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WAYS THAT WE ARE WRONG: INFORMATIONAL VULNERABILITY IN THE DIGITAL AGE

Ignas Kalpokas, Ainius Lašas, and Arvydas Grišinas

Kaunas University of Technology

Abstract. This paper is a theoretical contribution to an ongoing debate regarding the current predicament of truth and knowledge in the era of digital information overflow. It suggests that instead of an 'era of post-truth' in a literal sense, we should talk about a specific period of human informational vulnerability. The paper proposes a scheme for analysing human cognitive patterns that emerge when facing the confusing and murky reality of information flows. The proposed model is demonstrated analysing the main characteristics of conspiratorial narratives and ways in which the above-mentioned cognitive patterns interact with these narratives. As a result, the paper achieves two things: first, it presents informational vulnerability as a normal and natural human process, and second, it introduces a systematic approach for analysing it and interpreting public narratives.

Keywords: informational vulnerability, post-truth, conspiracy theories, cognitive patterns, biases, Lithuania

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1. Introduction

The role of truth, understood here as correspondence of statements to verifiable facts, has certainly become debatable in today's societies. Notably, the current epoch is often declared to be a time of post-truth, i.e. after truth (McIntyre 2018). Many critics present the current situation as a period of some sort of cognitive and intellectual degradation, i.e. the 'post' in post-truth tends to be taken literally. There is, nevertheless, a growing tendency to focus on the functional role performed

by such ideas with regard to both individuals and societies. It should be noted, however, that the epistemic pessimism that follows the post-truth discourse, rather than problematising the construction and adoption of 'truthful' narratives as such, criticises first and foremost technology-driven circumstances that complicate the processes of truth-making. Also, there seems to be an implicit and ahistorical assumption that at some point in the past humanity lived in the golden age of optimal information. Therefore, instead of being the times 'after truth', perhaps these are specific but not exceptional times when we deal with informational vulnerability.

This concept, commonly applied in data security studies, describes vulnerabilities of information systems that make them susceptible to hacker attacks, information leaks and similar incidents (MITRE Corporation 1999). This article applies the same term in a social and political context in order to 'humanise' its categorical meaning, that is, to analyse an individual's tendency to internalise faulty narratives and construct a worldview based on them. Importantly, informational vulnerability is not a new phenomenon but rather a continuous feature of human social life (Grišinas 2025). Historically, the universal presence of mythical and other heuristic traditions of knowledge has demonstrated how the scarcity and fragmentation of information have continuously undermined people's capacity to see the world in a factographic way. The purpose of this article is to examine how the excess of information and other challenges posed by the contemporary digital technologies lead to new types of informational vulnerability (see e.g. Andrejevic 2020, Woolley 2020, Tandoc and Kim 2022).

A crucial precondition for the above-mentioned vulnerability, as proposed in this article, is that social cognition, by definition, is non-truth-centric. Instead of truth, *sense-making* (Weick, Sutcliffe, and Obstfeld 2005) is seen as the key consideration. Here sense-making is viewed as the primary function of the brain, which applies to physical and social worlds. Hence, rather than adopting a doom-and-gloom narrative of deception and/or cognitive incapacity, it is suggested that we should focus on the patterns of perception that are often prone to biases. As a result, the question pursued here is 'how can we categorise, analyse and define the ways that informational vulnerability manifests itself in a digital age and beyond?'

It is by no means proposed here that the correspondence between utterances and facts is irrelevant in principle but, instead, that various forms of fallibility readily fit any kind of utterance. In fact, sometimes they are parts of the 'sensefulness', even if not the 'factfulness' of such utterances. While it is still argued that narratives, worldviews and thought patterns short of the ideal standard of sense-making are flawed, these flaws are to be considered largely unavoidable due to the fundamental human need for (immediate) sense-making. Informational vulnerability is, therefore, to be understood as individual susceptibility to internalise faulty sense-making and to consequentially generate narratives that, even if conveying a meaningful perception of the world, are not factually driven.

We further propose a systemic approach to understanding and analysing informational vulnerability, presenting conspiracy theories as an example of such a shortcoming in thought patterns. Instead of being pathological, it is argued, conspiracy

theories are best seen as simply a 'common part of people's understanding of the world, just as various as other forms of belief are' (van Prooijen 2018: 17). Also, conspiracy theories appear to be universal, widespread both temporally and geographically (van Prooijen and Douglas 2018), rendering the case a good starting point for exploring the concept of informational vulnerability.

