

Research Article

Communications patterns and power dynamics in the digital public sphere: A case study of the conversation about Minimum Living Income on Twitter

Patrones de comunicación y dinámicas de poder en la esfera pública digital: Un estudio de caso de la conversación sobre el Ingreso Mínimo Vital en Twitter

Laura Pérez-Altable¹*and Ana Serrano-Telleria²

- ¹Pompeu Fabra University, Plaça de la Mercè, 10-12, 08002 Barcelona.
- ² University of Castilla La Mancha, Calle Altagracia, 50, 13001 Ciudad Real.
- *Correspondence: <u>laura.perez@upf.edu</u>

Abstract: In 2020, in the midst of the first wave of the pandemic, the Spanish Government approved the implementation of the Minimum Living Income, a non-contributory benefit under the Spanish social security system that guarantees a minimum income for those in need of one. Drawing on previous work of Stefania Vicari et al. (2018) about the use of political hashtag publics and counter-visuality on the Italian Twittersphere, we analysed patterns of communication among users on Twitter. Thus, this paper contributes to existing research on the deliberative process within the digital sphere, with a particular focus on power structures and communication patterns. Findings show that digital-born media, politicians and political parties play a central role in the discussion through mention and quoted tweets practices, but not in the production of new messages, while ordinary users are more likely to be retweeted. This would suggest a tendency towards retransmitting and disseminating content produced by ordinary users more than official sources.

Keywords: digital public sphere; Twitter; Minimum Living Income; power dynamics.

Resumen: En 2020, durante la primera ola de la pandemia, el Gobierno español aprobó la puesta en marcha del Ingreso Mínimo Vital, una prestación no contributiva del sistema de seguridad social español que garantiza unos ingresos mínimos a quienes lo necesiten. Basado en el trabajo previo desarrollado por Stefania Vicari et al. (2018) sobre el uso público de hashtags políticos y la contravisualidad en la Twitteresfera italiana, este artículo analiza los patrones de comunicación entre los usuarios de Twitter. Así, este trabajo contribuye a la investigación existente sobre el proceso deliberativo dentro de la esfera digital, con un enfoque particular en las estructuras de poder y los patrones de comunicación. Los resultados muestran que los medios de comunicación nacidos en el ámbito digital, los políticos y los partidos políticos desempeñan un papel central en el debate a través de las prácticas de mención y citación de tuits, pero no en la producción de nuevos mensajes, mientras que los usuarios ordinarios son más propensos a ser retuiteados. Esto sugeriría una tendencia a la retransmisión y difusión de contenidos producidos por usuarios ordinarios más que por fuentes oficiales.

Palabras clave: esfera pública digital; Twitter; Ingreso Mínimo Vital; dinámica de poder.

1. Introduction

The On 24 September 2019, the Spanish Prime Minister Pedro Sánchez called an election which was held on 10 November 2019. The Spanish Socialist Workers Party (PSOE, for their Spanish initials) won the election with 120 of the 350 seats, so it was forced to form a coalition government with other parties. Finally, on 13 January 2020, the first nationwide coalition government was formed in Spain since the Second Spanish Republic (1931–1939). The cabinet consisted of members of the Spanish Socialist Workers Party and Unidas Podemos as well as independents proposed by both parties. According to the Spanish Prime Minister, Pedro Sánchez, this coalition is 'the most progressive government' in Spanish history. In addition, the results of the election also left the most fragmented and polarised parliament in the recent history of the country. Shortly after the new government was formed, the first cases of coronavirus in Spain emerged in January, and finally, on 13 March 2020, Pedro Sánchez, the Spanish Prime Minister, announced a declaration of nationwide State of Alarm, and as a consequence, a strict lockdown was imposed on 14 March 2020. The State of Alarm ended on 21 June, but the number of cases increased again, and the second wave peaked in October 2020.

As a result of the effects of the pandemic and the measures taken in response to it, a generalised economic crisis started, and the rates of inequality and relative poverty in Spain rose (Chislett, 2020). To lessen the economic impact of the coronavirus disease 2019 (Covid-19) crisis, at the end of May 2020, in the midst of the first wave of the pandemic, the Spanish Council of Ministers approved the Royal Decree Law 20/2020 introducing the Minimum Living Income, a non-contributory benefit under the Spanish social security system that guarantees a minimum income for those who do not have it. According to the Ministry of Inclusion, Social Security and Migrations (2021), the Minimum Living Income 'is a benefit aimed at preventing the risk of poverty and social exclusion of people living alone or who are part of a cohabitation unit and lacking the basic economic resources to meet their basic needs'. In the Spanish Parliament, all political parties voted yes to the Minimum Living Income benefit, except the far-right party VOX, which abstained. According to the Spanish Government estimation, the Minimum Living Income will benefit some 850,000 households and 2.3 million people, of whom 1 million are in extreme poverty.

