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The Fake News Epidemic: A False Tale for Democracy?

Abstract

Alongside the recent Covid-19 outbreak we have seen a real fake news epidemic. Since the 2016 US presidential election, via WikiLeaks, Brexit, the Cambridge Analytical scandal and the Covid-19 vaccines debate, fake news has almost pervasively captured the attention of scholars. The alleged political consequences on public debate have been crucial in many aspects. Hence, this paper evaluates the extent to which fake news can be a threat to the democratic public. Its contribution is twofold. First, it argues that a proper understanding of the problem would require a 'dynamic' account of fake news. Contrary to the collective wisdom that sees fake news as a finished product, the paper suggests that the 'fake' of fake news can be defined by the selection-replication-mutation mechanisms of users. In addition, the paper claims that people's moral commitments can play a more relevant role than mere partisanship in selection and diffusion of political fake news.

Keywords: democratic public, disinformation, epistemic vices, fake news

Introduction

"The employment of Next Generation EU assets for the recovery of Italian region is fake news". "The Super Green Pass safeguards people in indoor environments because people nearby don't get infected and cannot infect us". Headlines such as these appear regularly and have a relevant impact on public opinion and consensus toward institutions. Are they fake news? Are the statements ostensibly false or half-true in some way?

Fake news has a particular spot within today's information disorders. Alongside the recent Covid-19 outbreak we have seen a fake news epi-

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demic (Kucharski 2016; Rubin 2019). It found its apogee in the months of the health emergency in Italy, fomented and at the same time fostered by epistemically suspect and controversial beliefs, conspiracy theories and radical movements such as the anti-vaxxers (Loomba *et al.* 2021; Lyu *et al.* 2022). However, its extent, mechanisms and consequences for public discourse is a lively and debated issue, as there is no agreement between scholars. These considerations make it natural to wonder to what extent fake news is crucial to the wider threat of information disorders, political polarization, and the crisis of trust in institutions, or whether the fears about fake news are somewhat overrated. Is the *tale* of fake news a false tale?

The paper tries to answer some of these questions by focusing on how far fake news is of concern for the formation of citizens' political opinions. For this purpose, it proposes a dynamic framework for the spread of fake news. Disagreeing with the current state of the art that sees fake news as a ontological finished product, static and binary, that flows from one agent to another and concerns wrong factual information that someone (deliberately or not) contributes to spreading, this paper suggests that the widely shared claim that fake news is *false news* is blind to the dynamic nature of the phenomenon, thereby suggesting that an item of genuine (truthful) news may become fake news later on, in the process of its diffusion and vice versa. However, it also states that while the ontological status of news is not fixed, the extent to which fake news is believed can be influenced by people's adherence to specific moral commitments, which might induce the mutation of that (fake) news.

The paper consists of three sections. Sec. 1 recalls the current scholarly debate on fake news. It explores the different domains through which the mainstream literature focuses on fake news problems and also tries to unpack the arguments that support the methodological approaches employed by adopting several criteria. Sec. 2 examines the effects of fake news on public discourse. Particular attention will be paid to the unintended consequences that fake news generates when spread via the web. It is here that a dynamic account of fake news will be introduced, i.e., the idea that news can be interpreted as meme-like units, prone to selection and mutation when replicated. Fake news is not always born as 'fake news'. Many items of innocuous information can become fake via selection and mutation mechanisms (and vice versa) whatever the original intent of the message it gives out.

Sec. 3 completes the paper. It focuses on the current debate on why people fall for fake news, arguing that partisan affiliation is not the only thing that deceives the democratic public by leading it to accept news which fits with its own political ideology. Much fake news arises as controversial factual political information shared by people who endorse specific moral convictions, which include something beyond political affiliation, namely personal commitments and specific values and commitments about ethics, politics, religion, environmentalism and so on. Believing fake news is part of a *selection* mechanism, i.e., what users give attention to. Hence, our aim is to demonstrate that people's non-political world-views may have a relevant role in causing the corruption of 'good' news into fake news (malignant mutation).