This article hence opens with a consideration of changes in the information environment with the advent of digital technologies that have both helped and complicated the already complex task of dealing with the world around us. This difficulty, particularly when discussing disinformation, conspiracy theories and other 'vulnerabilities', is often subsumed under the concept of post-truth, typically with the aim of criticising the present condition and even portraying it as a form of cognitive and moral decay. It is, nevertheless, demonstrated that such a condition is not some postmodern aberration but, instead, the opposite: a manifestation of the normal human tendency to focus on sense-making above other considerations, even such as veracity. The point is elaborated by a discussion of flawed patterns of narrative construction present therein, substantiating it with findings from a nation-wide survey on reliance on conspiracy theories among the Lithuanian population in 2021. Finally, to demonstrate the applicability of the proposed approach, core structural tenets of conspiratorial narratives are explored using the proposed classification of informational vulnerability patterns to demonstrate their applicability.

2. Methodology

The core contribution of this article is twofold. Firstly, it reviews a range of leading secondary literature in a) communication and media studies and b) political science, with a particular emphasis on political communication, and debates the predominant argument in this literature that the post-truth era should be understood as a shift away from the need of factually driven public life and discourse.

From the communication and media studies perspective, particular attention is paid to the literature on the increasing centrality of digital media on everyday life, typically subsumed under the conceptual header of mediatisation. This is done in order to contextualise current theorisations of post-truth within the broader literature on digital transformations and to elucidate key premises upon which the subsequent post-truth literature is based. Meanwhile, it must be stressed that the extant literature on post-truth tends to be based on piecemeal interventions and does not have established schools or dominant theories.

For this reason, the authors have first identified conceptual clusters that provide a taxonomy of the current views on post-truth. The first set of views is seen as focusing on fundamental shifts that allegedly have taken place in contemporary societies. These include a) approaches postulating the loss of capacity to distinguish between truth and falsehood and/or moral decay, b) approaches focusing on disorientation caused by the structural features of contemporary information environment, c) approaches focusing on cultural change towards greater levels of distrust, and

d) approaches critical of cultural changes stemming from postmodernist philosophy and general devaluation of truth.

Against such alleged shifts, alternative – normalising – approaches to post-truth are presented. These approaches tend to focus on the necessity of narrative and meaning and their prevalence over other considerations, including truth. The provision of such taxonomy of approaches to post-truth is a contribution in and of itself. However, it also serves a methodological purpose: the development of a conceptual apparatus for further empirical validation. While existing work on post-truth tends to be based on abstract reasoning or empirical evidence, the data collected allows for empirical validation of the dominant approaches, at least in the specific case of Lithuania.

Instead, the article presents a different argument, suggesting that post-truth rather signifies a situation where the public is beset with increased tendency to rely on faulty narratives, marked by a set of typical cognitive patterns. This happens due to the multiple challenges presented by the digital culture, but it does not mean that fact-driven truth narratives are obsolete. It hence rearticulates the problem presented by post-truth as pertaining to an increased human informational vulnerability rather than a culture where truth no longer matters. In doing so, it frames the problem as an object 'open' for study rather than a 'closed' diagnosis of our times.

Secondly, the article presents a theoretical model, based on a suggested typology of faulty narratives, illustrated by a case of conspiracy theories. The theoretical argument that constitutes the core of this contribution is illustrated with the results of a survey, performed in Lithuania, in September–October 2021. A detailed discussion of the survey is not the main theme of this article and is used as a source for scientific examples to support the theoretical contribution. These examples, however, do demonstrate the wide acceptance of conspiratorial ideas, which renders them an excellent case for studying human informational vulnerability in the digital society.

3. Overflow of information in the digital age

In order to better understand the context in which the real or alleged changes in the audience relationship with truth take place, one first needs to delve into some of the changes that have become characteristic of the contemporary information environment. The tendency to rely on knowledge and narratives that are not factually driven and positively truthful yet socially meaningful, and to construct worldviews based on such perceptions, is far from new, with examples spanning throughout human history, from mythological traditions onwards. This contextualises post-truth as a historical phenomenon.

