

ACCURACY IN ONLINE MEDIA: INSUFFICIENT JOURNALISTIC ROUTINES IN FACT-CHECKING AND CORRECTIONS

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SUMMARY

Accuracy is at the core of what journalists do and it amounts to journalistic commitment to report without errors. This tenet of journalism is now in danger, because of the influence of digitalization, changes in media landscapes, and the utilization of the assertion model of journalism. In this study, we used a combination of content analysis and visual network analysis to investigate how subjective errors are disseminated through an online environment, how time/speed influences the propagation of errors, and what the error correction procedures/routines are. The results demonstrate that 69% of the analyzed stories contained errors, and the main cause of such errors was the use of secondary sources, instead of primary ones, these errors transcend national borders and, time/speed had only a minor role in the emergence and correction of the errors, etc. Out of the 107 media websites analyzed, only seventeen provide certain modalities of requesting error correction.

KEYWORDS

ACCURACY, ERRORS, SPEED, CORRECTIONS, ACCOUNTABILITY, JOURNALISM

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INTRODUCTION

At the beginning of the 20th century, the leaders of 'yellow journalism', Joseph Pulitzer and William Randolph Hearst, promised the accuracy of the news published in *The World* and *The Journal* to their audiences (Kovach and Rosenstiel, 2007:45). Unfortunately for the audience, the reports they were selling were far from ideal in relation to basic journalistic ethical tenets (Spencer, 2016). The struggle for accuracy in the media took more than a century, yet there are still no viable accuracy practices. Even worse, the media "correct very few errors and reluctantly make them" (Gilboa and Paz, 2019).

Criticism of media coverage has increased in recent years as a result of political, economic, and technological challenges (Eberwine *et al.*, 2018). For example, the Internet increased the speed of publishing and weakened the fact-checking routines by publishing online first and checking facts later (Porlezza, 2019). Moreover, the new players, such as Facebook and Google, took over the advertising market and the 2008 economic crisis further reduced the revenues of the media. Consequently, many newsrooms had to cut their staff numbers and many of those who were made redundant were in charge of fact-checking, so their responsibilities were passed to journalists. Further, contemporary politics mixed factual reporting with the 'alternative' narratives of the 'fake news' label. Today's politics "portrays media watchdogs as entities that operate to deliberately misinform" (Albright, 2017: 87). Concurrently, the journalism profession is having difficulties in keeping up with the challenges and, instead of following deceptive statements, "news organizations should establish the groundwork to make facts 'matter'" (Albright, 2017: 87).

Accuracy in journalism has historically been examined mainly in the United States of America and Western Europe, although "journalism's concern for accuracy is not specifically American" (Porlezza, 2019). There are a number of papers dealing with: journalistic error rates (Charnley, 1936; Brown, 1965; Berry, 1967; Blankenburg, 1968; Tillinghast, 1982; Urbam, 1999; Meyer, 2004; Malović, 1998; Maier, 2005; Fox *et al.*, 2009); the views of the audience on errors (Karlsson *et al.*, 2017); the influence of errors on credibility (Meyer, 2004; Cassidy, 2007), and on corrections (Maier, 2007; Silverman, 2007), *etc.* On the other hand, the problem of technological development, in the form of the World Wide Web and social media and their influence on "access, production, distribution and engagement of news and information" (Porlezza, 2019) is still unresearched and "systematic knowledge about the specific consequences of misinformation on accuracy, verification, and trustfulness of news outlets" (Porlezza, 2019) is missing. As a result, the goal of this study is to examine how journalistic errors are propagated through the web, and how time and/or speed influences the propagation of journalistic errors in light of the correction procedures/routines in online media, and how these affect media accuracy.

OBJECTIVITY AS A BASE FOR ACCURACY

According to Porlezza (2019), accuracy in journalism is related to the most central concept in journalism studies – the concept of objectivity, which represents a form of journalism practice in collecting, producing and disseminating news on the grounds of neutrality towards the object of the reporting, not taking sides on matters, and having a strict connection to accuracy (McQuail, 2010: 263-267). Westerståhl (1983: 407) was the first author to place the notion of accuracy within the concept of objectivity that is related to democratic ideology, according to which, political parties, leaders or any other persons/organizations shall not decide the direction of society's activity and that right belongs only to the citizens: "Citizens need to be informed of what is happening in the world around them. News reporting must be factual and impartial in order to provide a foundation for independent and rational decision making" (1983: 407).

The major components of objectivity are factuality and impartiality (Westerståhl, 1983: 405), in which "factuality involves several other 'truth criteria': completeness of an account, accuracy, and an intention not to mislead or suppress what is relevant (good faith)" (McQuail, 2010: 237). In fact, accuracy represents a journalistic 'strategic ritual', through the use of which journalists achieve an adequate level of objectivity and "should be understood in terms of the accuracy of the facts, because they can be tested and verified" (Porlezza, 2019).

According to *A Dictionary of Journalism*, accuracy represents "obtaining and transmitting information that is as correct and truthful as can be ascertained given the constraints under which journalism operates" (Harcup, 2014: 2).

Accuracy is the journalistic commitment to report without factual/mechanical or subjective errors. The first category is constituted of errors like spelling, punctuation, grammar, and typography, while the second group includes errors of meaning or interpretation (Singletary, 1980). For journalism, subjective errors like omission, misquotation, underemphasizing or overemphasizing, headline distortions, etc., are more dangerous.