1. The 'fake news controversy'

Fake news grabbed the attention of politicians following the 2016 U.S. presidential election and the Russiagate investigation. In the same years, the fiction of fake news was linked to the events of Brexit, WikiLeaks and the Cambridge Analytica scandal. Thenceforth, fake news jumped to the forefront of news coverage.
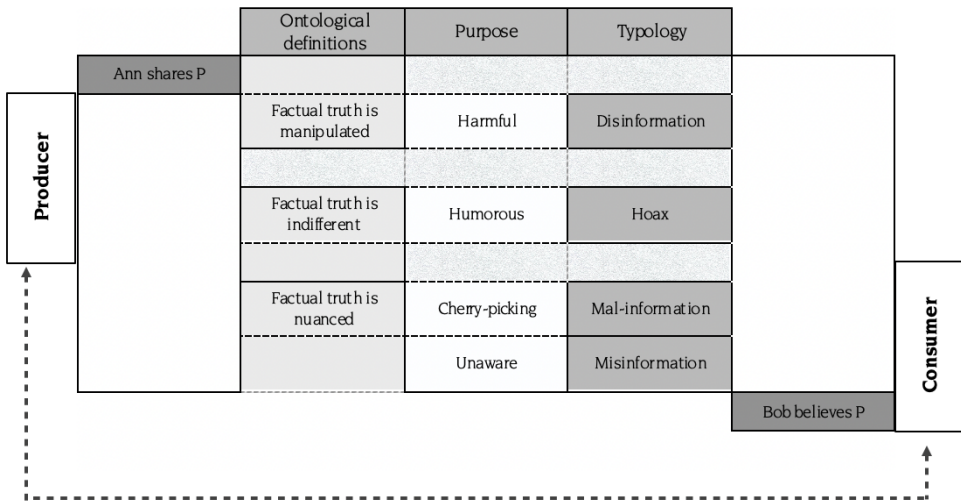
In terms of news values, topics, and formats, fake news can be considered as something very much like traditional 'real' news (Tandoc *et al.* 2021) or that simply tends to mimic it (Lazer *et al.* 2018). The current literature focuses on three broad domains: First, the generation of fake news and the nature of the concept, which overlaps with disinformation, misinformation, mal-information (e.g., Gelfert 2018; Tandoc *et al.* 2018; Tandoc 2019; Quandt *et al.* 2019; Ha *et al.* 2021). Second, the users of fake-news, in particular what people believe, what people share (e.g., Moravec *et al.* 2018; Galeotti 2019; Rose 2020; Martel, Pennycook and Rand 2020; Greifeneder *et al.* 2021; Beauvais 2022). Third, the consequences of fake news on democratic decision-making processes and election outcomes (e.g., Farkas and Schou 2019; Cantarella *et al.* 2019; Iyengar and Hahn 2019; Guess *et al.* 2020; Jamieson 2020; Curini and Pizzimenti 2020; Watts *et al.* 2021). Along with these domains, another segment of the practical literature follows the attempt to explore solutions to counter the spread of fake news, for instance fact-checking (e.g., Garrett *et al.* 2013; Uscinski

and Butler 2013; Graves *et al.* 2015; Tandoc 2019) or nudging tools (e.g., Alemanno and Sibony 2015; Thornhill 2019; Pennycook *et al.* 2020; Nekmat 2020; Roozenbeek *et al.* 2021).

The discussion is somewhat blurred because there is no agreement on the categorization of fake news. To sum up and unpack the accounts which support the different views on fake news, three criteria can be adopted (see Fig. 1):

1) ontological definitions
2) purpose
3) typology

Figure 1 • Fake news' categorization

	Ontological definitions	Purpose	Typology
Ann shares P			
	Factual truth is manipulated	Harmful	Disinformation
	Factual truth is indifferent	Humorous	Hoax
	Factual truth is nuanced	Cherry-picking	Mal-information
		Unaware	Misinformation
		Bob believes P	

Producer — Consumer

A large segment of the literature sees fake news as a maliciously 'manufactured' product, usually with the intentional and deceptive purpose to disinform. This would mean that fake news is not the result of mistakes, but deliberately aims to disinform people by using fictional storytelling (Alcott and Gentzkow 2017; Brennen 2017; Fallis and Mathiesen 2019; Damstra *et al.* 2021). Malicious damage, partisanship, corrosive falsehoods, and advertising purposes can support this practice (Morgan 2018). But deception can be also generated by intentional hoaxes and

humorous fakes: For instance, a satirical piece could unwittingly become fake news even if it was not when first released by its creators (Pepp *et al*. 2019).

