

Inequalities and information access: *An expert panel report*

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2022

ON THIS PAPER

This paper is a result 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). We present the results and considerations held during a seminar organized in November 2021 with some of the major specialists on researching news inequalities, consumption and avoidance. We dealt with concepts, methods and techniques.

AN EXPERT PANEL LINKED TO THE RESEARCH PROJECT *News, Networks and Users in the Hybrid Media System. Transformation of the Media Industry and the News in the Pots-Industrial Era* was held on the 18th of November, 2021, to improve the definition of approach to our research objects with the help of highly reputed scholars. Sílvia Majó-Vázquez (Reuters Institute for the Study of Journalism, Oxford University, United Kingdom), Antonis Kalogeropoulos (University of Liverpool, United Kingdom), Johan Lindell (Uppsala University, Sweden) and Ana Sofía Cardenal (Universitat Oberta de Catalunya, Spain) were invited, and kindly accepted, to join our research group to a hand-on meeting to deal about how to do research on news consumption, news avoidance and news inequalities.

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SÍLVIA MAJÓ-VÁZQUEZ

AUDIENCE POLARISATION AND MESSAGING APPS. EVIDENCE FROM NAVIGATION DATA IN SPAIN DURING THE FIRST COVID-19 NATIONAL LOCK-DOWN

DR SÍLVIA MAJÓ-VAZQUEZ, Research Fellow at Reuters Institute for the Study of Journalism, University of Oxford, was the first scholar in taking part in the seminar. She focused “more on the news consumption side and more specifically on news media diets on messaging apps.” Specifically, she talked about “a project or a study that belongs to a larger project, and which includes other researchers, one of them is Professor Ana Sofia Cardenal today with us, but also Dr María Victoria-Mas, and Dr Ivan Lacasa.” In that specific project, the researchers led by Dr Majó-Vázquez “look at audience polarisation on messaging apps”, based on data collected during the first COVID lockdown in Spain in 2020, specifically navigation data from mobile and desktop devices from that time window.

“While the streets of Barcelona were empty”, continued Dr Majó-Vázquez, “people was at home trying to keep up with the current events related to COVID, and we were mostly interested on knowing how they were using messaging apps to keep up with COVID events.” At that time, she remarked, the messaging

apps were very popular were popular before the pandemic started. “Yet in 2020, the national lockdowns amid the COVID-19 pandemic exacerbated this trend”, confirmed Dr Majó-Vázquez, and she added: “This was in combination with efforts from the different news media outlets from different places in the world. For instance, in the United Kingdom, the BBC, but also in Venezuela, or Guatemala in Latin America, efforts to reach new audiences for the news outlet on WhatsApp.” Since WhatsApp is widely used in many countries in the world, this service is “the first side and a very prominent door to news when it comes to keep up with current events, for instance, this is the case in Indonesia, also in India and in Malaysia and in Brazil, but it is negligible when we look at the US scenario.” It is also, to some extent, the case of Spain, “specifically, 35 percent of the population use WhatsApp for accessing news”, as confirmed by Sílvia Majó-Vázquez, instead in Catalonia it seems that Telegram is as popular as WhatsApp, at least. It is important, said Dr Majó-Vázquez, to compare different countries, since, for instance, “its is important to add cases studies beyond the United States to understand what is happening elsewhere when it comes to news consumption, because it might be completely different.”

“The use of WhatsApp for news, though, or any other messaging app really like Facebook message is combined with the scarce research that has been done so far”, said Majó-Vázquez, “and it is especially worrying when we not only considering news consumption, but also that messaging apps has demonstrably enabled the spread of hate speech and harassment during elections in several countries.”

“Algorithmically-driven diets on social media platforms though are not reproduced on messaging apps, where we have the people's curation outweighs the algorithmic curation”

As with other mediums to access news before it was social media platforms and before that it was cable TV, “these new mediums to access news are accompanied with concerns about the selectivity in news exposure”, she added. It is related, for instance, to the extent that people access to news is aligned to their ideology or they attitudinal predispositions. This is important “mainly because from a normative point of view

accessing news across lines of political difference has been deemed by several authors as a central element to maintain a democratic citizenry.” Moreover, “so far, we know that algorithmically curated diets, those that are prominent in social media, are more diverse than those anticipated by, for instance, proponents of echo chambers or filter bubbles.” At the same time, in Dr Majó-Vázquez’s opinion “we also know that when people select their news diets and they daily navigate the news ecosystem, this led to more narrower news media diets.”

As a first important assert, Sílvia Majó-Vázquez explained that “algorithmically-driven diets on social media platforms though are not reproduced on messaging apps. On messaging apps, mainly we have a reproduction of the offline networks that people have, where the people's curation outweighs the algorithmic curation.” This is important because “we know from previous research, for instance that one conducted by Dr Antonis Kalogeropoulos, predating social media, that interpersonal communication exposed people to more similar political information than news media, and that news among more homogeneous groups are frequently shared on messaging apps..”

“There are two mechanisms that we have to take into consideration when we study news consumption

on messaging apps,” followed Dr Majó-Vázquez. The first component is a trust component, “the fact that of-line networks are mostly built on trust by people that we know, and those relationships are based on strong ties that have been equated to more homogeneous news media diet in previous research.” At this point, Sílvia Majó-Vázquez kindly referred to “the very interesting research led by the late Pere Masip, it was very interesting to see his report after the COVID lockdown in Spain with qualitative evidence showing that incidental exposure to ideological diverse news content was very prominent in WhatsApp groups in Spain.” As a conclusion, it seems evident that “there are different patterns of news consumption in mobile and desktop devices, we found, for instance, that analysing news media diets from 2014 until 2018 in the US, we saw that those news media diets were formed on mobile devices and they were more diverse.” Comparing news audience networks on mobile devices and desktop devices “we saw that on mobile devices were denser, hence, that could be translated to more diverse news diets. The novelty of this research is that is not only focussed on navigation data from desktop, but also from mobile devices where most of the use of messaging apps takes place.

“We can't forget that WhatsApp, as well as other messaging apps, are mostly accessed through mobile devices”, said Majó-Vázquez. “We also know that brand awareness on social media, and also on mobile environments is lower and this can be combined with increasing levels to cross-cutting exposure.” “So”, as stated by Dr Majó-Vázquez, “the research question leading this project is whether WhatsApp as a referral to news is related to higher levels of audience polarisation and how this compares to Facebook and Google referred news diets.” It is important to understand that “we use the concept audience polarisation to define the extend to which individuals navigate the news ecosystem along partisan lines.”

A relevant question when doing research on this kind of networks is it is “an environment that is end-to-end encrypted”.

Dr Sílvia Majó-Vázquez's team started collecting data on the 14th of March, 2020, just a day after Spain declared a state of alarm, and they finished their data collection on 15th of May that same year, “so the first lockdown of the COVID-19 was covered by our tracking period.” The team collected data for around 700 individuals, data from their mobile devices and data from their desktop devices. Additionally, they also surveyed the individuals “to understand

them and to get some attitudinal information.”

