EU DG ECHO (eu_echo)
2nd ranking	UNHCR	EASO
3rd ranking	ASKVluchtelingen (Askv_tweet)	EP LIBE (ep_justice)
Rank of EU Commission	57	13
Rank of UNHCR	2	23
Most popular (indegree)		
1st ranking	UNHCR	EU Commission
2nd ranking	UN	ECRE
3rd ranking	IOM (UNmigration)	European Parliament
Rank of EU Commission	13	1
Rank of UNHCR	1	5
Most bridging (betweenness)		
1st ranking	UNHCR	EU Commission
2nd ranking	ECRE	EASO
3rd ranking	Refugee Council	European Parliament
Rank of EU Commission	141	1
Rank of UNHCR	1	34
Least constrained (filling structural gaps)		
1st ranking	UNHCR	Human Rights Watch
2nd ranking	PICUM	ECRE
3rd ranking	D66	EU Commission
Rank of EU Commission	24	3
Rank of UNHCR	1	89

As for the European network, Table 1 shows that the major actors are EU institutions. For instance, the most active actor is the European Commission's Directorate General for European Civil Protection and Humanitarian Aid Operations (DG ECHO), followed closely by the European Asylum Support Office (EASO). The EC, DG ECHO, and EP's LIBE committee are among the most important emitters and receivers in the European network, while DG ECHO features among the most bridging actors. The EC ranks at the 13th position on the activity metric but in first position on the popularity metric, meaning that, relative to other policy actors, it receives more information than it creates.

Comparing these metrics across the two networks, UN institutions are more present in the European network than EU institutions in the global network. Considering the global network, UNHCR and IOM receive attention and interact a lot with other policy actors. Conversely, EU institutions and affiliated are barely present in the global network. However, as we shall show below, this picture changes during key refugee and asylum policy events.

3.1. Policy actors and their roles in the global network
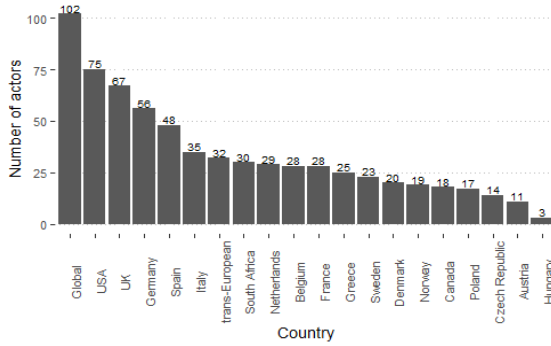
Fig.3 Number of Actors by Country

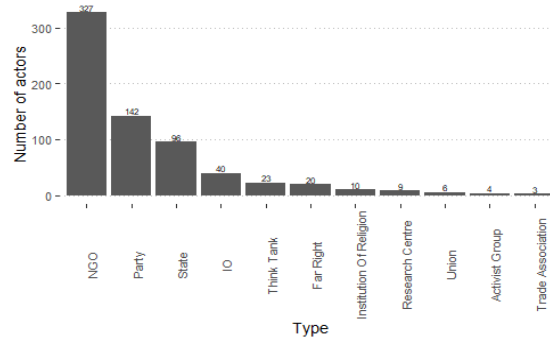**Fig.4 Number of Actors by Organization Type**

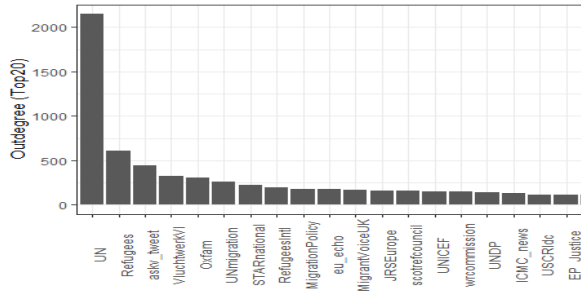**Fig.5: Highest weighted degree centrality:** *activity* **(outdegree)**

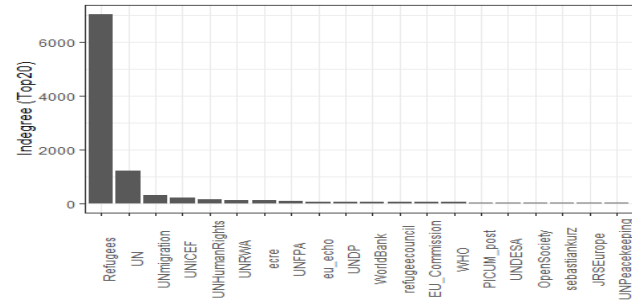**Fig.6: Highest degree centrality:** *popularity* **(indegree)**

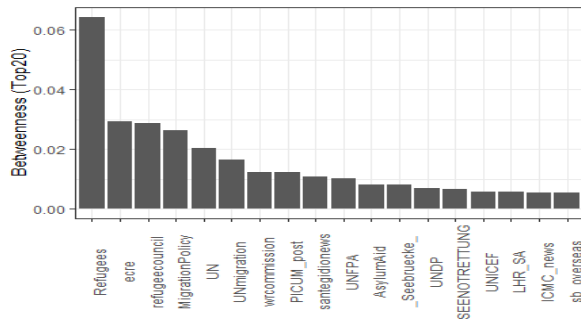**Fig.7: Highest betweenness centrality:** *bridging* **(control of information flow)**