In these cases, the ontological criteria of truth come from a manipulation of a known state of reality (P is ~P). It can refer to

- an event P does not occur ("Obama was not born in the United States");
- a state of reality (P) correlated with x is ~P, i.e., ~Px ("Julius Caesar did not cross the Rubicon River on 10 January, 49 BC").

Truth is factual data insofar as the objective language that the declaration "Obama was not born in the United States" expresses is false *if* it can be checked that Obama was really born in the United States (Tarski 1944).

Nonetheless, it could happen that news is simply indifferent to truth. "Bullshit" is a peculiar case. Unlike the will to conceal a "known" truth, news can be harmfully constructed without any concern for the truth (Frankfurt 2009), notwithstanding that it generates a viral disinformation effect. An example of this would be the famous news spread during the last US presidential campaign against Hillary Clinton (which involved her in a scandal known as "Pizzagate") concerning the use of the basement of a pizza parlor in Washington for pedophilic activities. Her private emails were hacked and then publicly released on Wikileaks in 2016. The information in these emails was manipulated, thus giving birth to a conspiracy theory (Kang 2016).

Nothing new thus far. From this viewpoint, fake news is nothing more than a form of political deception like those we have seen in the past. It has had remarkable examples in history: Suffice it to remember the "Great Fraud of Cowley", which involved the Great Stock Exchange in 1814 and announced that Napoleon I and the Bourbons had been killed. Likewise, during World War I, a lot of urban legends that spread through the trenches spoke of 'corpse' factories of German soldiers: Marc Bloch's essay (1921) has been considered pivotal testimony in this sense.

If that is the case, two aspects can be identified that essentially mark online fake news out as something different from the known forms of falsehood: The identification of sources and its methods of replication. In the past, the sources of news were clearly identified and it often happened that judgments and opinions were clearly associated with specific

editors. Nowadays, the content supply chain has been totally changed by the web and credibility evaluation is the primary responsibility of the end-users (Adams 2010; Pan and Chiou 2011; Olteanu *et al.* 2013). Primary sources often are not clear; they are not always associated with the ethical guidelines of the supplier (think of social networks); they are layered as items of information that travel through multiple sources before reaching end-users. Moreover, the social media effect of multiplying has been a crucial aspect of fake news creation and speeding up dissemination (Van Dijck *et al.* 2018). While in the past it was not possible to share news as quickly as digital users do with content–and there was no means of making it happen–today replication happens in real time.

However, keeping fake news to disinformation or intentional misleading purposes by someone means to consider one-half of the problem. Another vein of the current debate insists that a proper understanding of what fake news is would require a much broader view. In fact, not all items of fake news are prompted by the intention to deceive social media users (and people in general) into believing something blatantly false: There are hybrid forms of falsehood that refer to ontological 'not-discrete' criteria of truth, and that generate in people the same false beliefs fake news does.

In the scholarly debate the term mal-information is often employed concerning the use of true information with harmful intent (Wardle and Derakhshan 2018). An example would be yellow journalism, based on the 'art' of creating sensationalism without providing false content, by taking relatively mundane events and sensationalizing them with exaggerated language or biasing the storytelling (Kaplan 2007). On the other hand, news can be incorrectly formulated by whoever inputs it. It may depend on the lack of competence of the author, who provides 'low-quality' information, as well as the potentially biased storytelling of the facts he/she provides. In that case, the intentional deception component is not necessarily assumed, as false information can be created without harmful intent (Rubin *et al.* 2015; Allcott and Gentzkow 2017; Molina *et al.* 2021; Croce and Piazza 2021). The broader umbrella term misinformation has been specifically created for this purpose insofar as it can be difficult to ascertain the intentions of the unknown individuals who create falsehoods that spread on the internet (Pennycook and Rand 2021).