However, it is the quality of digital technology to overwhelm our capacity to process information in an orderly, systematic and critical manner that separates our times from the ones before. First and foremost, this pertains to overabundance of content that hinders meaningful choice by leaving less time and space available for critical consideration. Also, such an overabundance necessitates a technological

apparatus for the sorting of content, which then leads to the matters of algorithmic governance of information. Such governance, in turn, enables personalisation and tailoring of content as well as audience expectation of any relevant information being within easy reach.

The flow of information today can be characterised in terms of 'high velocity and dizzying excess' (Dahlgren 2018: 26). In particular, with the advent of social media and the decline of the traditional gatekeeping role performed by mainstream media, individuals have become permanently immersed in a vast pool of content (McDermott 2019: 221). It is indeed correct that 'news today is ubiquitous, pervasive, and constantly around us' (Gil de Zúñiga et al. 2017: 106), leading to the difficulty in distinguishing between claims and/or forming a continuous and coherent understanding of the world as such. This leads to a distinct challenge that both communicators and audiences face: even though messages still can be encountered (and viewed or heard, or read), they 'cannot be attended to' for the simple reason of time and cognitive pressure (Couldry and Hepp 2017: 112). Almost automatically, this seems to lead towards the need to 'drastically *select from* the environment […] in order to make it more manageable' (Couldry and Hepp 2017: 113), even though such trimming of one's scope of attention can also lead to an increase in the likelihood of falling for and sharing fake news (Bermes 2021).

Moreover, the way information is shared and accessed has changed with the advent of online platforms, which have been said to be responsible for 'the distribution of bite-sized and undifferentiated news out of context' (Syvertsen 2020: 38), thus further increasing the difficulty of interpretation and sense-making. Moreover, individuals are now caught in-between an already evident scarcity of attention on the one hand and 'an overriding push by corporations and institutions to capture, mobilize, and profit from attention' on the other, thereby adding to the potential disorientation of audiences within the contemporary media environment (Doyle and Roda 2019: 1–2). Hence, individuals are now forced to cope (or attempt to cope) with 'a deluge of information' without having the necessary time, motivation and cognitive resources for this task to be fulfilled; it is therefore only natural that other resources at one's disposal, such as prior experiences and pre-existing beliefs and convictions, are used as substitutes (Ecker 2018: 80).

Once processed, such information becomes the basis for interpreting further encounters with content, thus becoming deeply engrained and making retractions and denials 'notoriously ineffective' (Ecker 2018: 80). In this context, post-truth can be seen as a crisis of authority, primarily applying to the traditional structures and institutions of knowledge (Enroth 2023) that are seemingly being replaced with alternative tools of sense-making. However, it is necessary to point out that pre-existing beliefs are by no means new or unique to the digital age. They have shaped our sense-making since our brains developed this function. The same can be said about bite-sized and context-poor information. In the pre-mass media age, which makes up the longest period of human history, scarcity and partiality of information was the status quo, exposing individuals to informational vulnerability.

Under the current conditions of excess, the flow of content is notably intermediated by online platforms that effectively '*produce* the social structures we live in' (van Dijck, Poell, and de Waal 2018: 2). Similarly, for Hepp (2020: 82), today's societies are in the midst of 'processes of an automated, data-based construction of the social world'. This production, however, does not take place under the logic of public interest but, instead, following the platform logics of popularity and content congruence with user data. In this way, metrics, data patterns and data-based insights become central to the production of the social world, including the information individual users are supplied with (Hepp, Breiter, and Hasebrink 2018: 5–6; see also McDermott 2019: 221, Syvertsen 2020: 38).

Starting from these premises, it is then not uncommon to encounter claims of humans losing their agency in social matters to algorithms (see e.g. Andrejevic 2020: 30). Moreover, particularly under conditions of acute information overload and cognitive stress, whereby users are faced with a sudden additional onslaught of content (the COVID-19 pandemic could be an example here), individuals often display a tendency to avoid news altogether, thus even more deeply relying on accidental encounters tailored to their tastes and further increasing the likelihood of endorsing fake news and conspiracy theories (Tandoc and Kim 2022). As such, then, processes of platformisation tend to be seen as part and parcel of the rise of post-truth tendencies. But even here one should not be blind to the shadows of the past, when the Western partisan press arguably embodied the notion of platformisation. Furthermore, the selection and tailoring of information can take place not only at an individual but also at a state level. For instance, China presents an example of a society facing information overload and deficit at the same time as the ruling Communist party shapes the national informational environment. Algorithms are used to track and prevent any unwanted content, thus putting artificial barriers for individuals to access information. Similar examples can be derived from many other current or past authoritarian regimes that sought to actively shape their informational space and overpopulate it with propaganda and disinformation.