Stjepan Malović (2005: 31) notes that "the accuracy is the most important feature of any news, whether large or small, long or short. Every detail must be accurate. Each name must be spelled correctly, each citation must be spelled correctly, and all numbers that must be mentioned must have the correct sum at the end of the text. "

Fred Berry (1967) researched the causes of errors in journalism. He finds that inaccuracy is prominent in unanticipated stories, like those on crime and disasters. Berry also establishes that time plays an important factor in the reduction of errors only in the case of factual/mechanical errors. "Subjective errors actually increased when the story was anticipated" (Berry, 1967: 3). Sources of news also had an important influence on the number of errors. Stories coming from public relations' sources had the least number of errors, while stories coming from law enforcement, as sources, had the highest level

of inaccuracy (Berry, 1967). Laziness and incompetence (Lawrence and Grey, 1969), psychological factors, like stress (Greenberg and Tannenbaum, 1962), reporters' attitudes and prejudices (Stark and Soloski, 1977), and others, like the editorial process, the writing style, the imprecision of language (Singletary, 1980), are also the causes of errors.

ACCURACY AND PROFESSIONALISM OF JOURNALISM

The need for accuracy in journalism comes from professionalism, its truth-seeking nature and the societal function of journalism and the media (Karlsson *et al.*, 2017). Accuracy is commonly associated with professionalism in terms of ethics and codes of conduct. Journalism's first obligation is to tell the truth (Kovach and Rosenstiel, 2010), and accuracy is the main element of almost all international journalism codes of ethics. The *Society of Professional Journalists Code of Ethics* states that the "journalist should take responsibility for the accuracy of their work. They should verify information before releasing it and use original sources whenever possible. Also, that speed or format are not excuses for inaccuracy" (Society of Professional Journalists, 2014).

Accuracy is also an important part of the business model of journalism. Accuracy of the media "especially as perceived by news sources (who tend to be community leaders) is a major predictor of credibility, which in turn leads to robustness in newspaper sales" (Meyer, 2004: 223).

Moreover, there has been a change in the nature of the journalism. As a result of the changes in the media landscape and the influence of digitalization on the modality of gathering, producing and distributing news content, journalism has slowly switched from the model of verification to the model of assertion. The traditional journalism model "that puts the highest value on accuracy and context" has been replaced with a "newer model that puts the highest value on immediacy and volume and in so doing tends to become a passive conduit of information" (Kovach and Rosenstiel, 2010: 34). Speed is not a characteristic that is unique to digital media. Radio, wire services and 24-hour broadcast news channels emphasize speed in their daily working routines.

In the context of gathering news, speed is almost always the enemy of accuracy. It offers those who seek to report less time to check facts. This is why cable news channels that report continuously (such as CNN and Fox News) tend to report more erroneous information than the broadcast channels (NBC, CBS, or ABC) that have hours to vet their reports for a single network evening newscast (Kovach and Rosenstiel, 2014: 59).

Besides speed, the digital media will rush into errors due to several other factors: competition from the Internet, the continuous news cycle and pressure to be the first to break a story (Berkman and Shumway, 2003). Similarly, the problem with competition and the pressure to be first exist in all other types of media. As noted by Berkman and Shumway (2003: 235), the practice of repurposing content that comes from the traditional media means that "those news items on the Internet were likely to have already gone through those organizations' standard journalism verification and checks."

Speed is a source of errors, yet it can also represent a new possibility for corrections in digital media. "The material never actually leaves the media organization's database (unless downloaded), it is very easy to correct and erase mistakes or even entire news items instantly. By correcting the errors, the media represent themselves as accountable". (Karlsson *et al.*, 2017: 150).

ERRORS AND CORRECTION POLICIES

In the case of errors, readers have always had an option to write to the newspapers and the 'letters to the editor' were published on a specifically designated page (usually within the editorial pages), as part of a column or as a specific section of the newspaper. When 'letters to the editor' are published in a specific column, a newspaper appoints an ombudsman – a journalist or editor with long experience, who offers an apology for the mistakes. By publishing corrections of errors, the media and journalists show that they are accountable. Correcting errors is thus a 'means of making media responsible towards the public' (Bertrand, 2000: 107).

Preventing mistakes is of huge importance, but so too is setting the stage to correct them quickly and fully by taking advantage of the networked news environment. Doing so not only meets our obligations to the public, but can, in fact, build trust and help us feel better about our work as journalists. Bottom line: Corrections are important (Silverman, 2019).

Different media have their 'rules' about how to correct errors. Usually, *The New York Times* publishes corrections on the second page of the first section, while the TV newsmagazine *60 Minutes* presents corrections at the end of the show (Martin, 2009).

According to Scott R. Maier's study (2007: 40), errors were reported to the newspapers in only 300 out of the 2,700 stories (11%) in which news sources identified some form of inaccuracy. What is worst, only 23 (2%) of the analysed stories with errors resulted in the publication of corrections in the newspapers. When news sources reported the errors to the media, the result was almost the same. "Of 130 news stories in which the news sources said they informed the newspapers of factual inaccuracy, complaints yielded only four published corrections. In other words, the correction rate budged barely higher (three percent compared to two percent) when sources reported factual errors than when they did not inform the newspaper of errors" (Maier, 2009).

Further, there are differences in national journalistic practices. In the USA, there exists "a consensus that errors need to be corrected", whereas in European media, as a result of laying off of professional proof-readers during the economic crisis in 2008, quality management in newsrooms is almost non-existent (Silverman, 2012). According to Silverman (2012), "[t]oday, this is different: due to the layoffs, there are no more professional proof-readers so that journalists have to scrutinize their own articles. However, in most newsrooms established procedures are still missing. Journalists ask other journalists to read their articles, but usually this is done on an unsolicited basis".

Digital media made the corrections even more complicated as a result of multiplatform publishing. Mark Briggs (2010: 307) notes that

...many news organizations now publish separate versions of a single story, so correcting errors is a complex and cumbersome process. If a news story is posted to the main Website or blog, by e-mail, to a mobile phone, in a podcast, with a video and through RSS feeds, Twitter and social networking sites, correcting a simple error becomes an arduous task.