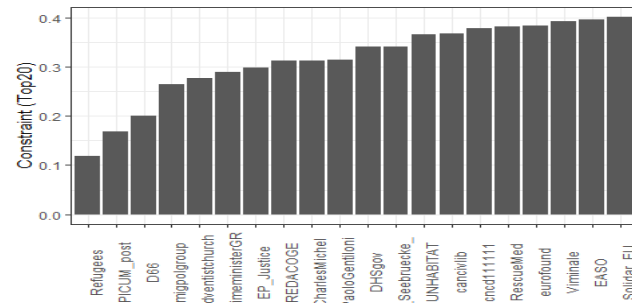**Fig.8: Actors under constraint (filling structural gaps)**
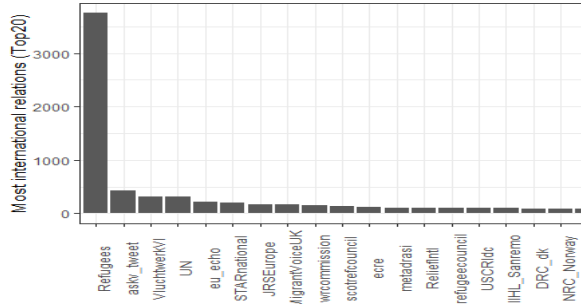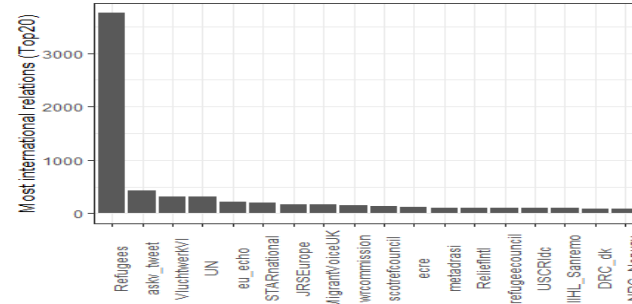

Fig.9: International relationships

Fig.10: Inter-continental relationships

Figures 3 to 10 display policy actors' role in the global network during the whole period (2014-2020). What catches the eye first is the dominance of intergovernmental organizations. Thus, the UN and the UNHCR are the most prominent two policy actors by any measure. While the UN is the most active in the global network (holding the largest number of links), the UNHCR is the most popular (being retweeted and mentioned the most), the most bridging (linking other actors to each other), the least constrained (linking actor groups to each other that are not connected otherwise), and the most involved in international and inter-continental communication on Twitter.

The European Commission emerges as one of the 20 most popular policy actors – that is, it is among those actors that are the most retweeted and mentioned in the global network. Though it is not among the most globally active. On the other hand, other EU institutions, notably ECHO, appear as highly active, popular, and involved in international and inter-continental communication. Further, EASO is among the top 20 most bridging actors.

The European Council on Refugees and Exiles (ECRE) has a central role in the global network; its main focus is European protection policies. While it ranks 7 in popularity, it is the second most bridging actor in the global network, and it is among the top 20 policy actors regarding involvement in international and intercontinental relations. ECRE is a non-state organization that gathers and disseminates information about European Union's and European states' refugee and asylum policies and the consequences of these policies for people seeking protection in Europe. ECRE's global importance may be attributed to its being a vocal critic of the dwindling refugee protection systems and asylum procedures in Europe, something which affects the quality of the global refugee protection system. Another transnational NGO, Platform for International Cooperation on Undocumented Migrants (PICUM) is the actor with the second least constraint – that is, linking other actor groups with each other that are otherwise detached or weakly connected.

Although to a much smaller extent that the UN and the UNHCR, some national level non-state actors are heavily involved in exchanging messages on international protection matters in the global network. The UK, Danish, Norwegian – and to a lesser extent the Scottish – Refugee Councils are among these. The UK Refugee Council is the third most bridging policy actor.

It should also be mentioned that the UNHCR proves to be the policy actor who bridges the most between the continents. It also engages the most in international relations – that is, globalizing and internationalizing the refugee-protection related issues more than any other policy actor.

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3.2. Policy actors and their roles in the European networks
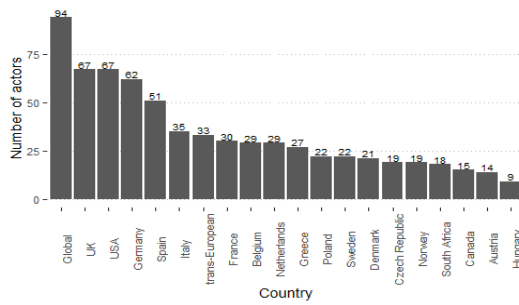
Fig.11 Number of Actors by Country
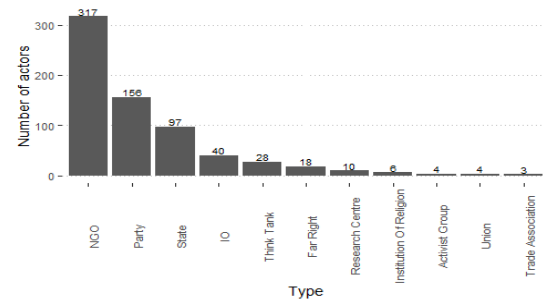