Under the circumstances described above, individuals who *feel* they are informed are more likely to act on their perceived knowledge of the world, regardless of the quality of such information (which can equally be good or sub-par); hence, even people who are, in practical terms, misinformed, can end up being active participants in democratic processes to no lesser extent than those possessing adequate knowledge (Song, Gil de Zúñiga, and Boomgarden 2020: 64). It also transpires that, even if and when users encounter diverse information through the use of multiple social networks, this might not have a perspective-broadening effect as counter-attitudinal information could well be processed in a biased, opinion-congruent way, thus eliciting a reinforced drive to defend one's point of view (Guo and Chen 2022). This activism would, undoubtedly, further contribute to the spread of disinformation. For the individuals concerned, however, this would give a notable sense of self-efficacy and emancipation (see e.g. Kalpokas 2019).

4. Post-truth as moral and cultural decay

The current patterns of information consumption have created an unease among at least some scholars, often expressed under a catch-all term 'post-truth'. While it is not the aim of this article to examine in any depth the question of whether a post-truth condition as such exists, it is suggested that at least some of the more radical interpretations do miss the point. In particular, within the literature on post-truth there is a tendency to treat it not merely as an aberration but, even more forcefully, as a sign of moral and cultural decay, whereby any sense of truth is lost and citizens themselves no longer care about matters of veracity, blindly giving in to emotions and beliefs. This section, then, provides an outline of such claims to lay ground for an alternative explanation later in the article.

Foroughi, Gabriel, and Fotaki (2019: 140) would equate post-truth with some kind of widespread lack of cognitive capacity that leads to universalisation of lies and fakery as well as to an overall weakness, if not degradation, of the public's character (see also McDermott 2019: 218). Following this line of argument, it might transpire that 'many human beings cannot realise their capacity to relate in an independent, reflexive manner to the world' (Schindler 2020: 392). Instead, they succumb to the role of emotions, convictions and prior experiences as coping strategies in an environment overpopulated with (dis-)information. Indeed, a common strategy of attempting to disqualify post-truth from meaningful political discourse rests on establishing a false dichotomy 'between the esteemed objective realm of facts, science, and reason and the dangerous subjective realm of emotions, ideology, and irrationality' (Harambam, Grusauskaite, and de Wildt 2022: 787). It is worth paying attention that audiences tend to be described as *simultaneously* overly passionate *and* cynical (see e.g. Schindler 2020), thus only further muddling the role that afactual knowledge plays in today's societies. Also, this seems to presuppose the presence of some exceptional rational age in the past, where emotions played a lesser role in decision making and information processing.

Within the mainstream literature on post-truth and fake news, the net result of the preceding developments transpires to be one of prevalent disorientation and epistemic anarchy whereby 'everything, and nothing, is believable anymore', leading to potential 'political paralysis' (O'Shaughnessy 2020: 59). Such lack of a clear and recognisable reality is seen as further exacerbated by the prevalence of social media bots as well as new forms of technology-enabled manipulation, such as deepfakes, that are used to amplify fake content and to drown factual information (see e.g. Woolley 2020). All in all, then, disorientation and lack of fixed points of reference are seen as the order of the day (Vaccari and Chadwick 2020), so that truth becomes irrelevant (McIntyre 2018: 5). Likewise, scholars lament 'the diminishing importance of anchoring political utterances in relation to verifiable facts', with audiences being claimed to ultimately lose the capacity of distinguishing between verifiable claims and mere bullshit (Hopkin and Rosamond 2017: 2, 12).