Not only is it very hard to correct the errors in digital media because of all the platforms and versions of a unique story, but also because of the life cycle of the story after publishing. Ryan M. Thornburg (2011: 298) emphasises that

...corrections are even more important online than they are in print. Because of the important role that 'search' plays in directing people to news stories, an article may get most of its visitors days or even weeks after it was originally published. Errors in the original article don't end up lining the birdcage or wrapping fish, as do errors in newspaper articles. Instead, they remain linked to blogs; as such, error can get repeated over and over again.

ERROR RATES IN THE MEDIA

In a seminal study published in 1936, Mitchell Charnley determined [the] "rate of three errors for every four stories and expressed concern about the number of errors and their nature" (Charnley, 1936). He established the method for estimating errors in news reports that was based on the data provided by the sources mentioned in the stories. Other researchers in the last eighty years, based on the adapted Charnley methodology (Brown, 1965; Berry, 1967; Blankenburg, 1968; Tillinghast, 1980; Meyer, 2004; Maier, 2005; Meier 2007), have reported errors in news that have ranged from 41% to 60%.

The American Society of News Editors started tracking the problem in 1985 (Meyer, 2004), and the 1999 report showed that "both journalists and the public believe that even seemingly small errors feed public scepticism about a newspaper's credibility. More than a third of the public – 35 percent – see spelling or grammar mistakes in their newspapers more than once a week, and 21 percent see them almost daily" (Urban, 1999). One of the latest studies in the USA finds "an inaccuracy rate among the highest reported in nearly seventy years of accuracy research", and establishes that newspaper credibility has "significantly declined in relation to frequency and severity of errors" (Maier, 2005).

Although US media accuracy is well examined, "empirical study about news accuracy elsewhere in the world is absent" (Porlezza *et al.*, 2012: 530). Stjepan Malović (1998: 197) conducted a study in Croatia in 1997, and he found that errors are present also in Croatian media. Malović concludes that "errors which are the result of speed, difficult working conditions, outdated technologies, can be tolerated and apologized [for]", but "consciously distorting the facts is unforgivable". Carl Fox, Steven Knowlton, Áine Maguire and Brian Trench (2009: 13) conducted a study about accuracy in Irish newspapers and

they found that 42% of the analyzed news lacked essential information, contained incorrect information, or had an error in the headline.

A study of accuracy in news reporting in Italy and Switzerland (Porlezza *et al.*, 2012) showed “factual inaccuracy in 60 percent of the Swiss newspaper stories they reviewed, compared to 48 percent of US and 52 percent of the Italian newspapers examined”. The study shows that newspaper inaccuracy has corrosive effect on media credibility and such practices cross national borders. Similarly, a study on the perception of accuracy in the Swedish media, shows that “citizens have strong expectations that the news media publish correct information and they have little tolerance for errors” (Karlsson *et al.*, 2017).

RESEARCH QUESTIONS

The purpose of this study is to investigate how errors are disseminated throughout the online environment, and how the online news media correct these errors. Instead of setting a hypothesis, we asked the following research questions:

RQ1: How are errors disseminated across the networks of news websites, regardless of the national borders?

RQ2: How is time/speed influencing the propagation of the errors through the web?

RQ3: How are the error correction procedures/routines influencing the accuracy of online media?

METHODOLOGY

For this study, we used a content analysis that consisted of two parts: an analysis of the news stories, and an analysis of the correction procedures. The content analysis for the analysis of the stories had these categories: the URL, the headline, the date of publishing, the time of publishing, the country of origin, the author, the name of the medium, presence of subjective errors, presence of corrections, the date of corrections, the time of corrections, the type of corrections, the source of the story, the link to the original source. On the other hand, the content analysis of the correction procedures had these categories: the type of the correction procedure, and correction labelling.

Instead of focusing on a large number of topics for the analysis, we reduced the sample to a specific case that had expanded across the web and that represented a light topic. Previous studies proved that online media in Germany (Dallmann, 2015), Chile (Elejalde, Ferres and Herder, 2018), the USA (Gentzkow and Shapiro, 2010), *etc.*, were politically biased while reporting hard news, so our presumption was that light news contains less bias, and because of that it easily spreads across the web. We also limited the sample to one case, because it would be almost impossible to track the propagation of misinformation through the web for a larger sample of stories.

In February and March, 2019, the news media published a story about a new award-winning whisky, Queen Margot, which costs just £13.49 (\$18) at Lidl, and that won a prize for being the 'Best Scotch Whisky' in the '12 years old and under' category in the 'Blended' section of 2019's World Whiskies Awards. This story came out as misinformation that involved a relatively high number of online media in Europe and the USA to break the accuracy rule, and it was therefore ideal for this kind of analysis.

Sample

The sample stories were extracted from the initial list of online media/news that was created by Google Search results on the keywords 'Queen Margot Whiskey' (without quotation marks), and which was limited to the period from February 1, 2019, until March 31, 2019. The Google search resulted in a list of 149 websites/stories, which was reduced to 107 stories, and to websites, when we had excluded social media and duplicates. The social media "are both sources of information as a whole and containers of multiple individual sources in the form of pages or accounts" (Venturini *et al.*, 2018) and extracting all the hyperlinks from them would be impossible (*ibid*).

The collection was scraped using the Data Miner extension of Google Chrome. The units of analysis were stories and websites.

Out of the 107 analyzed stories/websites, 24 were from the UK, 23 from France, thirteen from Spain, eleven from the USA, and 36 from other counties (Croatia, Portugal, Poland, Belgium, the Netherlands, Italy, Switzerland, etc.)