By applying our proposed approach to the exploration of Twitter network around the debate about the Minimum Living Income in Spain, this article focuses on communication patterns in the digital public sphere of Twitter and the conversation about the approval of the Minimum Living Income and its implementation. We consider this case study relevant because it offers the opportunity to investigate the communication patterns of a public issue with social and political impact under exceptional circumstances caused by the Covid-19 pandemic. Furthermore, as a previous study focus on the Finland case (Parth & Nyby, 2019), the use of the social media platforms to disseminate information about this type of policies is essential to the legitimisation of basic income. In that sense, this type of approach demonstrates the usefulness of data from platforms such as Twitter for social policies analysis.

To get an understanding of how users interact and how this interaction is articulated within this digital public sphere, we focused on Twitter. The prominent use of some functions of this social media platform (such as mention, retweet and quote tweet practices) would suggest some trends and tendencies to understand how the conversation in online networks is structured by different types of actors and the relations established by them. Use of the mention and quote tweet function indicates a greater tendency towards dialogue, while retweeting practices would suggest a trend towards disseminating content produced by others. Hence, to understand the interaction on Twitter about a social a political issue this article addressed the following research question: RQ- How was the information disseminated and what power relations were established through the different actors on Twitter regarding the debate on the approval of the Minimum Living Income in Spain?

2. Digital public sphere, power and platforms

The emergence of digital platforms and the changes in the mediatic system have made possible the establishment of a new scenario enabling new forms of communication (Pérez-Altable et al., 2020: 4). Thus, digital media play a central role in creating new ways to contribute to society through interaction among users across social media platforms (Marres, 2017: 7) when the implications of communication technologies within research fields are understood (Pavan, 2017: 62). In this sense, this study attempts to understand the implications of the use of social media in the process of establishing a specific topic inside the agenda. As Elena Pavan suggested (2014: 441), digital networks may be understood both as a metaphor and as empirical tools to explore the relations among actors. In this sense, the use of social media is understood in this proposal as a powerful tool to produce knowledge concerning the debate about the approval and the implementation of the Minimum Living Income benefit in Spain. For analysis of digital networks, it is important to understand the distinctive role that communication plays in these often densely interwoven networks of human actors, discourses and technologies. Beyond sharing information and sending messages, the organising properties of communication become prominent in digital networks (Bennet & Segerberg, 2013: 42).

This scenario implies a shift from passive spectators of traditional media to active users who not only consume content but also interact with it in different ways (Soler-Adillón, 2017: 2), leading to the formation of an active audience. According to Pere Masip, Carlos Ruíz-Caballero and Jaume Suau (2019), the concept of active audiences was first introduced to distinguish the new nature of audiences (Bruns & Highfield, 2016), perceived not only as active in the interpretation of journalistic texts and messages but also in the sense of being producers, disseminating content and holding public debates in online environments (Suau, 2015).

While the traditional media have adapted to the new media logic of the digital sphere (Pont-Sorribes et al., 2009), the new media are especially relevant because they enable conversations between politicians, the media and citizens (Suau-Gomilla et al., 2020: 210). In this new communicative landscape shaped by internet and social media platforms, the hybrid media system (Chadwick, 2013) is a central concept because it enables us to not only understand the changing media ecologies and the media constellation but also to understand how power works (Costera-Meijer et al., 2021: 11). According to Manuel Castells, 'power is the most fundamental process in society, since society is defined around values and institutions, and what is valued and institutionalised is defined by power relationships' (Castells, 2009: 10). For Castells, social networks that make use of global digital communication are the fundamental source of power and counter-power in contemporary society (Fuchs, 2009: 94). The question of power is essential since 'it draws attention to flux in between the interstitial and the liminal and it reveals how older and newer media logics in the field of news and media, and politics blend, overlap, intermesh and co-evolve' (Costera-Meijer et al., 2021: 14).

In line with this, one of the most interesting principles of network theory is the concept of 'power signature'. This term refers to the degree to which recognition (prestige and influence) is concentrated or dispersed among actors in a network. The basic idea is that there is a remarkable tendency among networks of very different types to link to, and thus concentrate, their associations around established high-capacity or high-popularity nodes (Buchanan, 2002). This tendency gives such networks a curious but robust 'scale-free' pattern of association linking bottom nodes to larger, or more widely recognised, actors (Barabási, 2009). Steep power law distribution (a small number of nodes getting most of the links and traffic) can be observed in many kinds of social and political networks, and the importance of these network 'heads' has been widely discussed; additionally, the concentration of followers around a few highly visible nodes is not only inevitable but explains their impact in terms of influence or prestige. Bennnet and Segerberg note that (2013: 154) the 'tails' of these steep power distributions can also serve important roles that may not be intuitive when one considers the bottom end of a power distribution. According to Malliaros et al. (2016), the problem of identifying nodes with potent

dispersive properties in networks can be further split in two subtopics: (1) identification of individual influential nodes, and (2) identification of a group of nodes that, by acting together, are able to maximise the total spread of influence (ibidem: 1). For instance, the tail of a network drives many new nodes to the top; thus, most influential nodes aggregate audiences among otherwise unstructured online populations.