Moreover, if we look at factual truth, ontologies of truth cannot be assumed ex ante. Discerning truth from falsehood becomes a qualitative

exercise. True statements can differ from false statements not only in the putative negation (~P), but also in the states of reality they describe. States of reality do not always describe a factual truth (P or ~P) in the sense that they cannot be a binary thing but need some nuances. Grey areas also exist. These could depend on the elements through which we describe the state of things. Basically, we can say that the statement "Russia invaded Ukraine in February 2022" is a factual truth, whereas the statement "Russia declared war on Ukraine in February 2022" is false because there was no formal act of declaration of war. But what happens when relevant journalistic headlines report that "Russia invaded Ukraine to free it from oppression and cleanse it of Nazis"?

2. A *dynamic account of fake news*

All the positions presented hitherto regard fake news as binary and an 'end-to end' entity that flows from Ann to Bob, say to A to B and they not do sufficiently pause on what is really crucial, i.e., the fact that news can change its status when disseminated. For these reasons, they provide an insufficient account of what fake news is.

Scholarly debate persists in setting boundaries between truth, false-hood, deceptive and unaware intentions of the message that the creator of fake news wants to give out. But this approach does not always work well. For instance, that the above-mentioned Pizzagate scandal that involved Clinton can be considered fake is undeniable. On the other hand, climate change denialism is not generally considered fake news, but misinformation (Treen *et al.* 2020). Despite everything, it is permeated by elements that echo conspiracy theories (e.g., "the greenhouse effect is an invention by liberals") which would imply an intentional component of deception, namely some alleged secret agent.

For practical purposes, all these distinctions are significant of course, making fake news a ready-to-use concept. But, at the same time, they may lead us down a blind alley. Thus, we suggest we do not obsess over pigeonholing fake news into categorizations. Instead, we propose a novel dynamic account of fake news. We would stress that whether an item of news has benign intentions is no longer as relevant insofar as content can be believed by someone and so become similar to intentional "ma-

lignant" fake news, then shared by generating imperfect copies of itself and mutations in the message it gives out.

Many items of fake news were not fake to start with. The overall message of some items of content remains unchanged when they are replicated, but specific items of information are quietly subverted. So, they became fake. This means that fake news, as such, cannot be just defined by those who produce it, but also by the process of replication and mutation, then by whoever finally receives it. We will try to clarify this.

Evolutionary biology can help us. The application of an evolutionary perspective outside of the biological realm to understand the transmission (inheritability) of culture and knowledge is known as Universal Darwinism (Dawkins 1983; Hodgson 2005). Fake news can be considered units of the evolutionary process (Marchetti and Mastrogiorgio 2023) like 'memes',[1] i.e., a unit that cultural evolution theory conceives as an equivalent of genes (Dawkins 1976). A common hypothesis that grounds memetics is that knowledge is "stored" in the brain within package content containing information encoded in the same way as genes are, which can be transmitted by the Darwinian selection mechanism (Blackmore 1999; Aunger 2002).

As in the biological realm, Universal Darwinism assumes three different steps of the evolutionary process: *variation*, *selection*, *replication*. Fake news arises as intentional or unintentional variations of existing content. Some items of fake news (such as bullshit and conspiracy theories) can sometimes come out spontaneously, no matter what its ontological truth. However, it never comes out of the blue, but it always builds upon existing material that can be rehashed: consider the aforementioned Pizzagate scandal, whose source of inspiration was Clinton's private emails.