Table 1. The list of the analyzed media

The names of the media					
<i>Scotchwhisky.com</i>	<i>The Standard</i>	<i>Manners</i>	<i>SAPO</i>	<i>MOPO (Morgenpost)</i>	<i>Europa FM (Atresmedia)</i>
<i>Esquire</i>	<i>FOX News</i>	<i>DNA (Dernieres Nouvelles d'Alsace)</i>	<i>Grimby Live</i>	<i>Le Dauphine</i>	<i>GQ Magazine</i>
<i>Eclectic Digital d.o.o. (poslovnipuls.hr)</i>	<i>YAHOO</i>	<i>The Olive Press</i>	<i>Noizz</i>	<i>20minuten</i>	<i>Impala (Portal de Noticias)</i>
<i>Forbes</i>	<i>MSN Microsoft News</i>	<i>F5</i>	<i>BMF TV</i>	<i>Staffordshire Live (Reach plc)</i>	<i>Le Progres</i>
<i>Jutarnji list</i>	<i>The Scotsman</i>	<i>20minutes</i>	<i>L'Union</i>	<i>Huffington Post (is)</i>	<i>Business News</i>
<i>Malt Whiskey Magazine</i>	<i>CheshireLive</i>	<i>My Private Brand</i>	<i>From Press</i>	<i>Logo 24 (Gazeta Poland)</i>	<i>Le Republicain Lorraine</i>
<i>The Independent</i>	<i>Le Point</i>	<i>PR Moment</i>	<i>20 minutos</i>	<i>L'Express</i>	<i>Sputnik (It)</i>
<i>Gear Patrol</i>	<i>The News Pocket</i>	<i>Watson</i>	<i>Daily Star</i>	<i>Jornal de Noticias (JN)</i>	<i>Investitor</i>



The names of the media

<i>Business Insider</i>	<i>Mandatory</i>	<i>El Confidencial</i>	<i>In Terris</i>	<i>La Voix Du Nord (LAVD)</i>	<i>La Red 21</i>
<i>Evening Standard</i>	<i>7SUR7</i>	<i>Le Parisien</i>	<i>La sexta (Atres Media)</i>	<i>La Depeche</i>	<i>Dnevnik (SI)</i>
<i>Metro</i>	<i>Mirror</i>	<i>Dlandhlu (PTWP GROUP)</i>	<i>Ouest France</i>	<i>24 matins</i>	<i>Femme Actuelle</i>
<i>ChronicleLive</i>	<i>The Hook</i>	<i>Daily Record</i>	<i>Wales Online</i>	<i>RTL (fr)</i>	<i>La Cadena SER</i>
<i>GoodToKnow</i>	<i>Watson</i>	<i>La Vanguardia</i>	<i>Puls Biznesu</i>	<i>Las Provincias</i>	<i>Ultima Hora</i>
<i>Daily Mail online</i>	<i>La Coctelera</i>	<i>Glasgow Live</i>	<i>ABC</i>	<i>Sudinfo.be (SUD PRESSE)</i>	<i>Radio FM</i>
<i>INEWS</i>	<i>Huffington Post</i>	<i>Londynek</i>	<i>Mundo Ao Minuto</i>	<i>Men's Health (Hearst Espana)</i>	<i>Spania I Dag</i>
<i>MarketWatch</i>	<i>Noizz</i>	<i>The Liberal</i>	<i>Mouv'</i>	<i>Capital</i>	
<i>Lad Bible</i>	<i>JOE</i>	<i>Business Insider</i>	<i>Origo</i>	<i>Surrey Live (Reach plc)</i>	
<i>DerWesten</i>	<i>Maennersache</i>	<i>ACTU (Publihebdos Group)</i>	<i>Gazeta Do Povo (GRPCOM)</i>	<i>La Provence</i>	

Data analysis

For the purpose of exploring how journalistic errors propagate from a source through the web, we used a visual exploration of networks or visual network analysis (VNA), which was derived from Social Network Analysis (SNA).

While SNA mainly “focuses on the mathematical qualifications of networks” (Decuyper, 2020:74), VNA can be adopted for the qualitative approaches where ‘network’ is used” as a method that allows the tracing of the complex entanglements by means of which specific practices are constituted” (Decuyper, 2020:77).

This visual technique is very useful for “studying media landscapes” (Venturini *et al.*, 2018) and to “allow reading networks as geographical maps, translating complicated mathematical concepts into more conventional vocabulary of regions and margins, path and landmarks, centers and peripheries” (Lynch, 1960). Further, VNA helps in asserting how the “network forms might transmute over time” (Decuyper, 2020: 76) and “to understand and explore practice by looking – through networks – at mechanisms that emerge out of a particular composition” (Decuyper, 2020: 77).

For the visualization, we used a force-directed algorithm ‘Harel-Koren fast multiscale’ and Node XL software. “Force-directed layouts create regions where numerous nodes are densely assembled and regions that are less crowded. These differences in density, determined by the uneven distribution of links, reveal the uneven association between

the entities of the network. Everything may be connected in this world, but not everything is equally connected” (Venturini *et al.*, 2018). For exploring the propagation of misinformation, the visual network analysis was updated with a time component, and we developed six visualizations that are based on the time (and volume) of the publishing (February 26; February 27, February 28, March 1, March 2, and March 10).