Fig.12 Number of Actors by Organization Type

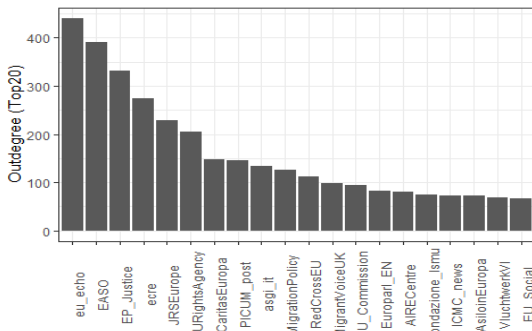**Fig.13: Highest weighted degree centrality: *activity* (outdegree)**

Fig.14: Highest degree centrality: *popularity* (indegree)
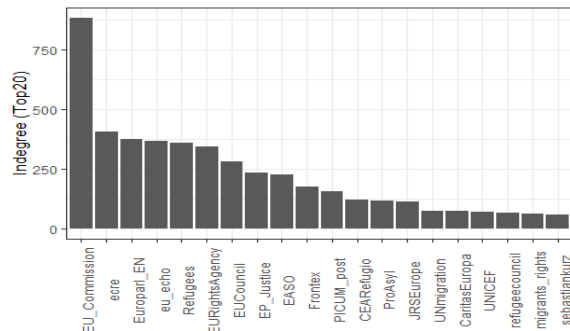

Fig.15: Highest betweenness centrality: *bridging* (control of information flow)
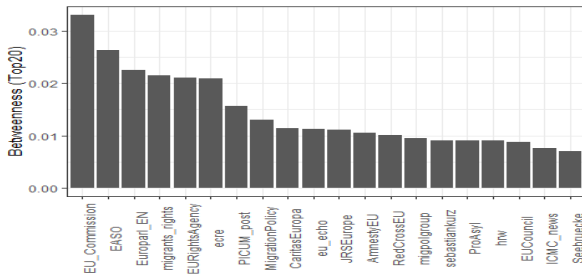

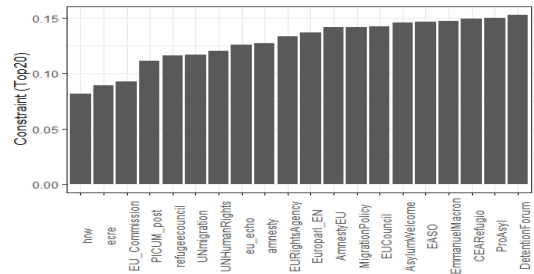**Fig.16: Actors under constraint (filling structural gaps)**
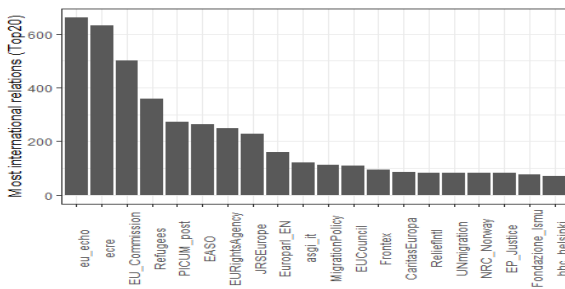

Fig.17: International relationships

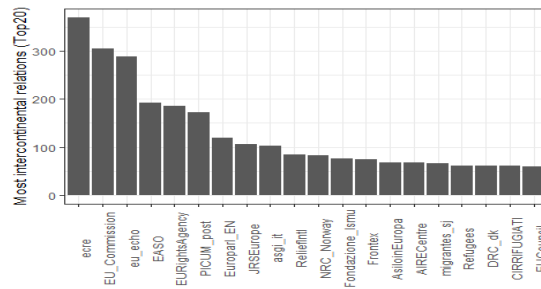**Fig.18: Inter-continental relationships**

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Figure 11 shows the number actors involved in communication about international protection within the European network. As in the global network, international actors are dominant in the European Twitter-network. The presence of trans-European actors is more or less at the same level as European countries. Unsurprisingly, the USA, the UK, Germany, and Spain contribute with the highest number of actors to Twitter communication on international protection matters.

Figure 13 shows the activity levels of the most active 20 actors in the European network around international protection. The European Union's different organs are the most active actors in the network, meaning that they are sending the highest number of retweets and mentions. In addition, some big global and transnational NGOs as well as a few big national NGOs are also very active. The UNHCR, on the other hand, is not among the actors with highest communication activity in the European communication network.

Figure 14 shows the most popular actors, that is, the actors whom other actors try to address the most with their communication activity. The European Commission emerges as the actor that is most addressed in the global communication about international protection. That is, the European Commission is getting most retweets and mentions in the European protection network on Twitter. ECRE is the second most popular actor, followed by other European Union institutions and agencies and the UNHCR.

However, the above-mentioned two measures do not necessarily show the influence of the actors. An actor may have low influence despite a high degree of activity. Betweenness centrality, on the other hand, measures the influence an actor has over the flow of information in a network (Heiberger et al., 2021). It is often used to find the actors that serve as a bridge from one part of the network to another. In other words, betweenness centrality measures the extent that a node plays a role as a bridge among the other nodes in the network (Newman, 2010). Nodes with higher betweenness centrality lie on the shortest path between other nodes and connect parts of the network that would be unconnected otherwise. Figure 15 shows that the European Commission has the highest betweenness centrality in the European network, that is, the EC is the actor that is most able to control the communication between the different parts of the network around international protection, followed by EASO, the European Parliament, the UK based charity organization "Migrants' Rights Network", EU Fundamental Rights Agency, and ECRE. Indeed, the 20 most influential actors group is dominated by EU institutions and some big NGOs.