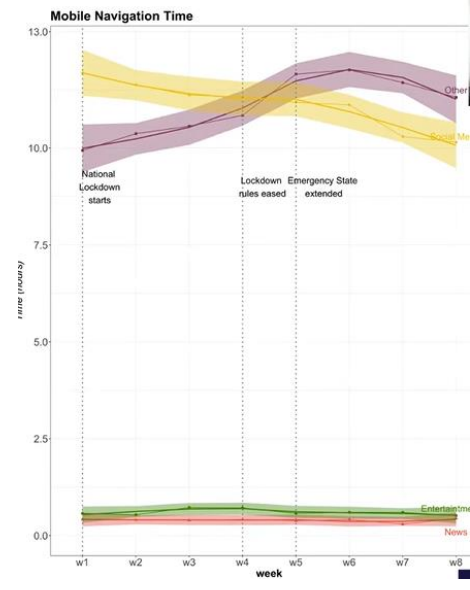
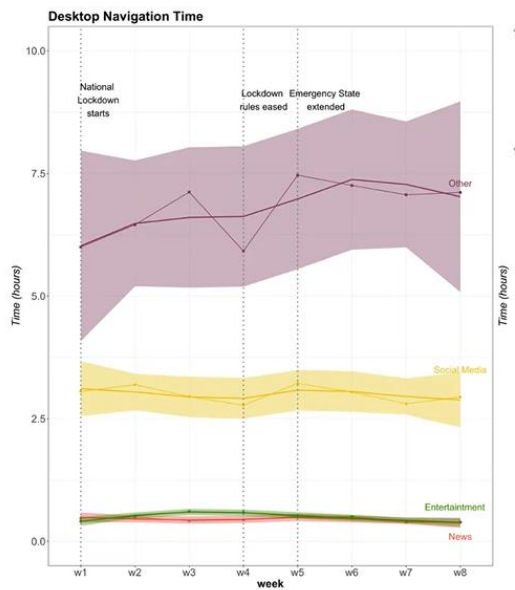
“There are different patterns of news consumption in mobile and desktop services.”

They also analysed whether the navigation data coming from the individuals that we study are correlated to and to what extent are they were representative of the navigation of the Spanish population. As a result, they found that “there is a high correlation between the top-most visited news outlets in our study from the top-most visited outlets, according to external sources, in this case, Comscore”, which was until the end of 2021 the company in charge of certifying the audience for Spanish news media online. “We also check for differential sampling bias, and we saw that on average the individuals accepting being tracked by mobile differ from the individuals accepting being tracked on their desktop devices on college levels.”

The results for this study were to some extent compared with another one led in 2015 by Ana Sofía Cardenal, “where we saw that only five percent of the URLs that people navigated at that time corresponded to news.” In this new study, “we found

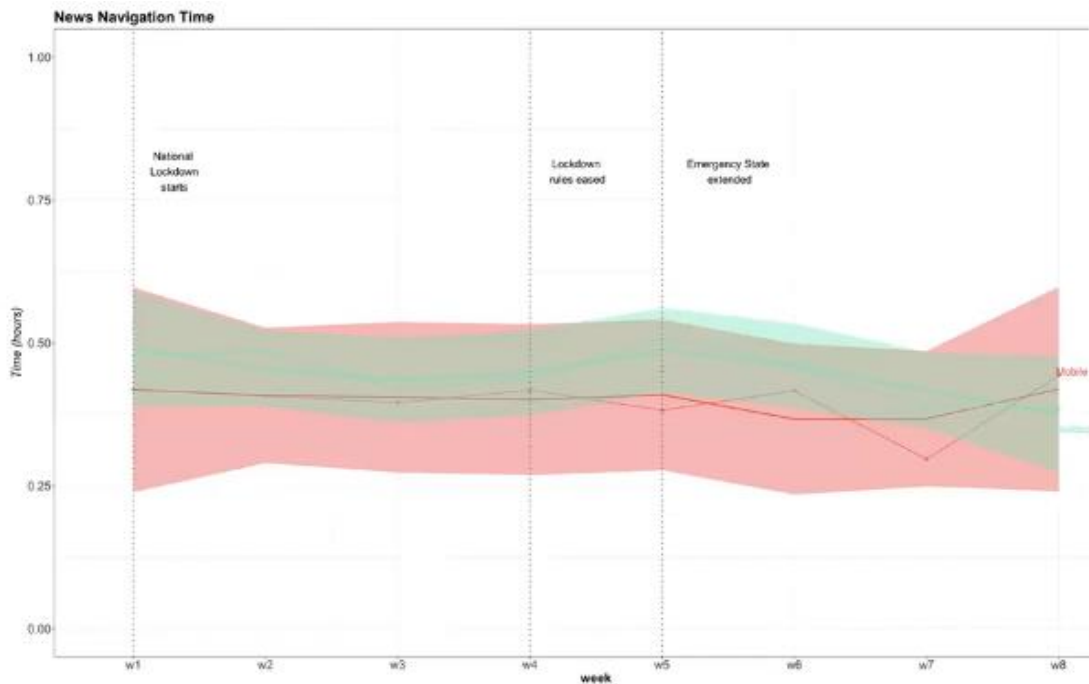
that about or over nine percent of the URLs identified in our dataset correspond to news navigation for desktop devices, and overall, almost 19 percent correspond to news navigation in mobile devices and the case of mobile devices, this is the triple of the last benchmark that we had for the same country and probably this is because of this extremely exceptional period that our study took place.”

“We can see that news consumption, it's only a tiny portion of the overall navigation of the individuals in our sample. So, on average, individuals on a weekly basis, even during the first COVID-19 lockdown in Spain, which, by the way, was one of the longest one in the world and one of the toughest ones in terms of the restrictions that people were imposed”, reminded Dr Majó-Vázquez. “They only navigate less than an hour on a weekly basis to keep up with current events in their mobile or desktop devices.” One possible explanation is that “people were locked at home, so probably they keep up with current events on the TV set.” But interestingly, from these figures here, we can also see that most of the mobile navigation time was devoted to social media”. When compared the time that people navigated the news environment on their mobile and desktop devices, “we see that even in the differences, the differences are pretty small”.



They use more desktop devices or they spend more time on the desktop devices to navigate the news media

environment during the time that we study their news diets,” explained graphically Sílvia Majó-Vázquez.



“Over 16 percent of the URLs in our dataset that point to news media were referred by WhatsApp, and almost 60 percent of the visits to news media outlets were referred by

Google. The third most important referral is Facebook, and this very much correlates with the figures coming from the digital news report as well,” explained Majó-Vázquez. As

a result, “WhatsApp is again a prominent referral to news in Spain”.