Coding reliability

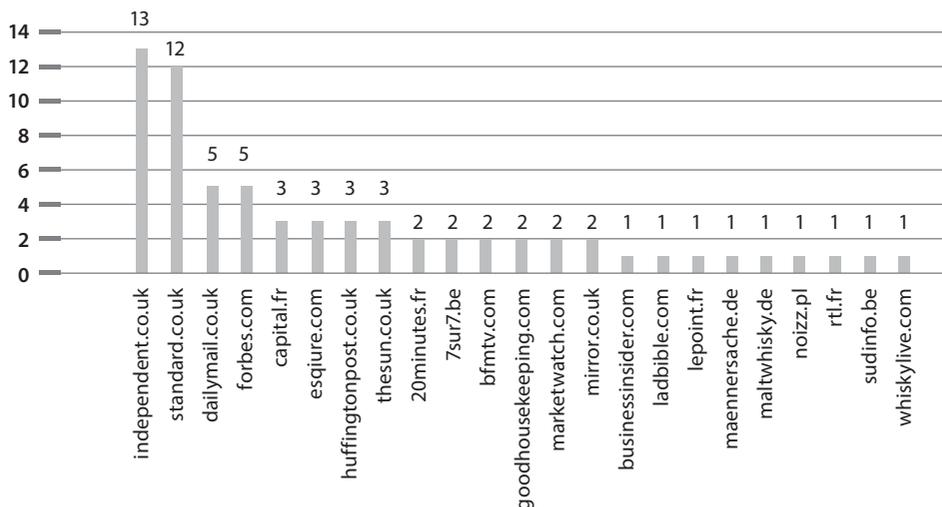
The coding was undertaken by two coders, and intercoder reliability was determined by selecting 21 pairs of stories which were coded by both coders. The reliability was calculated with the ReCal 2.0 Alpha tool (Dfreelon.org, 2019). The conservative Cohen’s Kappa with a value 1 showed high reliability (Lombard *et al.*, 2004).

RESULTS

RQ1: Errors’ path across the networks of news websites

From the stories analysed, we found that 33 (31%) were accurate, 6 (6%) were corrected, and were clearly labeled as corrected, 22 (21%) were corrected, but what was corrected was not made clear, and 46 (43%) contained errors.

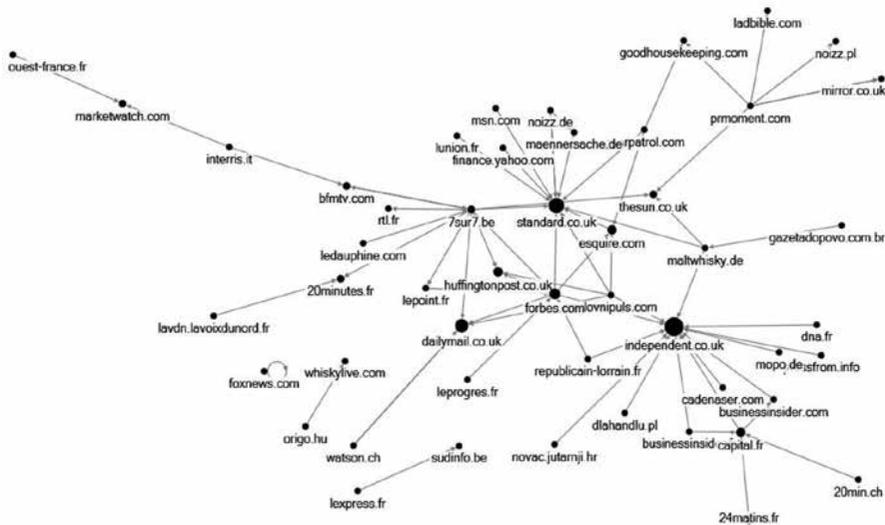
For determination of the paths between media websites we used the sources of the news mentioned, or those linked to the analyzed stories. Online media, like the British *The Independent* (thirteen stories), *The Evening Standard* (twelve stories), *The Forbes* (five stories) and *The Daily Mail* (five stories) were the most used sources in the analyzed sample.



▲ Figure 1.

Number of sources per website

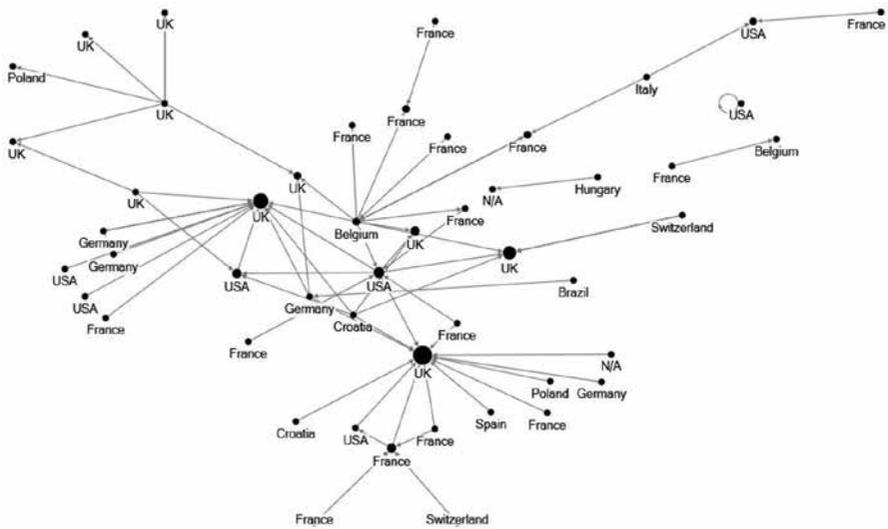
Based on the sources used, we created a network with fifty nodes and with 68 edges that represent the media landscape on the selected case story. Our network exploration examined the relations between them by means of their sources' practices and the spread of errors through the network. In Figure 2, it is possible to notice that the network is not spatialized as a circle, but is rather dispersed with the presence of the polarizing effect – clusters around *The Standard* and *The Independent*, as the main sources of selected case story. The size of the node is proportional to the number of edges (in-degree) pointing to them (linking).