Finally, Figure 16 illustrates the 20 actors with the least constraint. The constraint on an active actor is high if the other actors in the network communicate a lot with each other directly or if they share information indirectly via a central contact. If an actor receives only redundant information (i.e., has only neighbors which are also densely connected to each other), the metric is close to 1; if the "inverse" is true (i.e., values close to zero) we speak of actors who are closing structural holes and are not constraint (Burt 2004: 362).[8] On this scale, Human Rights Watch, ECRE, and the European Commission emerge as the actors with the least constraint, that is, they are filling the structural holes within the communication network around international protection.

These measures show that the EU institutions are highly active, popular, and influential in European Twitter network. The UNHCR is among the most popular actors in the sense that it receives many retweets and mentions, but it is not a bridging and structural-gap filling actor to the same extent as the EU institutions. Among non-state organizations, ECRE and Human Rights Watch (HRW) emerge as the most important actors. ECRE is highly active, popular, and a bridging actor whereas HRW scores the highest among all actors regarding ability to fill structural gaps and communication gaps between different parts of the network.

Figures 17 and 18 show the actors which pull the communication on international protection to, respectively, the global scale. On these scales, EU institutions, the UNHCR, ECRE, PICUM, and the UK-based Migrant Voice emerge as the actors that most contribute to the upscaling of the international protection related discussions to the global level.

4. Do Policy Actors Influence Twitter Communication During Key Policy Events?

The legitimacy and success of global policy relies on recognition by the international society. A strategy of international policy actors to achieve recognition is to entice key actors into their networks and socialize them into their own value sets through structured interaction. This includes intergovernmental organizations, states, international and national NGOs and CSOs, private sector actors, and individual citizens. In pursuit of recognition, global policy actors also endeavor to bypass intermediaries, e.g., states, in their communication links by tempting the actors in the intermediaries' networks into their own networks. Regarding social media communication, this policymaker behavior is expected to manifest itself in times of key global policy initiatives as

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[8] An important example for the importance of ties providing non-redundant information is the labor market (Granovetter, 1973).

increased number of actors and links in the network as well as the policymaker's increased degrees of activity, popularity, bridging, and structural gap filling in order to create direct links between themselves and stakeholders.

In Figures 1 and 2, we showed that UN institutions significantly increased their activity on Twitter during events related with the introduction of the GCM and GCR (2017-2019). In contrast, EU institutions peaked their communication activity during the mass refugee influxes in 2015-2017. In this section we zoom into the periods around key policy events during which the UN and the EU, along with other policy actors, saw a need for debating about international protection. As indicated in the beginning, we put our magnifying glass on the UN General Assembly's adoption of the GCM (19 September 2016), the UN General Assembly's affirmation of the GCR (19 December 2018), and the First GRF (17-18 December 2019). We particularly focus on the periods one month before and one month after the date of each event – that is, a two-month's period for each event.

Table 2 compares policy actors' activity, popularity, bridging, and communication-gap filling in the global network during these four key policymaking events. The first pattern concerns the differences between the numbers of actors involved and their communication links before and after each event. Concerning GCM, GRF, and EU New Pact, the numbers of actors and their links in the global network (cf. the first two rows in Table 2) increased after these three events took place. Obviously, these are news and discussions about what was decided and committed to during these events, and the UN appears as one of the most prominent three actors here. In contrast, the numbers drastically increased in the global network before the UN General Assembly's affirmation of the GCR in December 2018. Compared with the GCM, which recognizes state sovereignty more directly in national migration policy, GCR was about convincing states and other policy actors to join the UNHCR's new international cooperative framework on refugee protection, a more controversial policy area than migration, where states' legal discretion is more limited through their commitments to the 1951 Refugee Convention. That is, the UN had a more difficult persuasion task before the GCR event, and it performed a comprehensive social media campaign before December 2018. Despite this, in all these events, the most popular, the most bridging, and the most communication-gap-filling policy actor was the UNHCR. Several other UN institutions joined the debate. However, except the EU ECHO and EP LIBE, EU institutions' presence on Twitter was

not strong around these four policy events in the global network, including the announcement of the EU Migration and Asylum Compact, despite its continuous and visible presence otherwise.

In the European network, as shown in the first two rows of Table 3, we observe an increase in the numbers after the GCM and EU New Pact events whereas numbers decrease after the GCR and GRF events. That is, the communication activity increased after migration policy events while they increased before refugee and asylum policy events. Increased activity before a policy event takes place is a sign of controversy and interest in influencing the results of the event. It is important to note that the EU's New Pact on Migration and Asylum conceptualizes and treats refugee and asylum policy as part of the EU's migration policy, in one document, in contrast to the current focus of the CEAS distinctively on refugee and asylum seeker policies. The numbers in Table 3 indicate that this approach is also reflected in the European Twitter network patterns. The EU's attempt to embed its refugee and asylum policy in its migration policy objectives in the New Pact has been raising concerns in the international society, which led, among other things, the UNHCR to post diplomatic recommendations to the EU.