Audience polarisation was also measured by looking at *net selective exposure*, “which measures the level of segmentation of people's news media diets, or the extent that people navigate news information that is consistent with their own partisan position.” The main independent variable is the observed news consumption referred by WhatsApp. Those URLs that pointed to news outlets and were referred by WhatsApp.” Political ideology was also considered, and also age as a moderator “because we know from previous research that both variables can affect the way that people use WhatsApp.” Several controls were added to these analysis.

“WhatsApp news diets are in general more balanced than direct news traffic”

Dr Majó-Vázquez explained in some detail the procedure, “what we do to analyse the net selective exposure is to subtract the amount of time that people devoted to pro-attitudinal news outlets from the amount of time that people devoted to counter-attitudinal outlets, and we do that by previously classifying all the news outlets, according to the criteria of our audiences. We compare the final

classification, the partisanship of the news media outlets, according to our audiences with external sources. In this case, the digital news report audiences and there is a high correlation in that classification as well.” Positive values of this measure signal more cross-cutting exposure. “So, people that access either a more balanced news media diet or people that access more counter-attitudinal information, whereas negative values are associated to more segmented exposure, which means that people is mostly navigating the news ecosystem following pro-attitudinal information.”

When the average levels of net selective exposure, on mobile and desktop devices, “we see that although the differences are small, on mobile devices news media diets on average are a little bit more balanced. We also know that looking at a mobile referred and directed traffic, and desktop referred and directed traffic, across our measures, always referred traffic is more diverse or more balanced, or leads to a more balanced news diet than the directed traffic, which is mostly driven by self-selection.”

“We see that WhatsApp news diets are on average more balanced than direct news traffic and this is according to the previous literature that we have,” explained Dr Majó-Vázquez.

Moreover, “when we regress our dependent variable and we look at the levels of how the levels of net selective exposure varies according to the use of WhatsApp, what we see is that the use of WhatsApp as a referral to news is negatively associated to net selective exposure, which means is that the increasing use of WhatsApp for news is associated to more segmented news diets.” These results are also “similar for Facebook as a referral to news, whereas for Google what we see is that it refers on average more balanced news diets.”

Finally, Dr Majó-Vázquez mentioned the differences between across age and also across political partisan groups, and for the three platforms (Facebook, WhatsApp, and Google), she remarked that “young people on the left side of the ideological dimension have more diverse news diets when they use WhatsApp, Facebook and Google for news in comparison to young people from the right-hand side of the ideological dimension.”

The conclusions of this study are that “WhatsApp referred news diets are on average more balanced with respect to direct access to news, and these results are consistent when we use different measures, we use visits and we use time as well.”

ANTONIS KALOGEROPOULOS
***SOCIAL INEQUALITIES IN NAVI-
GATING THE ONLINE MEDIA ENVI-
RONMENT IN THE UNITED KINGDOM***

DOCTOR ANTONIS KALOGEROPOULOS (University of Liverpool, United Kingdom) presented his work on the social inequalities in navigation. Specifically, he focused on the online news navigation in the United Kingdom

According to Dr. Kalogeropoulos, the online media environment offers a lot more choices in terms of media, entertainment and news than the offline one. "For instance, there are infinite choices for entertainment and media online through platforms such as YouTube, Netflix, Facebook and so on", said Dr Kalogeropoulos. Thus, when looking at the passive data, in line with the previous work presented by Doctor Sílvia Majço-Vázquez, "we find that people spend only about three per cent of their time with news, at least in the United Kingdom and the United States." In this line, as Dr Kalogeropoulos explained, "it's interesting to compare it with another media environment, like the offline media environment, since, for instance, in the United Kingdom in 2019 the time spent on television with the news or politics, either news bulletins or programmes, was fifteen percent." "So", added Kalogeropoulos, "we see a big decrease from the environment where we

mostly get our news from television to an environment where we mostly get the news from on computers and mobile phones and tablets." From Dr Kalogeropoulos' point of view, "the gaps in news consumption between those who are very much interested in news and those were not interested in news will widen as prior showed when the rise of cable TV happened in the US." These gaps "are not sociologically neutral, there are a lot of social inequalities in news because as we know, traditional news use, but also online news use."

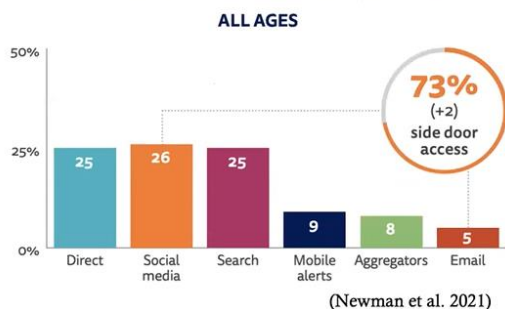
As Antonis Kalogeropoulos pointed out, "there are a lot of social inequalities in the news both online and offline." In that sense, education has always been a predictor of news use and news use frequency. "But now there are indications that as the media environment becomes more digitalised, there are more options for entertainment and media and education becomes stronger in predicting news use over time, at least in the case of Sweden, but also in the American context" explained Dr Kalogeropoulos. In addition, advancing Johan Lindell's intervention, Antonis Kalogeropoulos "the position of cultural capital" has an influence in online news use preferences". "There may be different levels of inequalities being built here."

There some other important variables, such as class and age. As Antonis

Kalogeropoulos explained, “young people are more likely to actively avoid news in this media environment, but also from qualitative studies, we see that young people are not likely to see traditional news brands as the best way to get news.

Gender is another aspect which has an influence in news consumption. “Gender plays an important role, not just in this online media environment, we know that women are less likely to consume news and more likely to actively avoid news than men, potentially due to inequality, structural inequalities in how the workforce and domestic responsibilities are shaped in society, but also due to societal perceptions that news is for men,” remarked Dr Kalogeropoulos.

PROPORTION THAT SAYS EACH IS THEIR MAIN WAY OF COMING ACROSS NEWS ONLINE BY AGE - ALL MARKETS



In that graph, taken from the *Digital News Report, 2021*, the changes in digital news consumption during the last years. “Twenty years ago, those who went online to news, almost all of them found them directly”, explained Antonis Kalogeropoulos, “we

didn’t have social media back then”. Now, according to those studies, “three quarters of them prefer to get the news via a side door pathway”. It happens especially “in media environments where trust is low and people send a lot of news to each other, for instance, on messaging applications”. Greece is a relevant example, “people use social media a lot because they don't trust the news media. equally all classes are not trusting of the news media in Greece”, explained Dr Kalogeropoulos.