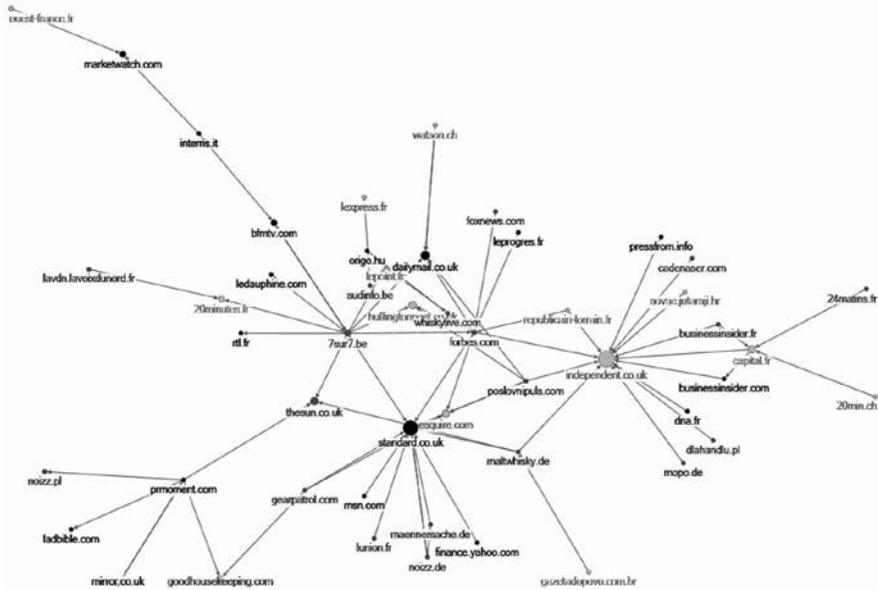
▲ Figure 2.
Spatialization of sources based on the medium name

When we replaced the labelling with the country of origin (Figure 3) it was easy to see that there are no borders between national media landscapes. Almost all of the edges are interconnected independently from the origin of the story or the origin of the medium.

After coloring the nodes of the network according to the category of accuracy (accurate – blue, accurate after correcting – red, and inaccurate – black) we determined a 'butterfly effect' of errors. As it can be seen from Figure 4, *The Evening Standard* contained the error, which spread to *MSN*, *Yahoo* and *Esquire*. Similarly, *The Independent* corrected the error, but it is still linked to *Business Insider*, *dna.fr*, and *pressfrom.info* who, at the time of analysis contained the error. Also, some media, using *The Independent* as a source, corrected the errors (*capital.fr*, *republican-lorraine.fr*).



▲ Figure 3.
Spatialization of sources based on the medium's country of origin

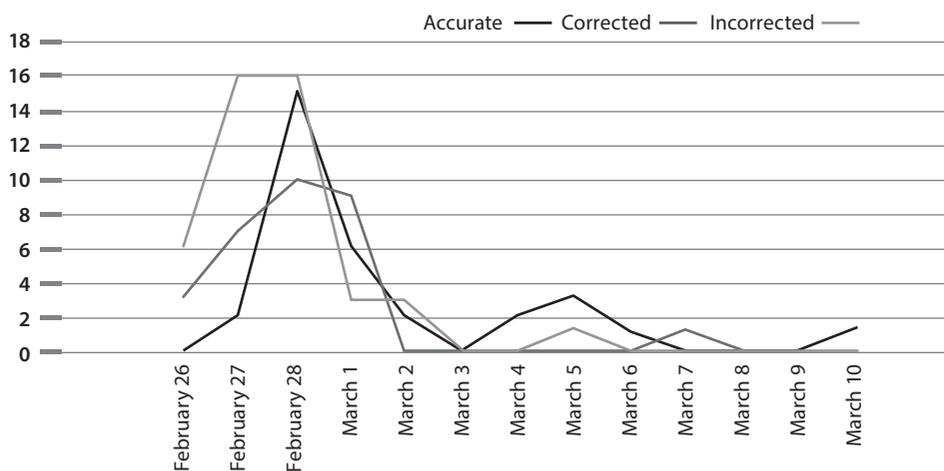


▲ Figure 4.
Spatialization of the originally accurate reports (dark grey), accurate after correcting (light grey) and inaccurate reports (black), based on the source

RQ2: Time and propagation of errors through the web

The story broke out on February 26, 2019, with nine stories published, and all of them contained some form of error. On the second day (February 27), the number of new stories increased by an additional 25 stories of which only two were accurate. On the third day (February 28), there were additional 41 stories, of which fifteen were accurate. This was the day when *Forbes* and *2sur7.be* (almost twelve hours later than *Forbes*) published the story that Queen Margot Whiskey was not the best in the world, and labelled the news as fake.