Differently from the global network in Table 2, EU institutions and agencies were the dominant actors in the European Twitter network during the four policy events in addition to the UNHCR. Surprisingly, the activity metric (outdegree) shows that the EC's presence was quite weak both before and after the four events. However, other EU institutions and agencies – e.g., EP LIBE, DG ECHO, EU FRA, EASO – were highly active. It is particularly noteworthy that this was the case also in connection with the EC's introduction of the New Pact proposal on 23 September 2020. However, the fact that the UNHCR was on board, intensively communicating within the Twitter network particularly after the introduction of the New Pact reflects the controversy between the EU and the UNHCR regarding the content of the New Pact. Indeed, the UNHCR was the most active actor in the European Twitter network after the EC's announcement of its proposal of the New Pact. Also, the metrics of popularity, bridging, and structural gap filling show that the UNHCR was among the top influential actors in the European Twitter network concerning communication about the New Pact. On the other hand, although not very actively tweeting itself during the New Pact event, the EC was the most popular (being retweeted or mentioned the most), the most bridging (linking other actors to each other), and the most communication gap filling (linking weakly connected parts of the European Network) actor after the announcement of the New Pact proposal.

Table 2: Policy Actors in the *Global* Twitter Network Before and After Key International Policy Initiatives

	GCM		GCR		1st GRF		EU New Pact	
	Before	*After*	*Before*	*After*	*Before*	*After*	*Before*	*After*
Actors (Nodes)	54	74	115	43	51	61	47	52
Links (Edges)	62	96	138	46	61	81	58	59
Most active (degree centrality - outdegree)								
1st ranking	UN	UN	UN	UN	EP LIBE	UN	UN	UNHCR
2nd ranking	Oxfam	UNHCR	Neos (AT)	ASKVluchtelingen (NL)	UN	UNHCR	UNHCR	UN
3rd ranking	UNHCR	Migration Policy Institute	IOM	IOM	International Institute of Humanitarian Law (IT)	WHO	Women's Refugee Commission	UN PeaceKeeping
Rank of EC	Isolate	Isolate	115	Isolate	51	61	47	52
Rank of UNHCR	3	2	5	35	5	2	2	1
Most popular (degree centrality - indegree)								
1st ranking	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR
2nd ranking	UN	UN	UN	UN	UN	UN	UN	UN
3rd ranking	UNICEF	World Bank	IOM	UN Human Rights	IOM	UNICEF	IOM	UNICEF
Rank of EC	Isolate	Isolate	51	Isolate	4	25	20	4
Rank of UNHCR	1	1	1	1	1	1	1	1
Most bridging (betweenness centrality)								
1st ranking	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR
2nd ranking	UN	UN	UN	IOM	UN	UN	UN	DG ECHO
3rd ranking	UNDP	IOM	UNIEF	UN	IOM	World Bank	IOM	UN
Rank of EC	Isolate	Isolate	115	Isolate	51	61	47	52
Rank of UNHCR	1	1	1	1	1	1	1	1
Least constrained (filling gaps)								
1st ranking	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR	UNHCR
2nd ranking	UN	UN	D66 (NL)	UN	EP LIBE	EuroFound	Migration Policy Institute	ECRE
3rd ranking	Women for Refugee Women	Immigration, Refugees and Citizenship (CA)	UN	ICMC	IOM	UN	Women's Refugee Commission	UNFPA
Rank of EC	Isolate	Isolate	115	Isolate	12	60	45	10
Rank of UNHCR	1	1	1	1	1	1	1	1

Table 3: Policy Actors in the *European* Twitter Network Before and After Key International Policy Initiatives

	GCM		GCR		1st GRF		EU New Pact	
	Before	*After*	*Before*	*After*	*Before*	*After*	*Before*	*After*
Actors (Nodes)	36	54	62	44	75	47	59	84
Links (Edges)	31	50	73	36	84	60	74	111
Most active (degree centrality - outdegree)								
1st ranking	DG ECHO	Migration Policy Institute	EP LIBE	ORBIT (BE)	EP LIBE	EuroFound	International Rescue Committee EU	UNHCR
2nd ranking	Europol	DG ECHO	EASO	EP LIBE	PICUM	Borderline Europe (DE)	Women's Refugee Commission	Greek Refugee Forum (EL)
3rd ranking	ECRE	PICUM	Ministry of Interior (PL)	EASO	EASO	Greek Refugee Forum (EL)	DG ECHO	EASO
Rank of EC	36	34	42	44	46	32	59	70
Rank of UNHCR	36	Isolate	62	44	75	47	7	1
Most popular (degree centrality - indegree)								
1st ranking	ECRE	EP LIBE	EC	EP	EC	UNHCR	EC	EC
2nd ranking	UNHCR	EC	EP	EC	EP	Frontex	UNHCR	ECRE
3rd ranking	EU FRA	ECRE	Frontex	UNICEF	EP LIBE	EU FRA	Caritas Europa	ProAsyl
Rank of EC	8	2	1	2	1	7	1	1
Rank of UNHCR	2	Isolate	7	26	7	1	2	6
Most bridging (betweenness centrality)								
1st ranking	ECRE	EP LIBE	EASO	Stichting (NL)	EP LIBE	EP LIBE	DG ECHO	EC
2nd ranking	EU FRA	EU FRA	EP LIBE	DG ECHO	EASO	EASO	RedCross EU	UNHCR
3rd ranking	DG ECHO	EC	DG ECHO	PICUM	ECRE	ECRE	UNHCR	DG ECHO
Rank of EC	36	4	4	44	4	6	59	1
Rank of UNHCR	36	Isolate	62	44	75	47	3	2
Least constrained (filling structural gaps)								
1st ranking	ECRE	Migration Policy Inst.	EP LIBE	Stichting (NL)	EASO	EC	EC	EC
2nd ranking	UNHCR	EC	EP	ORBIT (BE)	EP LIBE	EP LIBE	DG ECHO	ECRE
3rd ranking	EU FRA	PICUM	EASO	EP	ECRE	EASO	PICUM	UNHCR
Rank of EC	10	2	4	7	6	1	1	1
Rank of UNHCR	2	Isolate	25	42	16	9	8	3