Once it is generated, fake news can be accepted (or not) by others, and eventually replicated. The step of selection is about believing (or not believing) fake news. The current state of the art is split over the reasons why people fall for fake news. Partisan motivated reasoning (PMR)

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[1] I am also grateful to Antonio Mastrogiorgio for this suggestion. However, unlike the original model we hypothesized, here memetics will be referred to in order to understand how fake news is prone to a non-discrete mechanism of replication.

is considered a driving force insofar as the consumption of fake news n
in general – and political misinformation in particular – seems to run
according to partisan affiliations, reinforcing pre-existing beliefs (Red-
lawsk 2002; Bolsen *et al*. 2014; Taber and Lodge 2006, Gentzkow and Sha-
piro 2011; Kahn 2013; Taber and Lodge 2016).

Evidence of PMR abounds in all studies of political polarization.
Many items of research demonstrate that people are likely to believe in
fake news when it confirms their preexisting partisan preferences and
seek out information adopting 'inaccurate beliefs' that show the favorite
party in a better light than the others (Flynn *et al*. 2017; Peterson and
Iyegenar 2019). The adherence to these beliefs generates biased mental
representation, then inaccurate and partisan political opinions because
of PMR-mechanisms, wherein ideology plays a key role in cognitive per-
ception of the facts whatever the state of things actually is.

However, not all scholars agree on this. A lot of discussions revolve
around the limits of PMR. It has been found that in many situations
people are better able to discern between false political information
('fake news') and fact-checked information ('true news') regardless of
their partisan affiliation (even when it is not declared). Contrary to
PMR, the Classical Reasoning Account (CRA) argues that people en-
gaging in reasoning and reflection are less likely to mistake fake news
as accurate (Pennycook and Rand 2020). From this viewpoint, fake
news susceptibility is related to a weak use of analytical reasoning
and it is more a matter of non-reflectiveness than of political parti-
sanship (Pennycook and Rand 2019). Moreover, while PMR tradition-
ally assumes that politically sophisticated people are also better able
to rationalize new information to make it fit with their own political
preferences (Lodge and Taber 2013), it has been shown that more
politically-knowledgeable individuals are, all else being equal, better
able to spot the implausibility of a character-based story (Vegetti and
Mancosu 2020). In this framework, Bob – a politically sophisticated
person, who is also a member of the Republican Party – decides to
share the Pizzagate news: he might do so not because he believes it,
but for strategic reasons, namely with the intent of discrediting the
opposition party during the campaign.

Finally, once accepted, again, fake news can be replicated (shared)
creating a loop, considering that the replication could involve some mu-

tations. Like memes, content is an efficient (though not perfect) copier of itself when it is shared by others, as they are involved in a quasi-discrete mechanism of replication. Content can be viewed as a conglomeration of units spread (especially via the web) that tells a 'factual-truth story' 1) that *may* or *may not* be proved to be true, which in the case of second-hand news often happens, 2) that can easily be prone to fast/real-time replication and be exposed to a quickly imperfect mechanism regardless of whether its verifiability has been tested.

Anyway, when news is put on the web, it runs its course and can be prone to replication and mutation. Items of content might indeed become refined, combined or otherwise modified by other ideas, resulting in new memes. In some cases, mutations can follow a precise path of down-gradation. In fact, mental representations are rarely discrete (Atran 2001; Hodgson 2003; Henrich *et al*. 2004). Unlike genes, ideas are not wholly transmitted from one brain to another, and there is no guarantee that the mental representation in the second brain is the same as in the first. In brief, any particular 'public representation' can potentially generate an infinite number of mental representations in other minds (Sperber 1996). In fact, consistently with the literature, a user may or may not believe in a specific item of news; *but sharing such content is a totally different matter* (Pennycook *et al.* 2021).

Items of content can easily be down-graded via sharing to such an extent that they become 'real' fake news stories and vice versa. Let us consider this case more carefully. Look at the headline in Fig. 2.

When this kind of content reaches a large audience, it can engage lots of different public representations; but as most of us are laypeople, and we are not familiar with statistics regarding environmental and pollution hazards, the overall message may easily involve a low-fi transmission. Those are examples of subject-to-selection-mechanism fake content that can generate bias or empower radical climate change conspiracy theorists. Mutation (sharing) engages substantial mutations that may imply a radical corruption of a news item's general sense.