According to Elena Pavan (2017: 9), to capture instead the social aspects of power in networks, which have to do with how users exploit social media features and affordances, the focus should move from the structural features of online networks to the type of communication and participation processes they host. Agreeing with Boyd et al. (2010: 1), social media such as Twitter has enabled communication to occur asynchronously and beyond geographic constraint, but it is bound by a reasonably well-defined group of participants in some limited shared social context. By the term 'social', following Nick Couldry (2013: 1), we mean the web of interrelationships and dependencies between human beings that are always, in part, relations of meaning. It is thus important to consider the question of the interaction between two dynamic processes: the process of users posting and sharing information, and the process of network evolution (Myers & Leskovec, 2014: 914). Interaction, here, is public in terms of being accessible by anyone navigating the page and aiming to reach large audiences (Coretti, 2014: 126). As Stefania Milan has pointed out (2015: 890), the fundamental change that social media introduce to the realm of the organised collective is at the material level. By materiality, she means both the online platforms people increasingly depend on for interpersonal communication and organising, but also the messages, images and data field emotions and relations brought to life on those platforms.

Finally, as Irene Costera-Meijer (2021: 15) has noted, in this hybrid media system we can find many different actors participating in a struggle to shape public discourse and define the news agenda; in that respect, the central objective is to determine 'how and why these actors behave as they do' and to identify the extent to which new norms are becoming embedded in the routine communicative practices in the digital public sphere.

3. Data and methods

The present analysis looks at networked debate and communication patterns starting from digital discussion unfolding within the space of Twitter (Radicioni et al., 2021: 2). This paper focus on a case study of a conversation on Twitter about the approval of the law of the Minimum Living Income benefit in Spain and its implementation. The extraction of Twitter data was performed by selecting the keywords 'ingreso mínimo vital' (Minimum Living Income in Spanish). Data were collected using the Twitter Search API across the period 1 November 2019 to 14 October 2020. This time interval covers the entire period of the electoral campaign of the Spanish general election on 10 November 2019, the voting day, the formation of the new government of coalition and the first and second wave of the Covid-19 pandemic as well as the approval and implementation of this benefit (Figure 1). Because we aimed to focus on Spanish users, we built our sample only with tweets published in Spanish language. The final dataset comprises 142,389 tweets.

To investigate the evolution of the conversation on Twitter about the Minimum Living Income, we identified the most relevant key dates and events that took place during the time that our study covers. Thus, we divided our sample into five different phases, according to these key dates (Table 1).

19500 18200 16900 15600 14300 13000 11700 10400 9100 7800 6500 5200 3900 2600 1300 4/13/20 5/3/20 5/13/20 5/23/20 6/2/20 6/12/20 6/22/20 7/12/20 7/12/20 8/1/20 8/11/20 8/21/20 3/24/20 4/3/20 4/23/20 1/22/20 2/7/20 2/18/20 2/29/20 3/13/20

Figure 1. Longitudinal distribution of the dataset.

Source: Produced by the authors.

Table 1. Phases of the research analysis.

Phase	Time frame	Description of the most relevant events
1	01/11/2019-13/01/2019	Electoral Campaign, polling day and formation of the coalition government
2	14/01/2020-14/03/2020	First cases of coronavirus in Spain, declaration of the State of Alarm and start of the lockdown
3	14/03/2020-29/05/2020	Approbation of the Royal Decree Law introducing the Minimum Living Income
4	30/05/2020-21/06/2020	End of the State of Alarm and lockdown
5	22/06/2020-14/10/2020	Implementation of the Minimum Living Income benefit and second wave of Covid-19 in Spain.

Source: Produced by the authors.

First, Conversation in online networks is structured by different types of relations depending on the interactions established by users (Pavan, 2017). In this study we analysed the following different types of direct interactions between users:

- Mention: when a user posted a message that explicitly refers to one or more users.
 According to Courtenay Honey and Susan C. Herring (2009: 2), this use is a form of
 addressivity. 'Addressivity' can be defined as a user indicating an intended addressee by
 typing the person's name at the beginning of the message.
- Retweet: when a user reposted or forwarded another user's message. Retweeting effectively highlights the most relevant messages for users. Hence, each retweet substantially increases the range of the original tweet (Poell & Darmoni, 2012: 17).
- Quote tweet: a quote tweet is a retweet that has been made with a comment.

To provide a longitudinal exploration of the communication practices characterising the conversation on Twitter about the Minimum Living Income, we drew upon work by Vicari et al. (2018: 1243), and we analysed the conversation dynamics and identified (1) the number of tweets and unique users in each phase; (2) the percentages of mentions, retweets and quoted tweets in each phase and (3) the percentages of tweets that contain uniform resource locators (URLs) to external sources in each phase. Furthermore, we identified the most relevant users in the conversation during each phase of this study. Thus, adapting the coding scheme from Vicari et

al. (2018: 1240), we coded the top ten mentioned, retweeted and quoted users in each phase with at least three mentions, three retweets or the accounts that have been quoted at least three times, according to the categories of Table 2. For privacy and ethical reasons, Twitter accounts of ordinary users have been anonymised and replaced with pseudonyms (e.g. User_1).

Table 2. Categories of Twitter users.