“People use social media, for instance sending news to each other on messaging applications, in media environments where trust is low”

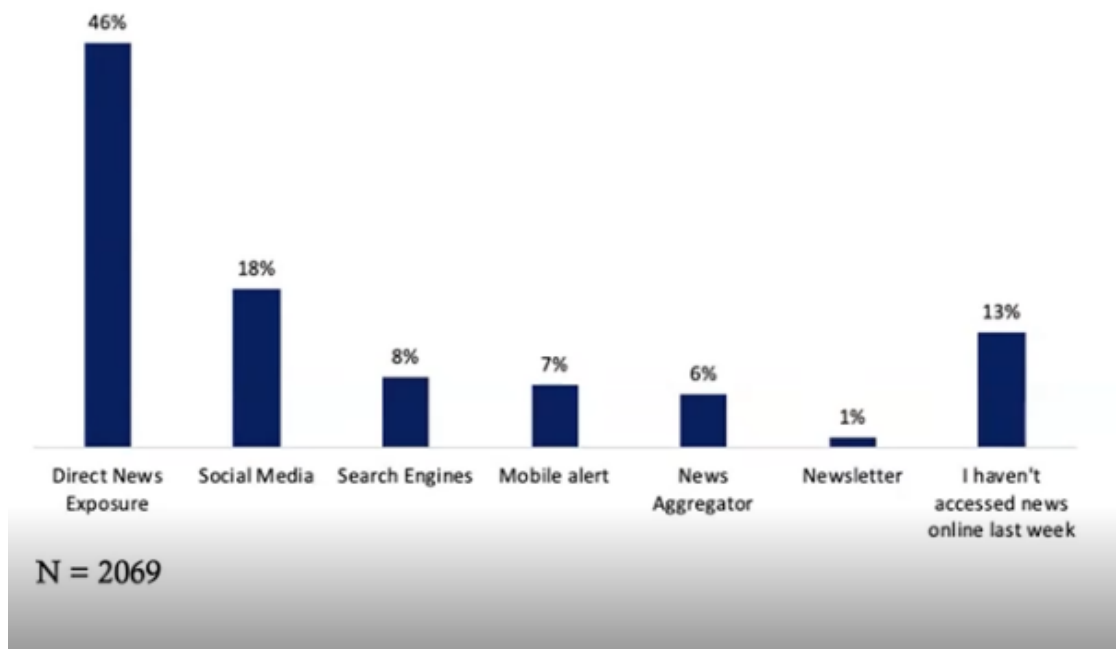
This leads to the concept of incidental consumption of news: “Social media and search engines can incidentally expose people to news,” explained Dr Kalogeropoulos, “and that is a good thing because we know that incidental exposure to news can be very beneficial, particularly for those with low levels of interest in news.”

Antonis Kalogeropoulos agreed with Sílvia Majó-Vázquez's study, “social media or messaging apps can be instrumental, or Google can be instrumental in exposing people to

news.” An interesting conclusion is that “we know from many studies that people do not learn about politics and current affairs when they get the news via social media.”

An exception to this is that in some countries, such as the United Kingdom, direct news exposure is still very high. “Forty six percent prefers to get the news by going directly to the website, so the apps of news organisations”, according to the *Digital News Report*. “Potentially this is because of the very, very central role

that the BBC plays in the news media environment, both the offline and online one in the United Kingdom.” Instead, “46 percent prefer news via direct pathways, 18 percent social media, eight percent search engines as the main pathway to news, and then seven percent alerts, six percent aggregators, one percent newsletter and 13 percent said they haven't accessed news at all during the past week online.” The figures are shown here:



Dr Antonis Kalogeropoulos remarked the importance of those who said that they hadn't accessed the news lately, “this 13 percent of people who while they have an internet connexion, they don't use it for news at all during at least the week leading up to the survey.” One of the explanations is that “these people tend to be

older, having low social grade, and low levels of cultural participation, and the characteristics that are referred here were statistically significant,” said Kalogeropoulos. On the other side, “our results show that direct news exposes are preferred by the groups that are historically more privileged in terms of age, gender,

and social class.” In Dr Kalogeropoulos’ opinion, there are two ways to read these results. “First, the use of social media and search engines for news may limit social inequalities in digital news use, and it’s good to have these alternatives.”

“Potentially, the rich are getting richer, and the poor might be getting poorer”

Related to this is the question of *information overload*: “We know the way that platforms like Facebook shape the news feeds are based on algorithms, identities, what they think we’re interested in, basically. So, if they think we’re interested in news, they’re going to show us more news.” But, as a result, “potentially the rich are getting richer, and the poor might be getting poorer”. Antonis Kalogeropoulos warns against this, since “the effects of this are unknown”, besides “we haven’t really paid attention to who are these three groups, social class, age and gender”, so he “as independent variables, employed a measure of age, gender, education, social grade, which is a measure of similar to social class in the UK and not exactly the same as social

class”, actually a combination of income and occupation.

Dr Antonis Kalogeropoulos mentioned the rise of paywalls and its relation with inequalities in navigation online media, since “it may mean that people who prefer direct news are more likely to go pay for news because all direct news exposure”, since, at least for online quality or, in the United Kingdom, broadsheet newspapers, with the exception of *The Guardian*, which has a membership model,¹ “you have to pay for it, and then if you don’t want to pay for it, then you can either get BBC, which is a great alternative in this country.” Anyway, Dr Kalogeropoulos added that “this may be an inferior news consumption experience when compared to the richer groups.”

Finally, Antonis Kalogeropoulos recognised that “this study comes with limitations. These are self-reports of preference. Preference doesn’t mean that people don’t get news other way. Someone might prefer to get news their social media, but get a lot of direct news as well on side of it.”

¹ At the time of closing this report, the only Spanish digital-born media, a daily newspaper whose business model was directly inspired by *The Guardian*, *Eldiario.es*, decided to

quite the membership model and implement a freemium one in November 2022.

JOHAN LINDELL

DISCONNECTING FROM SOCIAL NEWS: NEWS AVOIDANCE AND SOCIAL CLASS

DR JOHAN LINDELL, from Uppsala University in Sweden, presented his work *Disconnecting from the digital news. News avoidance and social class*. In this sense, news avoidance, according to Dr. Lindell, “seems to be an increasingly pressing problem.” This means that more people tend to tune out on the news over time “so it is becoming a big phenomenon in Western societies, at least.” News avoidance is usually framed as a democratic problem, “because somehow news consumption is linked to civic engagement and political participation. So, in other words, if more people are sort of withdrawing from the news, we might have a democratic problem.”

However, according to Johan Lindell, previous research in news avoidance tends to focus on individual explanatory factors such as cognition, motivation, political interest, news fatigue, among others, in order to explain why certain people would avoid the news. So, as Joan Lindell stated, “there is a little gap in terms of social class to explain the news avoidance although there are some studies

on social inequality in relation to news avoidance”.¹ But, in the opinion of Dr Lindell, there is still more to do in explaining the likelihood of avoiding the news and whether the social class would explain that.