Note that *as in biology*, cultural evolutionary mechanisms are blind (Campbell 1960). Many items of innocuous information can become something very similar to fake news via selection (when believed to be true) whatever the original intent of the message it gives out, and vice

versa. For instance character-based fake news is widespread and sometimes turns out to be true, such as the news about the Hungarian MEP József Szájer, according to which he took part in an orgy during the lockdown in Brussels, as the news, on his own admission, eventually proved to be true.

Figure 2 • Fake news' evolutionary mechanism

Latest United Nations report on climate change explains how reducing consumption of animal meat could lead to significant decrease in deforestation and reduction in greenhouse gas emission [1]	**Original news**
United Nation latest report claims that Eating Less Meat will save the Earth from climate change [2]	**Low-fi replicated news**
United Nations says that eating human corpses and placentas will be the last resource to combat climate change [3]	**Mutated-fake news**
	[1] https://www.nature.com/articles/d41586-019-02409-7
	[2] https://www.thetimes.co.uk/article/eat-less-meat-to-save-the-earth-urges-un-pzvtqmp28
	[3] https://maldita.es/malditobulo/no-la-onu-no-ha-propuesto-comer-cadaveres-placentas-y-fetos-para-combatir-el-cambio-climatico

3. Why fake news deceives the democratic public

The policies employed by advocates of CRA to spot fake news usually include education and training aimed at improving deliberation, reflection and enhancing basic political knowledge. However, while training in accurate thinking is a smart solution, it is also incomplete. In fact, enhancing knowledge of political facts – ontologically understood as factual truth-based information – and debunking wrong factual data, e.g., by using fact-checking, might not be enough.

One reason for this is extensively focused on in the current literature and regards the ways partisan misbeliefs resist correction (Lewandowsky *et al.* 2012; Nyhan 2020 and 2021). Basically, rather than ignoring factual information, some pieces of research in cognitive psychology show that presenting respondents with facts can reinforce their bias as ideological attachments prevail over the 'naked' and objective interpretation of facts. So, the current methods of debunking are not able to modify people's belief systems. Training in education about political facts might be a useless attempt and may even be harmful to the extent that it can reinforce existing biases of some people (Nyhan and Refler 2010). For that reason, a large segment of the literature continues to consider PRM the primary cause of political fake news consumption (Pereira et. al. 2018; Bisgaard 2019; Van Der Linden, Panagopoulos, Roozenbeek 2020; Osmundsen *et al.* 2021; Gawronski 2021).

However, we will illustrate that PRM is not the only driving force, but the effect of fake news on the democratic public should require a much broader view of the problem that include not only partisanship, but also the all-encompassing attitudes of people and their moral and epistemic virtues which influence their political beliefs.

Much news is descriptive: It claims that this thing happened, or that person said something. Other items of news are based on propaganda: It is intended to demonstrate that climate change is a scientific fake, that SARS-CoV-2 is nothing more than seasonal flu. Unlike situations in which proof is controversial (or not available), some items of fake news are easier to unmask if they are based on factual knowledge, no matter how.

On the other hand, much political fake news still has a *spurious* and *descriptive* side (e.g., Prime Minister Silvio Berlusconi called the first African-American president-elect in United States history "young, handsome and suntanned"). But when it reports that this thing happened, or that person said something, it refers to 'character-based' information, namely news stories portraying him/her as evil or doubtful of his/her personal integrity or competence (e.g, "Italian Prime Minister Silvio Berlusconi engaged in sexual acts, bizarre orgy rituals"). What can influence belief in this kind of storytelling?