For Kavanagh and Rich (2018: x–xi), this process signifies 'truth decay' by way of decreasing consensus over facts, decline in traditional forms of information

authority and dominance of personal opinion and experience. Indeed, personally comfortable belief-based information and easy-to-digest anecdotes are typically seen as more believable than factual but opinion-incongruent content (Ball 2017: 179–180). In this way, it would seem, the very possibility of a debate over what constitutes truth is undermined (Bufacchi 2021: 349–350). As Harjuniemi (2022: 272) somewhat ironically puts it, post-truth 'nullifies any claim to objectivity', thereby breaking away from 'the modernist model of truth-telling'. Of course, this form of truth nostalgia fails to account for the multiple ways in which modernity itself has been less than fully compatible with truth.

Elsewhere, a 'post-truth culture' is presented as one 'characterized by near paranoiac levels of distrust, in large part thanks to the constant sophisticated attempts to confuse and dupe' the public by political leaders (Harsin 2019: 102; for a similar view, see also Hopkin and Rosamond 2017: 2). Following this standpoint, audiences could be seen as a passive flock, significantly led astray by those in power (indeed, for d'Ancona (2017: 142), for example, passivity is central to post-truth). For Bufacchi (2021: 354) as well, 'post-truth is an invention of the powerful, not the powerless', projected 'specifically with the intent to undermine the Truth'. Also, in a similar manner, for Foroughi, Gabriel, and Fotaki (2019: 137), post-truth is about powerful and malevolent elites having hijacked the otherwise legitimate emancipatory discourses of previously oppressed communities, while McDermott (2019: 219) emphasises the ways in which political elites aim to obfuscate the details of their policies through appeals to emotions that are intended to make their audiences blind to facts (see also, generally, Suiter 2016: 27). Paradoxically, though, at least in some ways such accounts themselves demonstrate a very similar narrative model to that of conspiratorial thinking described later in this article, not just in form (shadowy elites conspiring to take control) but also in function (as an attempt to explain away a troubling reality).

Viewed from a historical perspective, the new information environment seems to represent a broader philosophical shift – the collapse of Enlightenment ideals, such as the universality of rational knowledge, rejection of the occult and the indisputability of the standards of knowledge, all being undermined by data analytics and algorithmic content moderation (see e.g. Andrejevic 2020: 32; for a similar argument, see also McDermott 2019: 219). While the debate as to whether such a view of the Enlightenment is correct (or perhaps merely an example of post-truth itself) lies beyond the scope of this article, it should still be stressed that accounts like this do function as explanatory tools (and, therefore, coping strategies), identifying a quick and easy-to-use narrative account of the present information environment. While for some (see, characteristically, Foroughi, Gabriel, and Fotaki 2019: 140) any reliance on incomplete information, biases and mental shortcuts is solely the result of '[t]he breakdown of consensus about a single all-encompassing truth', such a nostalgic attitude itself seems to be largely ahistoric, Western democracy-focused and based, in the words of Harjuniemi (2022: 279), on 'a baseless nostalgia for a bygone era characterised by truth and reason'. Indeed, it is evident that such framing rests on dichotomy-based thinking that posits a lost good that has been stolen (by

elites, platform companies, etc.) or otherwise degraded against an inferior current condition that is presented as directly caused by such an alleged degradation. That itself bears all the hallmarks of conspiratorial thinking discussed below.

5. The challenge of the rational ideal

While much, if not most, of the current debate on post-truth represents a nostalgic yearning for a supposed time when fact and accuracy allegedly were the key attributes of public debate, there is a good reason to claim that such longing is misguided in the first place. Instead, it transpires that truth-making in the social world depends on multiple, extensive and often open-ended processes of sense-making and the subsequent synergy of these elements into a narrative of truth. In other words, it is a highly cognitively demanding and continuous process with multiple potential pitfalls, which can come from the excess or lack of information and from distraction or disbalance in cumulative sense-making processes. Furthermore, even factually incorrect narratives do bring benefits to those who believe in them, thus providing an additional reason for their uptake.

As Sloman and Fernbach (2017: 257) observe, ignorance is a natural and inevitable part of the human condition, with the complexity of the world exceeding human capacity for immediate and definite understanding. After all, a key concern for individuals is comprehending the situation they are in and knowing how to act accordingly. Hence, particularly in situations that lack clarity, they seek to resolve uncertainty by way of relying on partial knowledge, rumours and unverified information (Kim 2018: 2). What ultimately matters, though, is how the various snippets of sense-making fit together to create a narrative. After all, people rely on narratives as they 'describ[e] the past, justif[y] the present, and present a vision of the future' (Holmstrom 2015: 120). Similarly, according to Baron (2018: 73), the truly important factor to keep in mind for any communicator 'is not evidence (i.e. facts) but *meaning*'.