To introduce social class as a variable in the study of the news avoidance, in the words of Johan Lindell, “we must first define what we mean by social class and then define why we should expect social class to matter.” Thus, and following Lindell’s explanation, beginning with what a class is, at least from Bourdieu’s perspective, “it’s simply a position in the social space, a position that is set by access to both material and symbolic resources, essentially what Pierre Bourdieu labels economic and cultural capital.” Dr Lindell added that “these sort of objective positions in the social space, that is class, tend to constitute cultural environments.”

Going a step further and talking about why we should expect social class to matter and explain the news, consumption and news avoidance, “that’s because class positions tend to constitute these cultural environments that shape what we may call subjective, tastes, preferences and mannerisms, and so on, and this is re-

¹ See, for instance, Palmer, R.; Toff, B. (2022). Neither Absent nor Ambient: Incidental News Exposure From the Perspective of News Avoiders in the UK, United States, and

Spain. *The International Journal of Press/Politics*. DOI: 10.1177/19401612221103144

ferred to as class habitus.” In Dr Lindell’s opinion, “this is one of the main contributions of Pierre Bourdieu Sociology, the so-called thesis that there are overlaps between the objective space of positions and the space of subjective orientations.” As a result, consumption, preferences and lifestyles tend to reproduce the social structures that produce them in the first place, “a dialectical process, and this is Bourdieu’s bridge between structure and agency.”

“To which extent does social class position predicts overall digital news avoidance, and to what extent the social class predicts the avoidance of different types of outlets?”

The study that Dr Johan Lindell presented in this seminar examines the news avoidance and the social class in Sweden. According to Doctor Lindell, “Sweden is a highly connected society where nine out of ten citizens use the internet on a daily basis. And over ninety-five percent of the population have some kind of access to the internet. But at the same time, social inequality has been increasing at a fast pace in the neoliberal turn in the 1980s,” as Johan Lindell explained. So,

“Sweden represents a particular case where nearly all citizens have the potential capacity to consume news online, but at the same time, there might be these deep-seated social structures mediated through what Bourdieu would call habitus that may generate social inequalities in terms of who is exposed to what kind of journalism, and who is socially predisposed to avoid certain news outlets.”

In his study, Dr Johan Lindell outlined two research questions: the first one is to what extent does social class position predicts overall news avoidance of digital news and, the second one, moving a little bit more into detail, to what extent the social class predicts the avoidance of different types of outlets. Thus, he tried to differentiate between different outlets with different profiles. The dataset used for this study comes from the 2019 version of the SOM survey, a questionnaire about society, opinion and mass media administered by the Gothenburg University in Sweden. The SOM survey is a mail-based survey of 10000 respondents, with a response rate of forty-eight percent.

The measurement of overall total avoidance of digital news presents some challenges, as Johan Lindell explained, due to incidental exposure to news online. “So, this particular point, the total avoidance of online news, could probably be approached

more of a sort of self-identification as a news avoider instead of focusing on the objective practice”, explained Dr Lindell. In this line, Johan Lindell’s findings regarding social class and the total avoidance of news online, demonstrates that lacking both cultural capital and economic capital matter for the extent people to which people report total news avoidance online. “Thus, lacking cultural capital predicts avoidance of the so-called quality press, despite the paywall, so economic capital does not predict this.”, Accordingly, “the barrier of entry is the symbolic mastery connected to cultural capital. In other words, lacking cultural capital lessens the likelihood for avoiding the popular press.”, said Johan Lindell.

According to Johan Lindell, within the variables that can determine news avoidance, political disinterest is the most prominent, because it predicts all kinds of news avoidance. Thus, the politically disinterested are much likely to avoid the news. In addition to political disinterest, gender is also significant. Usually, women tend to avoid online news of the quality press more than men. “Although in the analogue realm older people consume more news, in the digital environment older age predicts news avoidance,” said Johan Lindell. According to the study presented by Johan Lindell, social class in terms of individuals’ access to economic and

particularly cultural capital, explains news avoidance, as well as the political disinterest, the gender and the age. Analysing different types of cultural capital and avoidance of different avoidance of news reveals some particular dynamics. For instance, avoiding the popular press is more common among people with a high cultural capital. And avoiding behind paywall quality press is explained by symbolic mastery rather than monetary means.

“What we are witnessing in news avoidance is a negative bond, a withdrawal from these relations, more common at more precarious social positions”

To conclude, Johan Lindell explained that we can draw some broader lessons from his study in terms of the study of news avoidance. The first one would be we should rely on a multidimensional understanding of social inequality. For instance, “socio-economic status might be too broad, and it might collapse too different things and it might thus not capture the different social functions of different capitals that are active in so-called modern undifferentiated societies.” In line with this idea, Johan Lindell explained that “we need also

to differentiate what kinds of news outlets and genres that are avoided. So, different news is avoided for different reasons from different segments in society. And different cultural goods are imbued with different symbolic values.” As a result, “news is not a monolith and we should differentiate among the different brands, outlets, and genres.” As Johan Lindell pointed out, “we need to place social inequality at the centre of normative discussions on news avoidance. This is a sort of broader trend, what we may call a withdrawal from the social relations in modern societies. And journalism is about social relations between citizens and society and also about journalism itself and their audiences.”

“What we are witnessing in news avoidance is a negative bond, a withdrawal from these relations, and these withdrawals are more common at more precarious social positions”, concluded Dr Johan Lindell. “So, we should avoid certain diagnoses like the news avoider as unmotivated or politically disinterested.” To conclude with his intervention, Johan Lindell posed the following question: “Why are they withdrawing and how come this withdrawal is happening, first and foremost, at precarious social positions?”

ANA SOFÍA CARDENAL

**ASSESSING THE VALIDITY OF SURVEY
MEASURES OF NEWS EXPOSURE
THROUGH DIGITAL FOOTPRINTS**

THE LAST PRESENTATION of this seminar was given by Dr Ana Sofía Cardenal, from Open University of Catalonia [Universitat Oberta de Catalunya] who talked about measures of news exposure focused on how a survey can measure news exposure. The research presented by Ana Sofía included other authors: Dr Sílvia Majó-Vázquez, from University of Oxford, and Dr Maria Victoria-Mas and Dr Ivan Lacasa, both of them from the International University of Catalonia (UIC). In her presentation, Ana Sofía assessed three different measures of news exposure using digital footprints as a benchmark.

The first measure Ana Sofía Cardenal presented in the seminar were the open-ended questions surveys. The open-ended questions are questions where the researchers ask respondents to report the news that they have been exposed to or the media or the outlets, and they then provide no aid to respondents, and they just provide a blank list.

The second measure Ana Sofía Cardenal talked about is the check-all measure. In this case, researchers provide respondents with a list of sources, and then the respondents have to tick which sources they have visited previously. The then, the

third measure of news exposure, is the forced-choice, which is similar to the check-all, but in this case researchers ask respondents to say for each one whether or not they visited.