In summary, the European Twitter network across the four refugee and asylum policy events, ECRE, DG ECHO, DG FRA, EP LIBE, EASO, PICUM, and the UNHCR emerged as the most central actors structuring the European Twitter network and leading the communication. The EC's publicity increases particularly in connection with the EC's announcement of the New Pact proposal.

5. Structural Communication Gaps: Where are They? Who should Fill them? How?

In this section, we address two kinds of structural communication gaps: (i) isolates, i.e., policy actors who are tweeting about refugee protection, but not addressing or being addressed by others and (ii) policy actors who are in the largest component but without adequate levels of constraint.

5.1 Isolates in the Global and European Networks

Our depiction and discussion hitherto is based on the largest network components of the global and European networks that are illustrated in the middle of Figures 19 and 20. While the majority of policy actors are interconnected within the largest components, the actors that are illustrated with dots in the two crescents around the largest components show that there are many other actors on Twitter who are communicating about international refugee protection but not communicating with key policy actors like the UN, UNHCR, IOM, EC, EASO, EU ECHO, ECRE, PICUM, and national refugee councils. This is a major structural gap in the two Twitter networks, which reduces policy actors' publicity and their potential influence on the structure and content of public debates. Therefore, we outline the characteristics of the detached actors and explore ways of bringing them into the largest network components in the global and European networks.

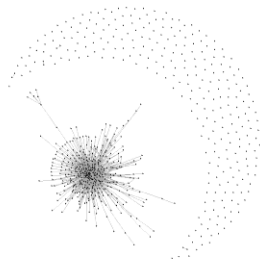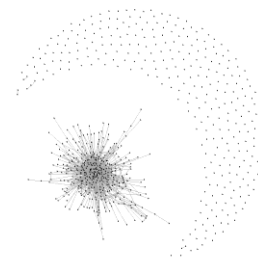**Fig.19: The Global Network and Its Isolates**   **Fig.20: The European Network and Its Isolates**

Figures 21 and 22 show the main features of the isolates in, respectively, the global and European networks. Isolates are policy actors who are not retweeting, mentioning, or being retweeted or mentioned by others. A vital communication gap in this respect concerns the prevalence of *international and national NGOs* among the isolates. In practice, this means that the UN, the EU, and other policy actors active in the Global and European networks are not able to reach an important group of organizations that are interested in refugee protection.

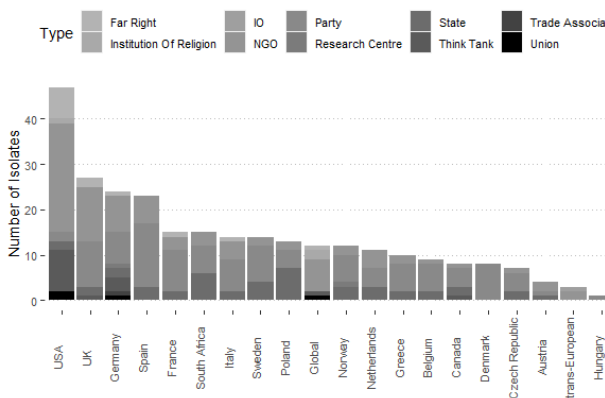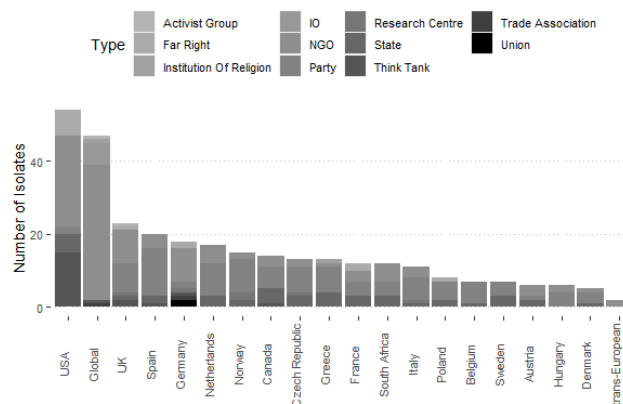**Fig.21: Isolates in the Global Twitter Network**   **Fig.22: Isolates in the European Twitter Network**

Secondly, in addition to many sub-state institutions, almost all national political parties and national NGOs are beyond the reach of the UN and EU institutions on Twitter. Moreover, for any policy actor, it is of vital interest to reach the most influential players in global politics. In this regard, figures 21 and 22 show that the UN and EU institutions do not reach the US policy actors and many global IOs, global NGOs, and global activist groups who are active on Twitter. Moreover, the EU institutions' activity level in the global network is also low (cf. Figures 3-10).