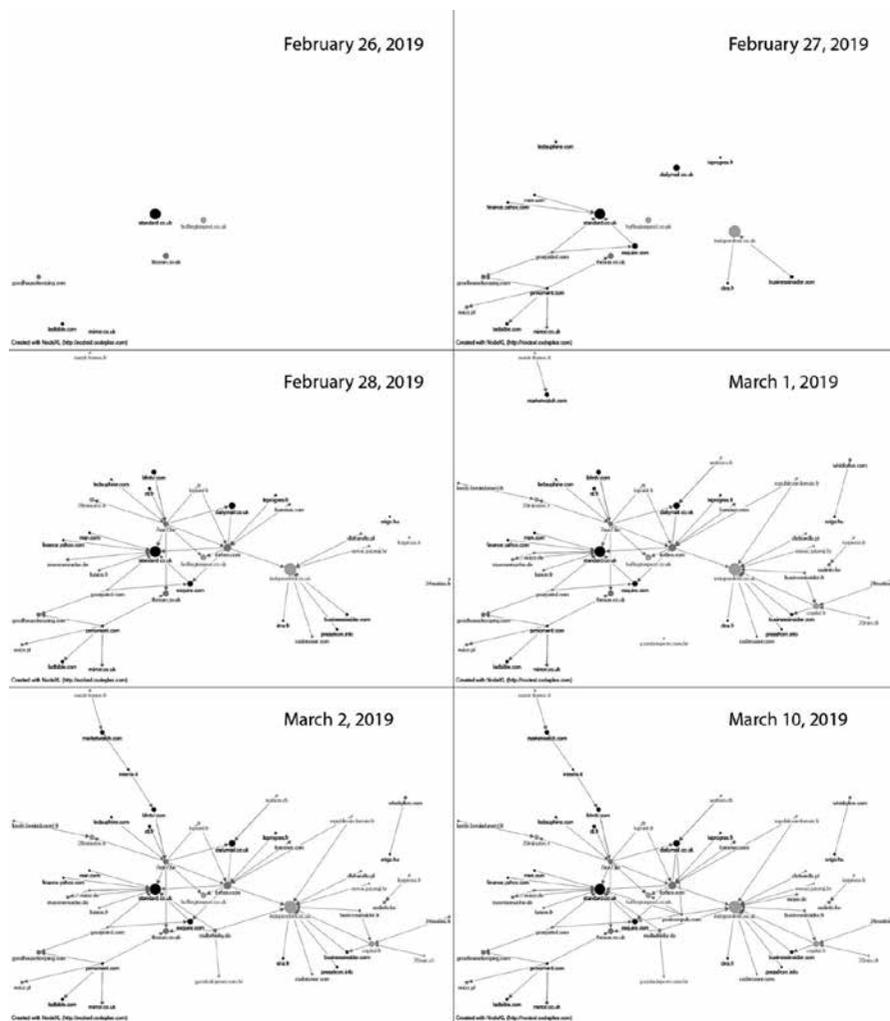
On March 1 and March 2, the number of inaccurate stories decreased to six in total, and nine were corrected, while the number of accurate stories was reduced to six on March 1, and two on March 2.



▲ Figure 5.
Daily news coverage depending on accuracy of information
(February 26 – March 10, 2019)

The data in Figure 6, are partially different from the previous data because they were generated from the list of sources mentioned/linked in the original sample of stories, containing a reduced number of media as a result of editorial practices that did not mention the original source. On the first day (February 26), the story was picked up from *goodhousekeeping.com*, *huffingtonpost.co.uk*, *ladbible.com*, *mirror.co.uk*, *standard.co.uk* and *thesun.co.uk*. On that day, only *goodhousekeeping.com* and *thesun.co.uk* had an accurate story. On the second day (February 27), the number of sources grew with the dominance of the inaccurate sources. *The Independent* published a story with an error that was later corrected (but it was not clear when), but the original report was used as the source for two other inaccurate reports. On the third day (February 28), the story about the inaccurate reports was brought by *Forbes* and *7sur7.be*, so the number of accurate sources began to grow.

Five days after the story broke (March 2), and four days after *Forbes* and *7sur7.be* wrote, new stories with inaccurate information were still being published. An Italian online medium, which was founded by a priest, Aldo Buonaiuto, *Interiss.it*, used *marketwatch.com* (which is owned by *News Corp*), and *bfmtv.com* were the sources of inaccurate information.



▲ Figure 6.
Dynamic spatialization of sources by the days of life of the story
(accurate reports-dark grey, accurate after correcting-light grey
and inaccurate reports-black)

RQ3: Error correction procedures/routines

Of the 107 analyzed stories, 28 were corrected. It is clear what kind of correction the journalists made in only six of them. In the case of 22 of the stories, only a timestamp and the word 'updated' were added next to the original time and date of publication (in three cases, only the updated time and date were kept).

In four cases, a correction was noted in the text of the story, and in two cases the correction note was added next to the story. For example, *The Independent* added the text at the end of the story "This article has been updated to reflect that Lidl's Queen Margot whisky won its award in the first round of the competition in the category for '12 years old and under' whisky in the 'Blended' section, and that further stages of the competition are yet to take place" (*The Independent*, 2019).

When the correction note appeared in the article, it read "We update our article this Friday, March 1, following a clarification on the charts. No, Queen Margot Whiskey did not win the World's Best Whiskey Award, but was named in the World Whiskeys Awards, which will be announced on March 28, 2019" (*Capital.fr*, 2019).

On average, it took thirteen hours and 21 minutes to correct the story.

Through the content analysis of the news websites, we determined that ninety (84%) did not have any tool by means of which the audience could report errors to the newsroom. Of the seventeen that had error correction options, thirteen were provided through an e-mail address for reporting errors, two had a special online form and two had a specialized page on which the audience could report, and which "contains all of the correction notes that the medium had published on the website" (Thornburg, 2011).

The email for reporting errors was used by *forbes.com*, *gearpatrol.com*, *chroniclelive.co.uk*, *cheshire-live.co.uk*, *mirror.co.uk*, *dailyrecord.co.uk*, *glasgowlive.co.uk*, *londynek.net*, *grimsbytelegraph.co.uk*, *dailystar.co.uk*, *walesonline.co.uk*, *staffordshire-live.co.uk*, and *getsurrey.co.uk*. The British media in this list are owned by one of Britain's biggest newspaper publishers, which is a member of IPSO, the *Independent Press Standards Organization* (*Mirror.co.uk*, 2019). There were specialized online forms for correction in *dailymail.co.uk* and *huffingtonpost.co.uk*, while *independent.co.uk* and *marketwatch.com* each had a correction page.

DISCUSSION

The data showed that 69% of the analysed stories contained errors, although some were later corrected. These findings are slightly higher than in the cases of studies made using the Charnley methodology. There are several reasons for this kind of inaccuracy in reporting. The analyzed stories were written on the basis of secondary sources, instead of the journalists turning to a primary one – the organization that was in charge of giving

the award for the best whiskey in the world. By using other media as sources, which has become a dominant practice/routine in online outlets, journalists embedded errors into their own reports. On the other hand, online media corrected three times more erroneous stories, if compared to print media (Maier, 2000). A possible explanation can be found in the fact that it is easier for the online media to receive feedback from the audience and to correct erroneous articles that are stored in their databases.