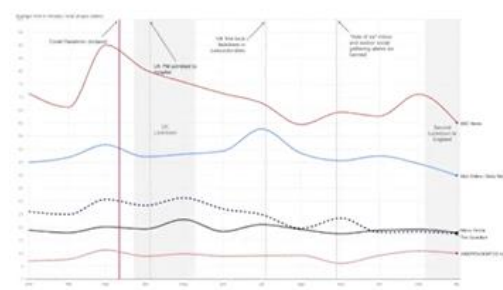
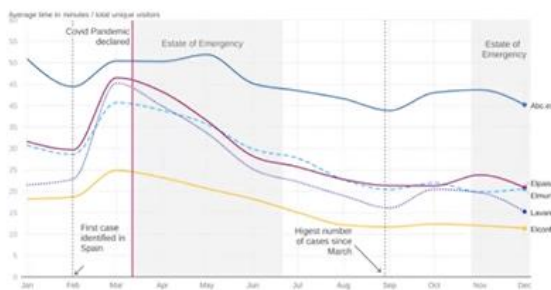
So, using observed exposure as the benchmark, Ana Sofía Cardenal focused on the online environment, on the measures that want to capture and measure the exposure to news. To assess the validity, Ana Sofía Cardenal explained that “we need to take into account how accurate these measures are but also how biased they are.”

“What we do is we want to assess the validity, the performance of three types of survey questions that are the ones that are most commonly used in media studies. assess open ended questions, which are questions where you know the researchers ask respondents to report the news that they have been exposed to or the media or the outlets, and they then provide no aid to respondents. They just provide a blank list”, specified Dr Cardenal. “There is this another measure, which is the check-all measure, where researchers provide respondents or panellists with a list of sources, and then panellists have to decide or have to tick which sources they have visited previously,” whose ultimate goal is “to aid respondents with this list.” Finally, “we have the forced-choice, which is also very similar to the check-all, we provide a list

of sources, but then we ask respondents to say for each one whether they visited or not. we are going to assess the performance of these three different measures using digital footprints, using observed exposure as the benchmark.”

So, in their study, as Ana Sofía Cardenal explained, they focused on two European countries which have different media systems and traditions. These countries are Spain and the United Kingdom. In relation to the period under analysis, the authors of this study captured news consumption during the period when the pandemic was declared, an unusual period with high news consumption. As Ana Sofía Cardenal explained in her

intervention, according to accuracy during the pandemic in news exposure, they expected that accuracy was lower in Spain than in the United Kingdom for several reasons. For example, one explanation could be the cultural differences. In Spain, in general, people tend to be more tolerant toward cheating than in the United Kingdom. Another factor to take into account is the newspaper readership tradition: people in Spain read less printed newspapers on average than in the United Kingdom. The third reason has to do with the media system characteristics. As we know from previous studies, the media system in Spain is more fragmented than in the United Kingdom.



The study covers the period from May 1 to May 15 in Spain and from May 6 to May 21 in the case of the United Kingdom. They launched the survey in May 2020 and they asked participants to report which outlets they had visited in the previous 15 days. So, the authors of this study collected the navigation data from these

participants from the 15 previous days to the date they answered the survey. To measure the news exposure, and as Ana Isabel Cardenal explained before, they used open-ended questions and check-all questions. In the open-ended questions they asked participants to report the outlets that

had visited. In the check-all condition, they provided to the participants a list of 30 outlets in the case of Spain and 28 in the case of the United Kingdom. The outlets presented by the authors in the check-all questions were selected among the top-most visited outlets according to Comscore. In order to facilitate the recognition of the outlets, they used the logos from these media outlets.

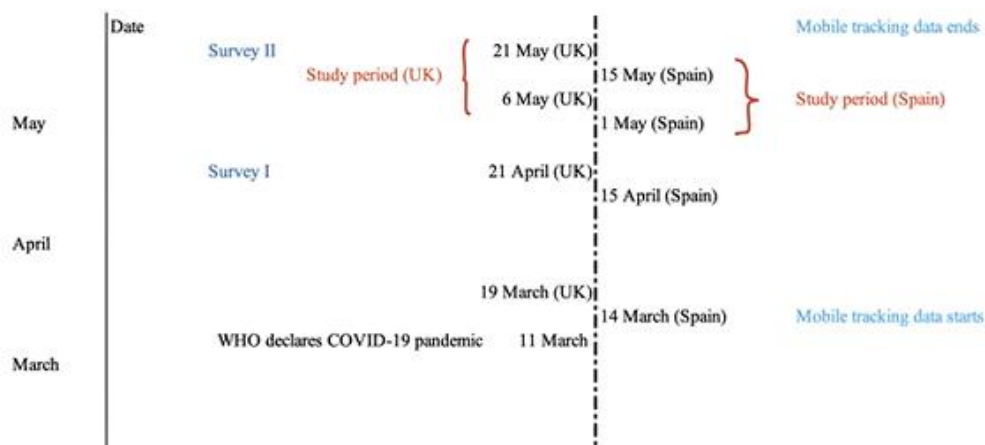
The team formulated some hypotheses because “we already had some expectations about this and we actually expected and we expect that accuracy will be lower in Spain than in the United Kingdom for several cultural reasons in Spain, where, in general, people tend to be more tolerant towards cheating right than in the United Kingdom”, so they would expect less accuracy. In addition, in Spain “there has been a low newspaper readership tradition, so people have read, as an average, less printed newspapers.”

In Ana Cardenal’s opinion, “probably the most interesting factor” is the necessity to considering that “there are some media system characteristics”, for instance, “we hypothesise that the media system in Spain is more fragmented than in the United Kingdom”. For this reason, they ex-

pected that “people that are interested in politics to be more inclined to overreport.”

To carry out this, they combined survey and web-tracking data. Data was collected through two companies: NetQuest for Spain and YouGov for the United Kingdom. In the case of Spain, they collected data from desktop and mobile navigation, whereas in the case of the United Kingdom they collected data only from mobile devices. In addition, they collected socio-demographics and political attitudes from participants. Finally, in May, participants were asked to report which outlets they had visited in the previous 15 days, and navigation data from these participants from the 15 previous days to the date were collected.

One of the main advantages of this approach is, as explained by Dr Cardenal, “the kind of measures we are using in our regressions at the individual level.” Those three accuracy measures are overreporting, underreporting and misreporting. “There are only four different combinations here,” explained Ana Sognia Cardenal. “We measure size and we measure partisanship or partisan slant.” The correlation found was “higher for Spain, but also high for the United Kingdom.”