Let us try to reflect on this fact. When these kinds of news report (or refer to) facts and are spread via social networks (or word of mouth) by someone, what makes the difference is the person's values which, in turn, refer to spe-

cific political and moral viewpoints that are employed as a filter vis-à-vis the factual information provided to him/her. This is a peculiar form of partisanship, which has no cognitive underpinning but which includes an epistemic and moral component and which has been called "partisan epistemology" (Rini 2017). In those cases, a piece of news overlaps ontologically the factual truth and the normative claims (implicitly or not) supported by whoever shared the news or by whoever received it. In Rini's argument, when we learn a person's partisan affiliation, when we believe the 'testifier' (whoever tells the news) to be an epistemic peer within a normative domain because we agree with him/her on a broader swath of claims, then we also learn (and accept) something about the political and moral values he/she endorses. Epistemology in this case is part of the PMR-mechanism.

However, in a dynamic perspective, fake news cannot be generated only by a storyteller, then passively accepted by other epistemic peers. Although the ontological status of a news item cannot be defined ex-ante, as the attributes of truth and falsehood are blind to the dynamic nature of the evolutionary mechanism and might not be known, believing and sharing fake news is a human property; hence it is part of a selection mechanism that occurs when people encounter news.

In these cases, we suppose that people's world-views might have a relevant influence on fake news' reception, as well as on an individual's urge to share it and that it can cause mutations of the same piece of news. This mechanism can be viewed as a sort of moral heuristic, in the meaning given by Sunstein (2005). People's non-political world-views include the set of mental representations and beliefs affirmed by citizens concerning the world, which give birth to moral and value commitments to which people become attached. They contrast with the world-views which are based on the realm of politics, understood, in practical terms, as the public arena wherein facts are free from value judgement.

People's non-political world-views are usually based on a comprehensive doctrine (Rawls 1993). So they are ideological convictions but, at the same time, they cannot be reduced to the PRM-mechanism: they are something wider and all-encompassing. At the same time, people's non-political world-views can bypass analytical reasoning. When knowledge which an agent refers to in his/her reasoning is simply missing or when it is employed through the filter of personal values and commitments, which can also include ethical counter-arguments, etc., analyti-

cal reasoning does not work properly. In this case, people's world-views prevail over it.

Hence, much information which some people would call 'fake' began its existence as controversial factual political information shared by people. Later – and because of *selection* – it can become fake (do not forget that the opposite can happen).

How can people's world-views bypass analytical reasoning, lead people to fall for fake news, and even provoke fake news' mutation? Let us consider this headline about the so-called "Sofagate Scandal": "Ursula von der Leyen was left without a chair at a meeting with President Recep Tayyip Erdoğan in Ankara on 6 April: EU chief Ursula von der Leyen blames sexism for Turkey chair snub". What will Ann, a proud activist in the feminist movement, infer from this statement? In the first place, let us assume that she believes this news is true (she has to be right). But if she decides to share the following headline that she found in a radical feminist blog – "Turkey's President Erdoğan calls women who work 'half persons'".[2] – what will happen if other peers, who agree on the same moral value commitments about women, share it? In the first place, Ann's inference about Erdoğan's behavior can be influenced by her feminist beliefs. But her convictions can generate moral heuristics, that lead to mistakes and biases that combine to fall for fake headlines such as Erdoğan's evil portrait.

In the second place, is this a fake claim or fake news? At first glance, it looks like a controversial political claim rather than real fake news. But is easily becomes a fake artifact. In fact, the headline comes from a real declaration by Erdoğan that was a little different–though for some it may sound equally questionable – claiming that "a woman who abstains from maternity by saying 'I am a worker' means that she is actually denying her femininity".

More interesting is that the second headline is not correlated in any way to the Sofagate Scandal (it hails from five years before!), but it can be linked to it if people believe it. In that case, we can think that the message can be subverted and the Sofagate Scandal turns into character-based misinformation attached to a fake headline. From factual-truth based news (Ursula von der Leyen was left without a seat by Erdoğan),

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[2] https://www.nbcnews.com/news/world/turkey-s-president-erdogan-calls-women-who-work-half-persons-n586421.

the news becomes decontextualized fake content, namely *j'accuse* vis-a-vis the Turkish President (Erdoğan hates women workers). No matter how Erdoğan in private really believes that women are less smart than men: The news circulates in public, profoundly mutated in any case.