Looking from the perspective of the UN and EU institutions and national states, the main reason for these policy actors not directly addressing each other online is highly likely related with diplomacy concerns as well as the existence of established channels of offline communication. However, highlighting best practices of the states through mentions and retweets should not be too tricky from a diplomacy point of view. Further, including international and national NGOs as well as parties in the largest Twitter network components at European and global scales should be possible with simple communication strategies – e.g., following them, inviting them to follow the UN and EU institutions' Twitter accounts, re-tweeting and mentioning them when relevant.

5.2 Constrained actors in the Global and European Networks

As mentioned, the level of an actor's constraint assesses if it receives only redundant information, i.e., has only neighbors which are also connected. Prominently, Burt (2004) uses this measure to identify structural holes. Actors with constrained roles span no or few structural holes, actors with low constraint values are tied to multiple information sources. While we presented actors spanning structural holes in sections 3 and 4 in passing, we will now focus on selected actors which are part of the largest component (i.e., they are no isolates) but possess mostly constrained relationships. Those actors have a high potential to link to more diverse set of actors and information on Twitter. Table 4 illustrates key values of actors on the constraint metric and ranks. The smaller the constraint metric, the bigger structural communication gap a policy actor fills in a social network.

Table 4: Constrained Actors in the Global and European Networks

	Actor	Constraint (Metric)	Constraint (Rank)	Number of Neighbors
Global network				
	UNHCR	0.1194	1	43
	PICUM	0.1682	2	15
	UN	0.5487	67	19
	IOM	0.7185	144	20
	UNICEF	0.7372	150	12
	ECRE	0.4925	47	16
	Council of the EU	0.7492	157	4
	European Commission	0.4189	24	6
	European Parliament	0.4358	31	2
European network				
	UNHCR	0.2691	89	8
	PICUM	0.1114	4	37
	UN	0.2350	72	4
	IOM	0.1171	6	13
	UNICEF	0.6624	249	3
	ECRE	0.0892	2	47
	Council of the EU	0.1424	14	9
	European Commission	0.0927	3	22
	European Parliament	0.1372	11	15

For the global network, we find that the UNHCR and PICUM are spanning multiple parts of the network, or, in other words, is least constrained (cf. Figure 8). Other actors related to the UN or the EU are much more constrained. Table 4 clearly shows that important branches of the UN are connected to actors sharing the same patterns of relationships and, hence, similar information. A

simple numeric example might underline the mechanism at work. For instance, UNICEF is only tied to 12 other actors in the global network, while the UNHCR entertains communications with 43 other actors. Some actors from the EU have even less diverse relationships, for instance, the European Parliament has only two different nodes as neighbors. To be sure, it is not only the raw number of relations that makes an actor constrained in Burt's sense. The EU Commission, for instance, has also only 6 different neighbors in the global Twitter network, but all of them share not much information, or, put differently, every neighbor provides non-redundant information.

Turning to the EU network, we are already familiar with the least constrained actors: here, the EC and ECRE are the least constrained, that is, connecting multiple parts of the European network. Interestingly, the UNHCR and, to a much larger extent, UNICEF occupy network positions that lead to receiving mostly redundant information. Again, we see that it is not only the raw number of neighbors, but the pattern underlying neighbors' relations. For instance, the Council of the EU and the UNHCR (9 vs. 8 neighbors) have an almost similar number of neighbors. Yet, the UNHCR is much more constrained in its relation, i.e., they share more ties with each other and, hence, possess access to more similar sets of information.

To limit the amount of redundant information, policy actors would not only need to simply "tweet more" (or rather: retweet and mention). As the examples of the EU Commission or EU Council show, it is important to whom one is referring: addressing actors from different communities increases the amount of non-redundant information rapidly and, hence, fills "structural holes". It seems noteworthy that the transnational NGO PICUM spans such structural holes in both networks, and ECRE in the European network. In other words, the communication strategy of PICUM and ECRE rests on many pillars and connects multiple parts of the global and European Twitter network on international protection of refugees.

6. Conclusion

We have found that the UNHCR has a stable and continuous presence in the global Twitter network over time. The UNHCR's communication activity and impact on global communication increases visibly in connection with global migration and refugee policy events. In contrast, the EU institutions increase their Twitter activity and impact the most during mass migrant and refugee inflows into Europe. In the European network, the EC has relatively less communication activity but is mentioned and retweeted a lot in connection with its refugee protection policy and practice.

The UNHCR is more present in the European network than EU institutions are in the global network. While the UNHCR's activity and centrality in the European network increased after the EC's announcement of the New Pact, the EC's and other EU institutions' presence in the global network during the same period barely increased beyond being mentioned more.

Our analysis also shows that the UNHCR, the European Commission, PICUM, and ECRE are the most central actors driving the global and European scale communication on international protection of refugees. Their centrality keeps pace with other stakeholders before and after critical global and transnational policymaking events. However, important policy actors are outside their reach on Twitter. Most notably, these are national governments including the USA, many international and national NGOs which are tweeting on refugee protection, and political parties.