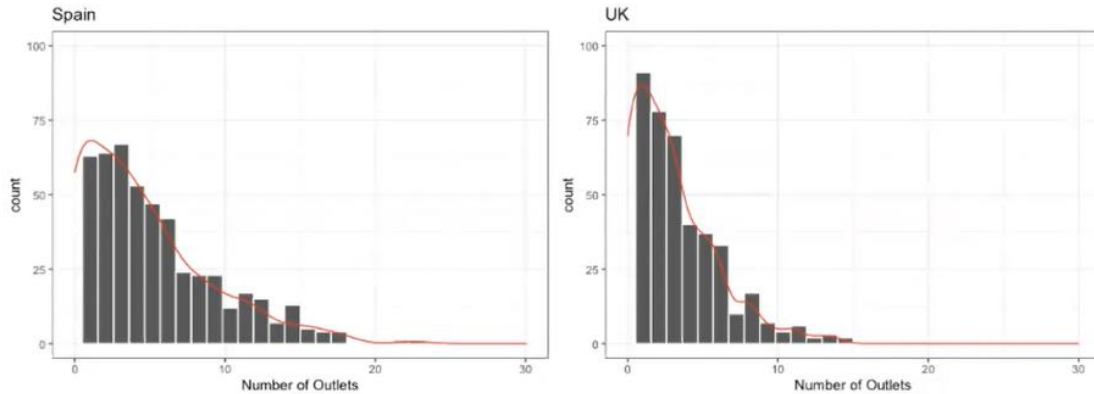


Related to bias, “we expect in the open-ended condition participants to report outlets that are easier to report, which means outlets that are larger, and outlets that are partisan, that have a clear ideological slant.”

We randomly assigned participants to three different conditions, we provided them with a list in Spain with a list of 30 outlets and in the UK with a list of 28. To collect the outlets, we relied on ComScore and we used the top-most visited outfits, according to ComScore. then they were forced to say whether they had visited or not. They had to tick one by one. Yes or no, yes or no, yes or no. to measure observed exposure, we used the same outlets that researchers provided on the survey. And so, what we did was extract from the navigation dataset visits to those outlets, to the list of 30

in Spain, to the list of 28 in the UK. And then observed exposure was coded as a one, if an individual, a participant had visited that outlet during the previous 15 days, during the study period.

During these 15-day period, most people in the United Kingdom visited between one and three outlets, whereas in Spain, most people visited between one and five outlets. According to the data provided by Ana Sofía Cardenal, the maximum number of outlets that were visited in Spain during the study period was 23, whereas the maximum number of news outlets that were visited in the United Kingdom was 14. “The distributions also tell us that there is a slightly more fragmentation in Spain than in the UK.”

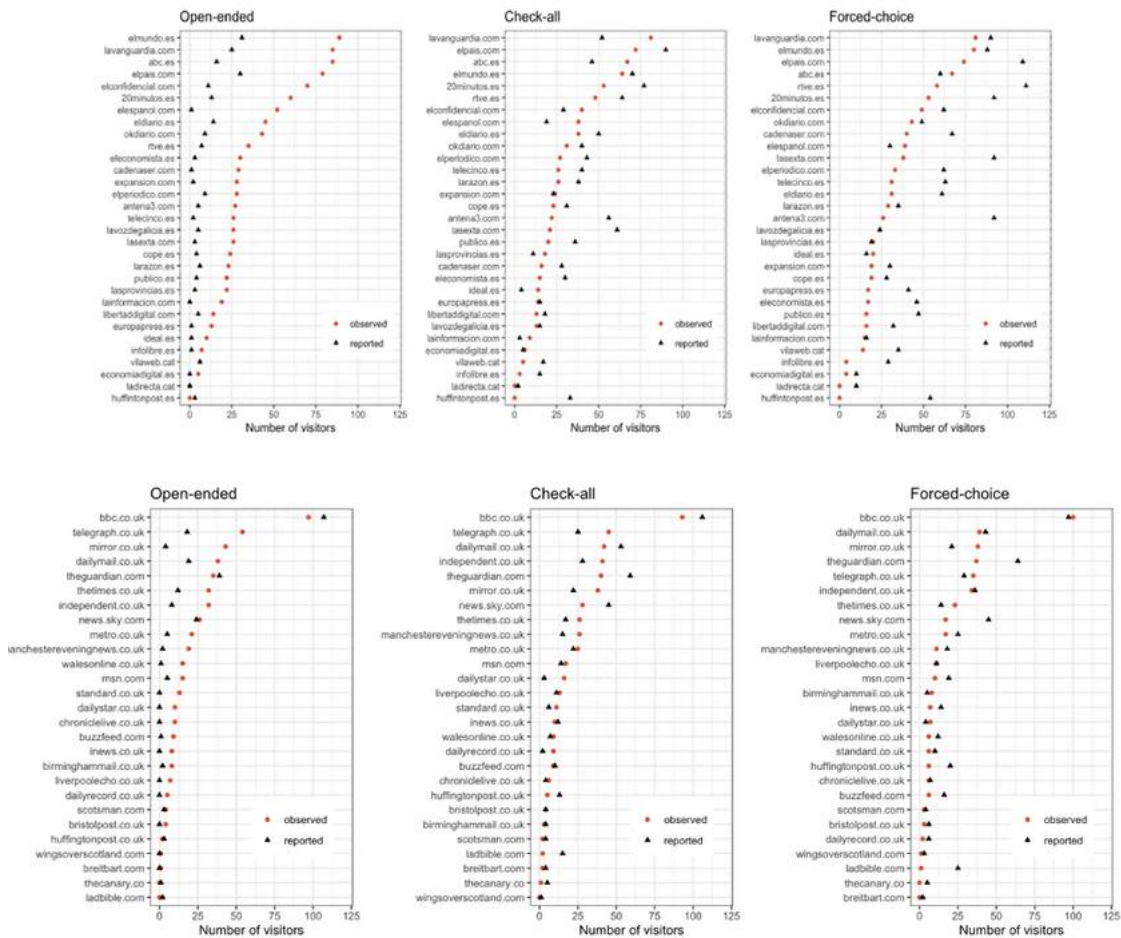


An outlet was classified as partisan, if it fulfilled two conditions: “At least 50 percent of the respondents perceived it as right wing, so over five, or left wing or left leaning.” The results were that the outlets mean position in this scale was either below point 45 or above point 55. “When these two conditions were fulfilled,” explained Dr Ana Cardenal, “we classified the outlet as partisan.” According to this criteria, “in Spain 17 outlets were classified as partisan, and in the UK 17 out of 27 were classified as partisan.”