The data show that, as a result of inadequate and insufficient editorial policies/routines relating to accuracy in different online media, errors transcended the national borders. This finding is in line with the comparative study of the accuracy in Italy, Switzerland and the USA (Porlezza *et al.*, 2012). Considering that the online media are interconnected, media accuracy is even more important online, because the journalistic errors can easily run across national borders. The online media are "part of a larger online structure where every single tweak affects another part of the system" (Van Dijck, 2013: 285). Further, errors made by traditional media have multiple consequences, as online media tend to take them by republishing their information without questioning such reports and thus their erroneous practices result in multiple consequences for the media landscapes.

Time/speed had only a minor role in the emergence and correction of the errors in this example, except for the British media during the first day. The highest number of errors was registered during the second, third and fourth days of the story's life. The example story was not breaking news, so journalists had enough time to report based on the facts. This finding is in line with those in Berry's (1967) research, which shows that time has an influence on the incidence of technical/mechanical errors. On the other hand, errors made by re-using the content from other media is the responsibility of faulty journalistic routines and newsroom error-management practices.

We found evidence that the fast growth in the number of stories containing inaccuracies was partially slowed down, and it was stopped mainly by other media which started reporting on the inaccurate reports (*Forbes* and *7sur7.be*). Even two months after the final reports were published, the errors were not corrected. Errors are still present in 43 of the stories and visitors can access them. The attitude 'we'll correct it later', has not been proven in this kind of practice. The online media newsroom should be aware of the life cycle of news published online, which does not end with a loss of interest by the audience (publishing next edition, airing of broadcast news, *etc.*) but continues and is accessible up to the moment when the record is permanently erased from the medium's database.

Online correction practices, as a way of proving that they are accountable, are almost non-existent. Of 28 corrected stories, only six had an explanation of what was corrected. In other 22 stories, only the timestamp and the word 'updated' were proof that something had been changed. Even if they had wanted to report errors to the editors, the audience would not have had a way to do it. Of the 107 analyzed media websites, only seventeen provide a certain modality of requesting an error correction. It is hardly to be expected that errors will be corrected if the newsroom does not know that such errors have been

made, but, as a previous study (Maier, 2009) has shown, “reporters and editors can neglect correction requests with little consequence. Correction rates are not typically raised in performance evaluations” (Maier, 2009). We can speculate that findings would have been even worse if we had checked reports on social media, apps and other platforms.

CONCLUSION

The findings demonstrated that the main causes of journalistic errors and their spreading were insufficient journalistic routines/practices regarding fact-checking and corrections. The media neglected accuracy as an ethical standard in the journalism profession in favour of the speed of publishing, but only to some extent. After initial reports with errors, and the first reports that indicated the error, many media continued to publish the inaccurate story without proper fact-checking and by relying on secondary sources. In this case, it was not the speed nor the lack of time that caused the errors, but a flawed routine that abandons accuracy as a tenet of journalism.

The findings also proved that corrections are important, and that the media need to have error-management in order to be responsible to their audience and to improve/maintain their credibility. It is even more important for the media to have error-management because this will prevent their own staff from ignoring fact-checking. As Porlezza (as cited in Silverman, 2012) pointed out, journalists might tend not to be mentioned in a correction corner if their newspaper publishes errors, thus contributing to the decline of error rates. The same routine can be adopted regarding other media errors. As our case has proved, writing about other media errors prevents future errors and corrects the existing ones.

These findings underline the fact that initiatives to move fact-checking to the audience, or to out-source this part of the editorial practice, will not solve the problem. Accuracy is “a core tenet of journalism” and “verification is an increasingly essential journalistic skill” (Riordan, 2014: 10) and, because of that, fact-checking and corrections must remain the journalist’s and the editor’s everyday routine, regardless of the type of media.

LIMITATIONS AND FURTHER RESEARCH

The study was limited by the selection of a single case as the basis for tracking the propagation of journalistic errors and correction routines. The findings should be clarified by in-depth interviews with journalists and editors who are involved in reporting. In future research, the sample should be extended in relation to the number of cases and to different topics.

The problems of media accuracy and correction routines should be permanently researched as an attempt to force media to update their error-management procedures.

By making media accuracy transparent, researchers will contribute to a reduction in the number of journalistic errors and will also improve newsroom practices.

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TOČNOST U ONLINE MEDIJIMA: NEDOVOLJNE NOVINARSKJE RUTINE U PROVJERAVANJU ČINJENICA I ISPRAVCIMA

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SAŽETAK *Točnost je osnova novinarskog posla i predstavlja novinarsku posvećenost izvještavanju bez grešaka. To načelo novinarstva sada je u dodatnoj opasnosti zbog utjecaja digitalizacije, promjena u medijskom okruženju i primjene novih modela novinarstva utemeljenog na mišljenjima. U ovom istraživanju korištena je kombinacija analize sadržaja i vizualne analize mreže kako bi se istražilo na koji se način subjektivne pogreške šire putem internetskog okruženja, kako vrijeme/brzina utječe na širenje pogrešaka i kakvi su postupci, odnosno rutine ispravljanja pogrešaka. Rezultati pokazuju da je 69 % analiziranih napisa imalo pogreške, da je glavni uzrok takvih pogrešaka upotreba sekundarnih umjesto primarnih izvora te da pogreške prelaze državne granice, a vrijeme/brzina nema bitnu ulogu u nastanku i ispravljanju grešaka. Od 107 analiziranih medijskih mrežnih stranica, samo ih 17 pruža mogućnost podnošenja zahtjeva za ispravku pogreške.*

KLJUČNE RIJEČI

TOČNOST, GREŠKE, BRZINA, ISPRAVCI, POUZDANOST, NOVINARSTVO

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