Category	Example
Celebrity	@Paula_VazquezTV
Digital-born media	@eldiarioes
Experts	@JoaquinBoshGra
Institutional accounts	@desdelamoncloa
Journalist	@iescolar
Legacy media	@el_pais
Ordinary user	@User_1
Political party	@PS0E
Politician	@sanchezcastejon
Satirical accounts	@WillyTolerdoo
Social media	@YouTube

Source: Produced by the author.

Finally, we explored the effect of content types on user practices. More specifically, we analysed the retweeting practices depending on if the tweet was retweeted or not. These tweets were categorised on the basis of their content, that is, if the URL redirects to a page or if the URL belongs to a multimedia content (photo or video). Tweets without a URL in the message were categorised as 'text only'.

4. Minimum Living Income communication practices and power dynamics

On a platform such as Twitter, a prominent use of mention and quote tweets would suggest a greater tendency toward dialogue, while a prominence of retweets would suggest a trend towards retransmitting and disseminate content produced by others (Pavan, 2017: 9). In Table 3, we can see that the mentioning practice was the most common practice (45.73%) across the five different phases, followed by retweeting practices, with 36.26%. As the table shows, quote tweets constitute a residual form of interaction in this network, as they account for, on average, only 7.98% of the total.

Table 3. Conversation patterns.

Phase	Tweets	Mentions		Retweets		Quotes		
1	534	279	52.24%	205	38.38%	18	3.37%	
2	464	207	44.61%	149	32.11%	19	4.09%	
3	57.989	24.799	42.77%	22.150	38.20%	4.878	8.40%	
4	48.104	21.319	44.32%	17.007	35.35%	4.152	8.63%	
5	35.298	18.516	52.46%	12.122	34.34%	2.301	6.19%	
Total	142.389	65.120	45.73%	51.633	36.26%	11.368	7.98%	

Source: Produced by the authors.

Tables 4-8 present the Twitter handles of the top ten accounts for each phase with at least three mentions, retweets or quoted tweets. As the different tables illustrate, mentioning and quoting tweets practices share some similar patterns regarding the accounts with the most interactions. As we can see from Table 4, during the first phase of this study, mentioned and retweeted mechanisms were the most prominent. In this phase we can distinguish four types of users above the rest: accounts from media outlets, such as eldiarioes or _contrainfo, accounts from journalists, for example estherpalomera or iescolar, political parties official accounts, that is vox_es or PSOE and, finally, official accounts of politicians, as sanchezcastejon or luisacarcedo. The quoting mechanism, with only two accounts, is residual in this phase.

Table 4. Top users mentioned, retweeted and quoted during the Phase 1.

Phase 1

Mention				Retweet				Quoted			
Rank	User	N	Cum. %	Rank	User	N	Cum. %	Rank	User	N	Cum. %
1	eldiarioes	141	37.7	1	PSOE	1,349	17	1	eldiarioes	3	16.7
2	sanchezcastejon	45	49.7	2	eldiarioes	1,103	31.3		PS0E	3	33.3
3	PS0E	19	54.8	3	User_2	999	44.1				
4	ahorapodemos	6	56.4	4	sanchezcastejon	485	50.2				
5	_contrainfo	5	57.8	5	User_3	406	55.4				
6	User_1	4	58.8	6	PODEMOS	330	59.6				
	luisacarcedo	4	59.9	7	estherpalomera	155	61.6				
	unvelez	4	61	8	iescolar	169	63.8				
7	iescolar	3	61.8	9	carlossmato	158	65.8				
	vox_es	3	62.6	10	User_4	124	67.4				

Source: Produced by authors.

The second phase (Table 5) is characterized by the diversity of accounts that appear when we analyse the mentioning mechanism: media outlets, institutional accounts, politicians, accounts from social media platforms or political parties official accounts. We consider especially relevant the central role played by politicians. Focused on the analysis of these accounts, we can observe that all of them belong to members of the Spanish Government: from the personal account of the Prime Minister (sanchezcastejon) to the personal account of the Minister of Inclusion, Social Security and Migration (joseluisescriva). It appears also the personal account of the former vice president Pablo Iglesias and the personal account of the Minister of Labour and Social Economy, Yolanda Díaz. The mention of these accounts suggests a personalisation of politics, with the rise in popularity of politicians.

It is interesting to note that in this phase and specifically in the retweeting mechanism, institutional accounts emerge, for example DsocialesGob or desdelamoncloa. In that sense, the use of institutional accounts from social media platforms by the Spanish Government to disseminate information about the Living Minimum Income offer an essential opportunity to the legitimisation of this basic income.

Finally, quoting mechanism is also residual in this phase, as it happened in Phase 1.

Looking at the third phase (Table 6) it becomes evident that the increase in the total numbers of interactions both in the mentioning and retweeting mechanisms as well as the quoting practice. In this phase, the most mention accounts were, above all, official accounts from political parties and politicians. In that sense, we can note a shift from a more informative sources (phase 1 and 2) to political sources, which are prominent in this phase. In that sense, it is important to highlight that the media outlets were losing presence as central actors in the debate, with some exceptions when we analyse the quoting mechanism.