Dr Ana Sofía Cardenal showed some graphically displayed data as a graph to explain results in a clearer way. “Now to better see which question performs better,” explained Dr Cardenal, “what we did was we computed the differences between observed and reported”, so “we can see

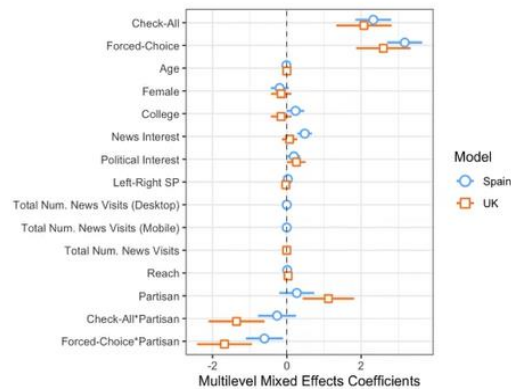
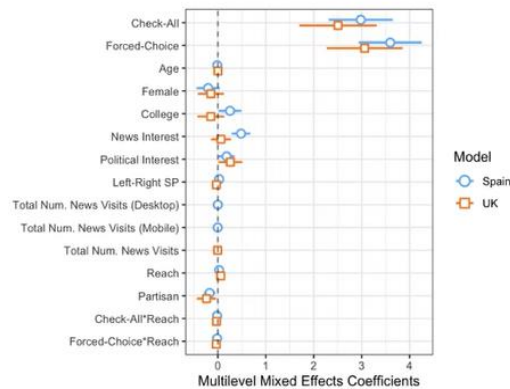
that, in fact, the check-all performs clearly better in Spain, whereas in the United Kingdom the check-all slightly performs better.”

According to the graphic, the red points are observed visits, the black ones are reported visits. “Just with a single glance, we can see that there is much more accuracy in Spain than in the United Kingdom.” Dr Ana Sofía Cardenal added that “it is clear that there is a lot of underreporting in the open-ended condition in Spain, and there is a lot of overreporting in the forced-choice condition in Spain.” On the contrary, “in the UK, I think there is more accuracy across all conditions.” One possible reason would be that “the media systems have different characteristics or that they have the level of fragmentation/concentration of the media system, barriers between the systems.”



In order to further test the performance, Ana Sofía Cardenal’s team regressed overreporting on the different questions. “Our dependent variable here is overreporting, it is measured at the individual level and our main predictors are the experimental condition.” Dr Cardenal underlined how “actually both the check-all and the forced-choice of questions produced more overreporting that would be expected, but in the case of Spain it is impressive how much overreporting the forced-choice condition produces.” According to these

figures, “people as an average overreport, more than four outlets more than in the in the open-ended condition.” In order to investigate further the question of bias, “which we expected to operate more in the open-ended condition because it is easier to recall outlets,” Ana Sofía Cardenal’s team insisted in “what Antonis Kalegeropoulos and his colleagues have called *brand awareness*, so we assume that size and slant can increase brand awareness.”



These results need to be interpreted in the way that “check-all and the forced-choice condition produce a lot of overreporting when an outlet has no readership at all, no audience at all,” said Dr Cardenal. “But as the audience increases, then this outlet tends to be less overreported in the check-all and in the forced-choice condition.” “So, in relative terms,” she explained, “it is more overreported in the open-ended condition, and the same happens with partisanship when the outlets are neutral, both the check-all and the forced-choice condition produces a lot of overreporting in relation to the open-ended conditions.” Instead, according to Dr Ana Sofía Cardenal, “when the outlet is a partisan outlet, then in the check-all condition and in the forced-choice condition, there is less overreporting, so it means that in relative terms, in the open-ended conditions, partisan and larger outlets tend to be reported more than smaller and a neutral outlets. accuracy is lower in the United Kingdom than in Spain.” Dr Cardenal

attributes this effect to the fact that “mostly in Spain, the online environment is more fragmented, because there is a higher number of digital-born outlets, there is a weak public broadcasting service.”

Another conclusion of the work is that “the check-all question is performing better in terms of accuracy,” and a fact that Ana Sofía Cardenal finds “very interesting” is that for both countries, “but especially for the United Kingdom in the open-ended condition, even though the open-ended conditional counteracts overreporting, it is more vulnerable to accessibility bias.” The recommendation is that “this is a result that we should take into account when we design our surveys.”

As a final advice, Dr Cardenal insisted in the fact that “about selective exposure, we need to avoid open-ended questions, otherwise we will get a very different picture that is going to be different if you ask through the survey with respect to what you see that participants do online.”

SOME FINAL CONSIDERATIONS

IN THE FOLLOWING DEBATE, Dr Majó-Vázquez said that “we still need surveys,” because “we only have a handful of countries”, especially those of the so-called global North, “where we can get browsing tracking data, Whereas by running surveys we can access to understand media systems and news diets.” Dr Antonis Kalogeropoulos also alerted about the fact that possibly “tracking data also have their own disadvantages, even though they're more reliable than surveys in many cases”, since in some countries, such as Spain, where the use of social media to get news is high, “people that might just see stories on the feed, but they don't click on actually, or they just see a video”, which Dr Ana Sofía Cardenal agreed with. “this is something that I might add as a limitation”, since “this could be another possibility, people just are exposed to news a lot through social media and they see the headline, they might see the source, but they don't click and we don't get to see that.”

As a final remark, Dr Díaz-Noci referred to the necessity of transmitting mainly positive messages about equity, “it is important to build a positive narrative about how to face inequality”, so, in his opinion, “we need a positive message as well, but first of all, we need reality, and that's where research comes,” mentioned some

quite unequal countries, such as Brazil, where little research has been published on news inequality, and in this respect, Antonis Kalogeropoulos wondered “why the field, and that includes myself as well, were so instrumental in describing these inequalities, but maybe not so in finding ways to alleviate these inequalities, to make them smaller”, whilst in other fields related to inequalities, such as health inequality “there has been a lot of work on trying to minimise social inequalities in access to health information.”, even experiments “to try out a lot of things working with digital or offline forms of trying to give access people to essential information”. To make a long story short, “we consider information about politics in current affairs to be so important, but we don't really consider ways to alleviate that in a similar extent.” In Johan Lindell's opinion, “it's very important to not be too media centric here, of course, journalism can tweak and configure and attempt to do certain stuff to reach new segments, but as long as we live in highly unequal societies, it's going to be difficult”.

“I think it's all about education”, added Ana Sofía Cardenal, “also educating citizens to be resilient, to cope with some of the disruptions that this new media environment is presenting them”. Since “we know that there

is more inequality in access to education”, and society is being increasingly polarised and the gap “between the people that have education and the people that do not are widening”, Dr Cardenal considers that “we should definitely start fighting there”.

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The *Online News Research Papers* series is devoted to present the insights and results of our research line on digital journalism and online news, as well as in the intellectual property law applied to the digital world.

This paper is a result 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).



AN EXPERT PANEL LINKED TO THE RESEARCH PROJECT

News, Networks and Users in the Hybrid Media System.

Transformation of the Media Industry and the News in the Post-Industrial Era

was held on the 18th of November, 2021, to improve the definition of approach to our research object and to share experience about methods to do research on inequalities regarding access to news with the help of highly reputed scholars.

Ana Sofía Cardenal, Sílvia Majó-Vázquez,

Antonis Kalogeropoulos and Johan Lindell

were invited, and kindly accepted, to join our research group to a hand-on meeting



**INEQUALITY IN THE
DIGITAL WORLD**