This is not to say that facts do not matter (or, as many critics of the post-truth condition would claim, that truth *no longer* matters); instead, it should be recognised that narratives are personalised 'forms of evidence' (Baron 2018: 196). They undergo an individual process of construction and/or adoption that is prone to various pitfalls. Therefore, if a factual explanation does not yet exist or is incomplete or is simply more complex and indeterminate than the alternative (as factual explanations often are), then some individuals will always choose the alternative to fill in the void (Ecker 2018: 82). Such sense-making shortcuts can approximate factual narratives but can also lead through the gates of the imaginary world.

In another attempt to identify a false chasm, McDermott (2019: 221) seeks to establish a dichotomy between fact and narrative, as if facts would never necessitate narrativisation, while a narrative would essentially be constructed out of false explanations. Similarly, for Schindler (2020: 392), narratives merely provide an escapist fantasy that prevents people from encountering the world as it is. Instead, it

must be stressed that facts or pieces of information gain value and start to make sense once they are incorporated into a narrative (Holmstrom 2015: 124). Consequently, for any conception of the world, truthful or not, narrative is of the essence. In a way, though, the value of the narrative can be seen as independent of its foundations in either truth or falsity. As a result, even conspiracy theories can be a practical and functional response to the circumstances ruling at the time: after all, 'conspiracy theories also connect people, give meaning to experienced disparities and corruption in society' (Harambam, Grusauskaite, and de Wildt 2022: 785).

As such, they are, therefore, sense-making and orientation-providing tools – as any narrative would be. Nevertheless, an important caveat must still be stressed: while such narratives must be seen as equal in a *functional* sense, this is not to say that no distinction should be made in terms of their truth congruence. For this reason, after a broader discussion of conspiracy theories, this article will proceed with a classification of potential cognitive shortcomings (problematic narrative structures) that demonstrate multiple ways of digressing from the rational ideal.

6. Conspiracy theories as faulty narratives

Conspiracy theories are by nature narrative and, in most cases, include factual misinformation and faulty thinking. We propose to conceptualise conspiracy theories in terms of informational vulnerability because such an articulation reflects their universality and historicity, avoids unproductive normative judgements and provides means to test the relevance of the proposed concept. While often considered to be a fringe phenomenon, conspiracy theories must be seen as a consistent feature of social life. They appear to be universal, widespread both temporally and geographically (van Prooijen and Douglas 2018).

It should not come as a surprise that conspiracy theories tend to be particularly popular in times and situations that manifest a great deal of uncertainty because they 'resolve the ambiguity of complicated situations by providing a coherent account of what is going on and who is good and who is bad' (Butter 2020: 67). Indeed, it must be stressed that truth can sometimes simply be beside the point, as people, particularly in uncertain and challenging situations, tend to 'search for frameworks to make sense of events', often opting for 'narratives that connect a number of developments with a causal logic', thereby constituting a way to satisfy this immediate need for sense-making (Mazarr et al. 2019: 52). In this way, the need for the adoption of explanatory narratives can easily trump the need for full evidence (see e.g. Baron 2018: 73). Since conspiracies tend to error on the side of cynicism, caution becomes a substitute for truth.

Conspiracy theories, courtesy of their capacity to provide a simple and easily understandable explanation, provide order in knowledge. As noted by Brotherton (2016: 110), 'the thing we want to avoid above all else is seeing the world as haphazard' because, if the world around us is devoid of both patterns and agency, 'we have little hope of comprehending, predicting, and controlling our fate'. For this

reason, individuals sometimes prefer to believe in some controlling force behind the scenes, even if it is a malign force. After all, 'identifiable enemies can potentially be thwarted, managed, or at the very least understood', which is not the case with faceless randomness (ibid.).

At their heart, conspiracy theories are hence functional problem-solving and conceivable sense-making tools. While it might be relatively easy to pin conspiracy beliefs on some clearly identifiable personal characteristics, such as socioeconomic status, age or gender, existing research disproves such overly quick explanations (see, notably, Butter 2020: 74). More than anything, they are 'attempts to explain the ultimate causes of significant social and political events and circumstances' by way of a very specific explanatory strategy, i.e. postulating 'claims of secret plots by two or more powerful actors' that are secretly operating from behind the scenes (Douglas et al. 2019: 4; see also Adam-Troian et al. 2021: 4, Butter 2020: 9, Douglas and Sutton 2018, Oleksy et al. 2021:1).