Table 5. Top users mentioned, retweeted and quoted during the Phase 2.

Phase 2

Mention				Retweet				Quoted			
Rank	User	N	Cum. %	Rank	User	N	Cum. %	Rank	User	N	Cum. %
1	publico_es	33	10.5	1	User_6	1,372	46.1	1	desdelamoncloa	3	16.8
2	joseluisescriva	21	17.2	2	desdelamoncloa	201	52.8		electo_mania	3	31.6
3	Pablolglesias	18	22.9	3	PS0E	192	59.3				
4	sanchezcastejon	17	28.3	4	electo_mania	97	62.5				
5	YouTube	10	31.5	5	User_7	67	64.8				
6	AIReF_es	8	34.1	6	DSocialesGob	64	66.9				
	inclusiongob	8	36.6	7	User_8	61	69				
	EP_Social	8	39.2	8	pmklose	54	70.8				
7	desdelamoncloa	6	41.1	9	nachoalvarez_	48	72.4				
	elEconomistaes	6	43	10	publico_es	42	73.8				
8	nachoalvarez_	5	44.6								
9	PS0E	4	45.9								
	VSocialGob	4	47.1								
	Yolanda_Diaz_	4	48.4								
10	20m	3	49.4								
	ABCeconomia	3	50.3								
	Diarioabierto	3	51.3								
	DsocialesGob	3	52.2								
	elconfidencial	3	53.2								
	ionebelarra	3	54.1								
	User_5	3	55.1								
	updayESP	3	56.1								
	wallstwolverine	3	57								

Source: Produced by authors.

Table 6. Top users mentioned, retweeted and quoted during the Phase 3.

Phase 3

Mention				Retweet				Quoted			
Rank	User	N	Cum. %	Rank	User	N	Cum. %	Rank	User	N	Cum. %
1	Pablolglesias	2,758	6.6	1	Pablolglesias	64,569	8.7	1	PabloIglesias	447	9.2
2	eldiarioes	1,384	9.9	2	PODEMOS	23,411	11.8	2	PODEMOS	179	12.8
3	sanchezcastejon	1,326	13	3	User_9	22,870	14.9	3	pnique	150	15.9
4	pnique	976	15.4	4	pnique	22,564	17.9	4	sanchezcastejon	138	18.7
5	PODEMOS	975	17.7	5	WillyTolerdoo	12,478	19.6	5	VSocialGob	113	21.1
6	PS0E	824	19.6	6	sanchezcastejon	10,151	21	6	PS0E	111	23.3
7	joseluisescriva	663	21.2	7	PS0E	9,311	22.2	7	eldiarioes	109	25.6
8	publico_es	658	22.8	8	gerardotc	8,130	23.3	8	publico_es	56	26.7
9	VsocialGob	381	23.7	9	AntonioMautor	6,989	24.3	9	elmundoes	54	27.8
10	el_pais	361	24.6	10	Cristina_H_	5,640	25		La_SER	54	28.9
								10	desdelamoncloa	49	29.9

Source: Produced by authors.

As we can see from the Table 7, the fourth phase continues with the trend present in the third phase: the majority of the accounts were from political parties and politicians, especially from members of the Spanish Governement. Thus, there is not presence of other Spanish politicians in the debate. Actually, only the far-right political party Vox appears thought the mentioning mechanism.

Table 7. Top users mentioned, retweeted and quoted during the Phase 4.

Phase 4

Mention				Retweet				Quoted			
Rank	User	N	Cum. %	Rank	User	N	Cum. %	Rank	User	N	Cum. %
1	PabloIglesias	1,094	3	1	pnique	18,457	3.9	1	pnique	127	3.1
2	sanchezcastejon	848	5.3	2	PabloIglesias	14,687	7	2	Pablolglesias	105	5.6
3	pnique	832	7.6	3	PODEMOS	9,208	8.9		VSocialGob	105	8.1
4	eldiarioes	689	9.5	4	User_10	9,105	10.9	3	el_pais	102	10.6
5	PS0E	547	11	5	PS0E	8,470	12.7	4	PS0E	77	12.4
6	PODEMOS	502	12.4	6	RubenSanchezTW	7,801	14.3	5	PODEMOS	76	14.3
7	joseluisescriva	395	13.5	7	User_11	7,548	15.9	6	User_6	74	16
8	vox_es	363	14.4	8	joseluisescriva	7,321	17.4		joseluisescriva	74	17.8
9	inclusiongob	350	15.4	9	EnricJuliana	6,615	18.8	7	eldiarioes	68	19.5
10	PaulaVazquezTV	301	16.2	10	JoaquimBoschGra	6,037	20.1		Santi_ABASCAL	68	21.1
								8	inclusiongob	66	22.7
									User_11	66	24.3
								9	evabelmonte	53	25.6
								10	User_12	52	26.8

Source: Produced by authors.