This result is especially crucial in the light of another PROTECT finding: small countries' discourses on migrants and refugees on Twitter, Facebook, YouTube, and Reddit are characterized by nationalism and nativism to a larger extent than by global and transnational perspectives (Dutceac Segesten and Farjam 2022). UN and EU institutions add global and transnational perspectives to public debates on international protection; when national states and policy actors from small countries are outside the UN and EU social media networks, the risk for the formation of nationalist and nativist echo-chambers increases, reinforcing the current populist tendency to question the legitimacy of the international refugee law and international organizations. PICUM's and ECRE's social media strategies can be regarded as examples of best-practice for reaching and influencing a wide spectrum of policy actors on Twitter, and they need to be studied in more depth.

References

Ahmed, Saifuddin, Kokil Jaidkab, Jaeho Choda. 2016. The 2014 Indian elections on Twitter: A comparison of campaign strategies of political parties. *Telematics and Informatics* 33: 1071-1078987.

Ahmed, Saifuddin, Vivian Hsueh Hua Chen, Kokil Jaidka, Rosalie Hooi, and Arul Chib. 2021. Social media use and anti-immigrant attitudes: evidence from a survey and automated linguistic analysis of Facebook posts. *Asian Journal of Communication*. 31(4): 276-298.

Dutceac Segesten, Anamaria and Mike Farjam. 2022. A content and frame analysis of the social media discourse on refugees and migrants, in the context of the United Nations and the European Union, 2015-2019. PROTECT Deliverable no. D7.6. Bergen: PROTECT Consortium.

Freeman, Lin. 1979. Centrality in social networks: Conceptual clarification. *Social Networks*, *1*(3), 215–239.

Gintova, Maria. 2019. Understanding government social media users: an analysis of interactions on Immigration, Refugees and Citizenship Canada Twitter and Facebook. *Government Information Quarterly* 36(4):1-10.

Granovetter, Mark. 1973. The Strength of Weak Ties. *American Journal of Sociology*, *78*(6), 1360–1380.

Heiberger, Raphael., Majó-Vázquez, Silvia, Castro Herrero, Laia, Nielsen, Rasmus, & Esser, Frank. 2021. Do Not Blame the Media! The Role of Politicians and Parties in Fragmenting Online Political Debate. *The International Journal of Press/Politics*, 19401612211015120. https://doi.org/10.1177/19401612211015122

Hong, Sounman and Sun Hyoung Kim. 2016. Political polarization on twitter: Implications for the use of social media in digital governments. *Government Information Quarterly* 33: 777-782.

Hooghe, Liesbet and Gary Marks. 2018. Cleavage theory meets Europe's crises: Lipset, Rokkan, and the transnational cleavage. *Journal of European Public Policy* 25(1), pp.109-135.

Mickoleit, A. 2014. "Social Media Use by Governments: A Policy Primer to Discuss Trends, Identify Policy Opportunities and Guide Decision Makers." *OECD Working Papers on Public Governance*, No. 26. OECD Publishing.

Newman, Mark. 2010. *Networks: An introduction*. Oxford University Press.

Perez-Cepeda, Maximiliano and Leopoldo G. Arias-Bolzmann. 2021. Refugee Information Consumption on Twitter. *Journal of Business Research* 123: 529-537.

Praet, Stiene, David Martens, Peter Van Aelstb. 2021. Patterns of democracy? Social network analysis of parliamentary Twitter networks in 12 countries. *Online Social Networks and Media* 24 (100154)

Raalte, Anoekvan, Pieter Maeseele, Sean Phelan. 2021. Twitter as a right-wing populist's playground: The algorithmic populism of Dutch political party 'Forum voor Democratie' and leader Thierry Baudet during their political rise. *Discourse, Context & Media* 44: 1-8.

Rodriguez, Nathian Shae. 2016. Communicating global inequalities: How LGBTI asylum-specific NGOs use social media as public relations. *Public Relations Review* 42: 322–332.

Seo, Hyunjin, Ji Young Kim, Sung-Un Yang. 2009. Global activism and new media: a study of transnational NGOs' online public relations. *Public Relations Review* 35(2), 123–126.

Sicakkan, Hakan G. (2021). Conceptualizing the Right to International Protection: A Cleavage Theory Approach. PROTECT Deliverable no. D1.1. Bergen: PROTECT Consortium.

Sicakkan, Hakan G. and Idil Atak. 2021. Devising the Policy Tools of a Human Rights-Based International Protection System. PROTECT Deliverable no. D1.3. Bergen: PROTECT Consortium.

Sicakkan Hakan G., Raphael Heiberger. 2022 (Forthcoming). Between Europeanism and Nativism: Exploring a Cleavage Model of European Public Sphere in Social Media. *Javnost- The Public*.

Twitter. 2021a. "How to Post Twitter Replies and Mentions." Retrieved December 8, 2021 (https://help.twitter.com/en/using-twitter/mentions-and-replies).

Twitter. 2021b. "How to Retweet." Retrieved December 8, 2021 (https://help.twitter.com/en/using-twitter/how-to-retweet).

Wasserman, Stanley. and Faust, Katharine. (1994). *Social Network Analysis: Methods and Applications*. Cambridge University Press.