7. Informational vulnerability

It is at this juncture that we encounter the problem of vulnerability within the shifting structures of knowledge. To illustrate how conspiracy theories relate to the epoch of post-truth, it is time to discuss the core concept of our debate: *informational vulnerability*. We define this term as individual susceptibility to construct and/or internalise faulty narratives. For the purposes of this paper, narratives are understood as certain explanatory patterns. They are constructed by putting separate pieces of data together to form an explanation of observed events and developments. Predictably, faulty narratives then contain flawed data and/or flawed patterns.

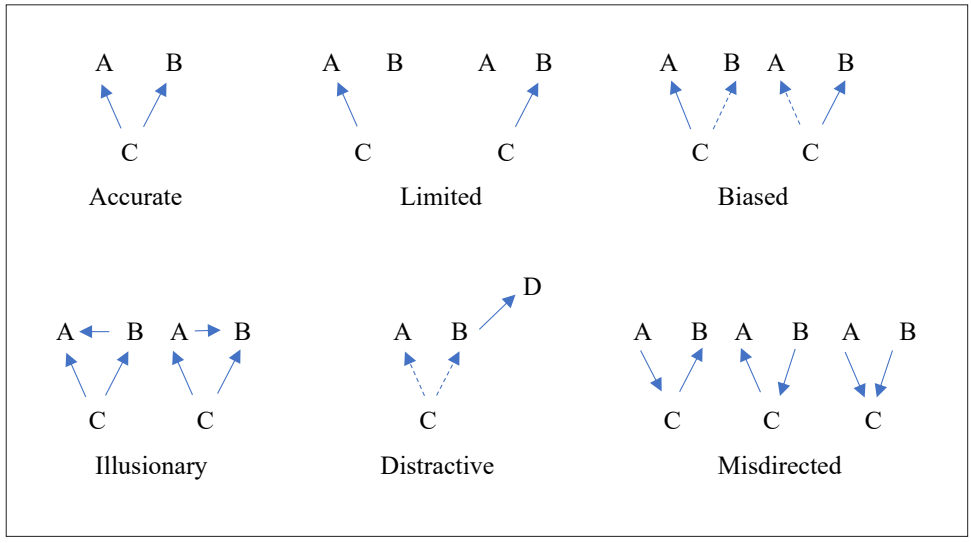

Figure 1. Types of faulty narratives.

In this case, the ideal type is a factually and relationally accurate narrative, which serves as a reference point for the evaluation of other narratives of interest. An accurate narrative contains all relevant data pieces, with their relative importance and links among them (if any) correctly identified and internalised/accepted. For the purposes of illustration and analysis, Figure 1 provides a three-point pattern (A, B, C), where, for the sake of argument, an accurate pattern is conceived as C causing both A and B. A faulty narrative falls short of this ideal either in terms of the narrative itself or its structure due to various possible reasons. We will further demonstrate and discuss faulty patterns using examples from a representative survey on conspiracy theories conducted in Lithuania, in September–November 2021. Since the authors of this article constructed and initiated the survey, we draw on it by showing how faulty patterns interact with conspiratorial narratives, thus expressing but also contributing to the concept of human informational vulnerability.[1] We propose to consider five cognitive patterns, underlying the concept of informational vulnerability: *limited, biased, illusionary, distractive and misdirected*. These patterns emerge as we consider possible alternatives to the basic 'accurate' pattern, which can be further augmented along with the growing complexity of the pattern and even the interaction of different patterns. However, these basic 'deviations' are sufficient to illustrate key points of the paper.