Finally, the fifth phase (Table 8), presents some divergences with respect to the previous phases. Mentioning practice presents accounts mainly from politicians and media outlets of different ideologies. For example, larazon_es is a conservative daily newspaper based in Madrid, while publico_es is a left-wing Spanish online newspaper, as well as elsaltodiario. Retweeting practice in this phase shows a peculiarity respect to the other phases. The majority of accounts retweed in this phase belonged to ordinary users, so it becomes evident that the conversation in this phase were dominant mainly by messages from ordinary users. At last, quoting mechanism shows a decrease with respect to the third and fourth phases, although it is still more prominent than in the phases 1 and 2.

Table 8. Top users mentioned, retweeted and quoted during the Phase 5.

Phase 5

Mention				Retweet				Quoted			
Rank	User	N	Cum. %	Rank	User	N	Cum. %	Rank	User	N	Cum. %
1	Pablolglesias	1,176	3.4	1	User_13	7,385	2.7	1	elmundoes	53	2.3
2	PODEMOS	710	5.5	2	pnique	5,974	4.3		pnique	53	4.6
3	sanchezcastejon	707	7.5	3	User_14	4,355	5.7	2	inclusiongob	37	6.2
4	pnique	446	8.8	4	User_15	3,945	7.1	3	voz_populi	31	7.6
5	publico_es	391	10	5	PODEMOS	3,856	8.3	4	Pablolglesias	30	8.9
6	larazon_es	306	10.9	6	gerardotc	3,295	9.4	5	elconfidencial	28	10.1
7	PS0E	259	11.6	7	User_16	3,003	10.4	6	User_20	27	11.3
8	elsaltodiario	255	12.3	8	User_17	2,906	11.5	7	abc_es	26	12.4
9	eldiarioand	210	13	9	User_18	2,849	12.4	8	nachoalvarez_	25	13.5
10	joseluisescriva	197	13.5	10	User_19	2,697	12.4	9	AdriLastra	23	14.5
									PODEMOS	23	15.5
									eldiarioes	23	16.5
									A3Noticias	23	17.5
								10	publico_es	21	18.4

Source: Produced by authors.

Along the same lines, Figure 2 provides an overall mapping of these accounts grouped by type of interaction referring to the percentage of times, each type of account, was mentioned, retweeted or quoted by other users. As shown in Figure 2, it is apparent that mention and retweet

mechanisms was the most stable mechanism used by the different actors, generating different dynamics of interaction among the five phases of this study. Quoting practices was used in a more homogeneous way through the different phases in which this study has been divided.

Mention Retweet Quoted

Phase 1 Phase 2 Phase 3 Phase 4 Phase 5

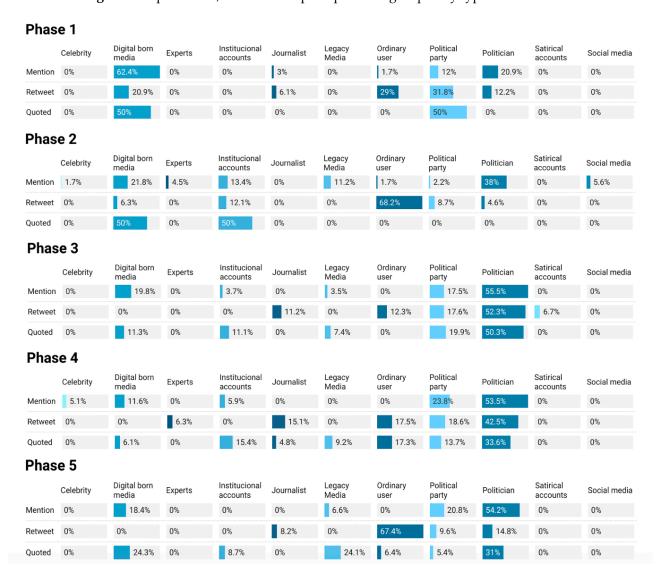
Figure 2. Accounts grouped by type of interaction.

Source: Produced by authors.

Figure 3 show that there is a slight trend in the retweet practice for all phases. Users disseminate the content produce by other users using the retweet function to a greater extent. In that sense, retweeting practices were primarily used by spread content produced by ordinary users. In fact, the use of retweeted practices opened up opportunities for non-elite – namely, ordinary user – accounts to disseminate their content more widely and reach a wider audience. However, media outlets (digital-born media in particular), politicians and political parties are also relevant, specifically in the mention and quote tweet function.

Finally, the exploration of retweeting practices shows that the tweets with multimedia content (e.g., photos or videos) are more likely to be retweeted than other types of tweets containing URLs to external sources and only text. Looking at Figure 4 it becomes evident that tweets with multimedia content produced more engagement than tweets without multimedia content (namely, tweets with only text). Only in phase 5 were tweets containing only text the most shared by users. In other words, tweets with multimedia content are more spreadable (Jenkins et al., 2013) than tweets with only text. In most cases, the videos that users shared were GIFs. Thus, the concept of user-circulated content emerges, changes the focus from the user-generated content and helps us to gain a wider view of the digital culture characteristics, creating meaning within the network.

Figure 3. Top mention, retweet and quote practices grouped by type of account.



Source: Produced by authors.

Figure 4. Retweeting practices in relation to tweet form.