Ideally, Bob, a politically sophisticated person, may doubt this news story if character-based information on Erdoğan is available. He will consider the sources biased. But in the end, reasoning may not improve accuracy in people in whom robust world-views prevail. And it is difficult to admit that even politically sophisticated people like Bob rely on their reasoning when claiming reciprocal world-views and comprehensive doctrines.

Final remarks

This paper has discussed the phenomenon of fake news and its alleged political influence. The question that drives the paper from its inception is whether the concerns about fake news are overhyped and its effects exaggerated. Scholars put a lot of emphasis into defining and categorizing the concept. This makes the literature on fake news somewhat disharmonious. This paper has suggested that instead of obsessing over these things, a proper understanding of fake news would demand a different view of the problem.

It has been shown that many items of content that flow into public speech contain or refer to biased or exaggerated storytelling of fact; they are imbued with controversial or inaccurate beliefs; they consist of partisan storytelling, so that truth and falsity are blurred. Many scholars believe that these kinds of content cannot be fake news and, basically, identify them with disinformation or mal-information, whose purposes are clearly harmful. Others claim that they are fake news misinformation, where the intention to deceive is not the rule. In this regard, the paper has argued that whether fake news has an intentional or non-intentional purpose to deceive the reader is no more relevant than that people believe (or share) it.

To support this thesis, a dynamic account of fake news has been introduced, built on standard evolutionary theory, wherein news can be interpreted as meme-like units prone to a blind mechanism of selection and mutation. In this framework, fake news cannot only be defined by those who 'produce' and spread it, but also by those who finally receive it.

In addition to this, the paper sheds light on some methodological aspects on which we can now reflect, as their relevance might be fundamental when deciding to make policies to reduce the consumption of fake news. These considerations represent a missing piece in the current debate and there is little correspondence between the two segments of the literature.

We feel our analysis represents a distinctive contribution, essentially for two reasons. On one hand, we have clarified that a static ontological definition of fake news must be avoided. Fake news is not a stand-alone entity that can always be subject to scrutiny, but rather its ontological criteria of truth continuously evolve through a blind selection mechanism. This does not mean ruling out truth, but relativizing its criteria by articulating the distinct mechanisms for scrutiny. At the same time, we have hypothesized that, although the mechanisms of selection are blind (for example, 'benign' news may evolve into 'malignant' fake content, rumors and misinformation, i.e., 'unaware fake', may become unarguably true statements), what people believe is a part of the selection mechanism.

However, believing cannot be merely considered through the lens of cognitivism: we have identified many causes for why, according to the scholarly debate, some people may fall for fake news (partisanship as well as lack of reasoning and lazy thinking), but other situations can be envisaged. We have also suggested that people's moral commitments and their non-political word-views can be an expansive source rather than a partisan bias in provoking malignant mutation ('fake news') of controversial storytelling.

Taking all these factors into consideration, the paper recommended that understanding the effect of fake news on the democratic public would require considering the all-encompassing attitudes of people and their moral and epistemic vices.

Current research on fake news, among other aspects, should reconsider the psychology of fake news. New studies (empirical and/or experimental) may also be needed to test and supplement the dynamic model of fake news here provided to show how fake content evolves into non-fake content. Finally, behavioral policy-making should address what kind of policy agenda would suit such an approach. In recent years several initiatives of the EU commission have been shaping this trend, an ongoing revision of the true pillars and symbols of the early generation of EU Inter-

net policy. They include public consultations on online disinformation, the recommendation of a 'proactive' media policy, the creation of an independent network of fact-checkers and the implementation of nudging tools to induce end users to reflect before sharing (such as browser extensions). All these proposals just tend to elude the real concern about the spread of fake news, either by approaching the issue in a "mechanistic" way, or by seeing fake news as an epidemic virus to be defeated. Instead, concerns about fake news are partially justified insofar as it distorts public discussion and induces polarization, whose 'keystone' would imply a reconsideration of the problem of reasonable political pluralism.

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