Source: Produced by the authors.

5. Conclusions

By analysing the conversation in the public digital sphere about a topic of public concern, i.e. the approval and implementation of the Minimum Living Income in Spain, we consider that this research contributes to the existing field of research on active audiences and the public digital sphere. In that sense, drawing on the previous work of Vicari et al. (2018), our research provides a multi-level methodological framework that looks at actors and communication practices of a public deliberation in the digital space over time.

Our results show that the use of Twitter functions and communication strategies enables the emergence of diverse actors among the different dynamics in the conversation. This study shows that digital-born media and politicians play a central role in mentioning and quoting tweet dynamics, while ordinary users are likely to be central to retweeting practices.

These finding suggest that digital-born media and politicians focus on personalised messages, in the sense that a prominent use of mention and quote tweets indicate a greater tendency towards dialogue (Pavan, 2017: 9). The medium with which users interact with the most through mentions is eldiario.es, an online newspaper founded in 2012. The political agenda of eldiario.es has been described as progressive. On the other hand, the most mentioned politicians were Pedro Sánchez (@sanchezcastejon), Prime Minister of Spain, Pablo Iglesias (@PabloIglesias), former Second Deputy Minister and Minister of Social Rights and 2030 Agenda at that time, and José Luís Escrivá (@joseluisescriva), Minister of Inclusion, Social Security and Migration of the Spanish Government. All of these politicians were members of the Spanish Government at that time. In that sense, as our findings show, the repeated mention of the personal accounts of politicians suggests a personalisation of politics, with the rise in popularity of politicians. On the contrary, there is not reference to any Spanish politicians from other parties. There is only brief mention of the far-right Spanish political party Vox during the fourth phase. Furthermore, the use of the social media platforms by institutional accounts to disseminate information about this type of policies, it is essential to the legitimisation of basic income. In that sense, this type of approach demonstrates the usefulness of data from platforms such as Twitter for social policies analysis and debate.

The use of retweet practices suggests a tendency towards disseminating and retransmitting content produced by others. Thus, the results reveal the emergence of dissemination of highly spreadable content by ordinary users using the retweet function. Our study, however, also shows that politicians and political parties are quite relevant, especially in the first, third and fourth phases. As mentioned in the literature review, what underlies the analysis of discursive dynamics on digital platforms such as Twitter is the notion of power dynamics in the hybrid media system, where old and new communication patterns coexist. In that sense, according to our findings, the democratising potential of Twitter should be called into question.

Attending to the analysis of retweeting practices in relation with the message form, in general, tweets with multimedia content are more spreadable (Jenkins et al., 2013) and, thus, more retweeted than tweets with only text. Specifically, tweets that shared photos and videos were retweeted more than others on average. In most cases, the videos that users shared were GIFs, so the visual content could be functional to express agreements or disagreements. Here, the concept of user-circulated content emerges, changes the focus from user-generated content and helps us to gain a wider view of the digital culture characteristics, creating meaning within the network.

In that sense, more research needs to focus on the visual content of tweets to understand the implications of the use of the multimedia content. What seems clear is that a message with multimedia content is more likely to be retweeted by other users.

Future research will focus on further explorations of discussion on Twitter and analysing the content of messages from a qualitative perspective to get a full understanding of not only the communicative practices from a structural perspective but also to investigate what users are saying, that is, the meaning of these relations. This qualitative approach would not necessarily supplant the quantitative analysis but rather complement it because social networks are both structure and process at the same time.

Funding

This work is part of the project 'News, networks and users in the hybrid media system. Transformation of media industries and the news in the post-industrial era' (RTI2018-095775-B-C43), funded by the Spanish Ministry of Science, Innovation and Competitiveness (2019-2021).

Acknowledgements

The authors would like to thank the anonymous reviewers for their valuable and constructive comments that greatly contributed to improving the final version of this paper.

References

Barabási, A-L. (2009). Scale-Free networks: A Decade and Beyond. Science, 325, 423-413.

Bennet L., & Segerberg, A. (2013). The Logic of Connective Action. Digital Media and the Personization of Contentinous Politics. Cambridge University Press.

Boyd, D. (2010). Social Networks Sites as Networked Publics: Affordances, Dynamics and Implications. In Z. Papacharisi (Ed.), *Networked Self: Identity, Community and Culture on Social Network Sites* (pp. 39-58). Routledge.

Bruns, A.; Highfield, T. (2016). Is Habermas on Twitter? Social media and the public sphere. In G. Enli, A. Bruns, A. O. Larsson, E. Skogerbo, & C. Christensen (Eds.), *The Routledge companion to social media and politics* (pp. 56-739). Routledge.

Buchanan, M. (2002). Nexus: Small Worlds and the Groundbreaking Science of Networks. Perseus Publishing.

Castells, M. (2009). Communication and Power. Oxford University Press.

Chadwick, A. (2013). The Hybrid Media System: Politics and Power. Oxford University Press.

Chislett, W. (2020, June 30). Covid-19 ups Spain's income inequality. *Elcano Royal Institute*. https://blog.realinstitutoelcano.org/en/covid-19-ups-spains-income-inequality/

Coretti, L. (2014). *The Purple Movement: Social Media and Activism in Berlusconi's Italy* [Doctoral dissertation, University of Westminster]. University of Westminster. https://westminsterresearch.westminster.ac.uk/item/964wx/the-purple-movement-social-media-and-activism-in-berlusconi-s-italy

Costera-Meijer, I., Rogers, R., Westlung, O., Witschge, T., Díaz-Noci, J., & Serrano-Tellería, A. (Eds). (2021). *Researching the news in the hybrid media system: An expert panel report*. DigiDoc Research Group (Pompeu Fabra University), DigiDoc Reports, 2021. PONR04/2021.

Couldry, N. (2013, November 21). *A Necessary Disenchantment: Myth, Agency and Injustice in a Digital World.* Inaugural Lecture, London Scholl of Economics and Political Science. London, UK.

Fuchs, C. (2009). Some Reflections on Manuel Castells' Book "Communication Power". tripleC, 7(1), 94-108.

Malliaros, F., Rossi, M.E., & Vazirgiannis, M. (2016). Locating influential nodes in complex networks. *Sci Rep* 6, 19307. https://doi.org/10.1038/srep19307

Marres, N. (2017). Digital Sociology. The reinvention of Social Research. Polity Press.

Masip , P., Ruíz-Caballero, C., & Suau J. (2019). Active audiences and social discussion on the digital public sphere. Review article. *El Profesional de la Información*, 28(2), e280204. https://doi.org/10.3145/epi.2019.mar.04

Milan, S. (2015). From Social Movements to Cloud Protesting: The Evolution of Identity. *Information, Communication, and Society, 18*(8), 887-890. https://doi.org/10.1080/1369118X.2015.1043135

Ministry of Inclusion, Social Security and Migrations. (2021). Minimum vital income.

 $http://www.segsocial.es/wps/portal/wss/internet/Trabajadores/PrestacionesPensionesTrabajadores/65850d\\ 68-8d06-4645-bde7-05374ee42ac7?changeLanguage=en$

Myers, S., & Leskovec, J. (2014). The Bursty Dynamics of the Twitter Information Network. WWW '14 Proceedings of the 23rd international conference on World Wide Web, 913-924.

Parth, A-M., & Nyby, J. (2019). Welfare experiments as tools for evidence-based policy making? The political debate on Twitter about the basic income trial in Finland. *Policy Studies*, 18(8), 887-900 https://doi.org/10.1080/01442872.2020.1772217

Pavan, E. (2014). Embedding Digital Communication Within Collective Action Networks: A Multidimensional Network Approach. *Mobilization*, 19(4), 441-455. https://doi.org/10.17813/maiq.19.4.w24rl524u074126k

Pavan, E. (2017). The integrative power of online collective action networks beyond protest. Exploring social media use in the process of institutionalization. *Social Movement Studies*, 16(4), 433-446. https://doi.org/10.1080/14742837.2016.1268956

Pérez-Altable, L., Serrano-Tellería, A., & Fernández-Planells, A. (2020). Audiencias activas y desigualdad de ingresos: análisis exploratorio de la conversación en Twitter. *Hipertext.net. Revista Académica sobre Documentación Digital y Comunicación Interactiva*, 20, 1-12. https://doi.org/10.31009/hipertext.net.2020.i20.01

Pont-Sorribes, C., Codina, L., & Pedraza-Jiménez, R. (2009). Comunicación de riesgo y sistemas de comunicación en la web: cinco modelos. *El Profesional de la Información*, 18(4), 389-397. https://doi.org/10.3145/epi.2009.jul.05

Radicioni, T., Squartini, T., Pavan, E., & Saracco, F. (2021). Networked partisanship and framing: a socio semantic network analysis of the Italian debate on migration. *arXiv preprint arXiv*:2103.04653.

Soler-Adillón, J. (2017). Tres conceptos clave en medios digitales. *Hipertext.net. Revista Académica sobre Documentación Digital y Comunicación Interactiva*, 15, 1-3. http://dx.doi.org/10.2436/20.8050.01.38

Suau, J. (2015). Citizens and online media participation. Attitudes and motivations towards participatory journalism and other practices in London and Barcelona [Doctoral dissertation, Universitat Ramon Llull]. Universitat Ramon Llull. https://www.tdx.cat/handle/10803/289347#page=1

Suau-Gomilla, G., Pont-Sorribes, C., & Jiménez-Pedraza, R. (2020). Politicians or influencers? Twitter profiles of Pablo Iglesias and Albert Rivera in the Spanish general elections of 20-D and 26-J. *Communication & Society*, 33(2), 209-225. https://doi.org/10.15581/003.33.2.209-225

Vicari, S., Ianelli, L., & Zurovac, E. (2018). Political hashtag publics and counter-visibility: a case study of #fertilityday in Italy. *Information, Communication & Society,* 23(9), 1235-1254. https://doi.org/10.1080/1369118X.2018.1555271



© Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) https://creativecommons.org/licenses/by-nc-nd/4.0/