A *limited pattern* (LP) offers an explanation based on partial information. It contains only a segment (or segments) of the overall narrative. This segment meets the ideal standards of relative importance and relevant links, but it is incomplete (as indicated by the missing causal link from C to B in Figure 1). Due to the lack of all relevant information, the pattern is a limited one and thus flawed. Regardless, a counter-factual truth-claim is being produced as a part of the sense-making effort. Drawing on the results of the representative survey, we identified that 22.2% of Lithuanian respondents tended to agree with the statement that the collapse of the Soviet Union was the work of the US Central Intelligence Agency (CIA). While it is difficult to deny the fact that the CIA sought to undermine the Soviet regime during the Cold War period, such a statement clearly ignores not only the question of the effectiveness of alleged CIA actions but also the complexity of the disintegration of the Soviet Union. It prefers a simplistic explanation at the expense of various other external and internal factors, including the rise of nationalism, the nature of Soviet leadership, etc. (see e.g. Tuminez 2003). Thus, this limited perspective constitutes the *limited pattern,* determining respondents' support for the faulty narrative.

The second category, a *biased pattern* (BP), relates to preference for particular data. In such cases, all relevant data pieces are available for narrative formation, but a recipient consciously or subconsciously (de)emphasises some parts or linkages over others. In comparison to a *limited pattern*, the *biased pattern* deficiency is less about fragmentation and more about distortion. Revisiting the survey, the statement

[1] The survey included 1,041 participants aged 18 years and older, who were chosen through a multi-stage sampling process. The average age of the participants was 54 years, with a standard deviation of 17, and females made up 54% of the sample. The participants were asked to answer 34 questions, including an assessment of various statements related to conspiracy theories (Lašas, Grišinas, and Kalpokas 2025).

'in reality, all politics is a puppet show where everything is pulled by strings' has found support among 65.61% of Lithuanian respondents. Even under superficial contemplation, it is obvious that many contingent/situational factors can influence a political process as well and reduce the effectiveness of 'pulling strings'. Politics is, of course, a power game with many processes hidden from the public, but the exaggerated emphasis on the ability to control everything, even if contingent factors would be mentioned, can provide a rather biased or imbalanced view.

Moving onto an *illusionary pattern* (IP), as the name implies, a mental schema is created where there is none. This is not so much a deficiency of the ideal type but more of an alternative imagined narrative, which is based on different data pieces – imagined data. Returning to the survey, we included a statement 'Israel exerts active backstage influence upon Lithuania's internal affairs'. It was endorsed by 20.4% of survey respondents. The statement has very little to do with reality, as Lithuania is of marginal strategic importance to Israel and, at most, its influence is limited to Holocaust-related issues. Even in such cases, the reviews of the Lithuanian politics of Holocaust memory do not consider Israel an influential player (see e.g. Nikžentaitis 2019). The fact that the factor is accepted as influential by a fifth of the respondents demonstrates the proclivity of some to illusionary information, creating a faulty narrative as a result.

Next, a *misdirected pattern* (MP) misinterprets the nature of linkages among relevant factors. For example, it can reverse causality between two variables or approach a correlation as causation. In the survey, we tested a statement on the nature of media–business relations in Lithuania by asserting that 'major Lithuanian media outlets serve the interests of specific political/business groups'. 60.4% of the respondents agreed with the statement, though current academic literature tends to reverse this relationship and instead asserts the ability of Lithuanian media outlets to put substantial pressure on both businesses and political parties (Lašas 2023).

And finally, a *distractive pattern* (DP) draws recipients' attention away from available relevant information pieces to other information. In such a way, the emphasis of another pattern/linkage is treated as a type of flawed narrative because it distracts recipients' attention from the accurate pattern, affecting recipients' narratives and actions. In the survey, we did not test such statements, but the order of multiple conspiracy-related statements can be viewed as potentially affecting participants' responses. After all, the anchoring effect is a widely established phenomenon in the literature on cognitive biases (Tversky and Kahneman 1974).

In all cases, the lack of critical thinking is both a necessary and sufficient condition for flawed cognitive patterns to emerge. Critical thinking is here understood as 'intellectually disciplined process of actively and skilfully conceptualizing, applying, analysing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action' (Scriven and Paul 1987). Crucially, Scriven and Paul point out that critical thinking is 'never universal in any individual; everyone is subject to episodes of undisciplined or irrational thought' (ibid.). For this reason, both the process (critical thinking) and the result (factually and relationally accurate narrative) need

to be approached as ideal types. Paradoxically, however, critical thinking functions as a means of deconstructing counter-factual yet sense-making narratives, which further increases human informational vulnerability.

Under certain unique conditions, every individual is hence informationally vulnerable. In such a case, informational vulnerability should be approached as a typical human condition rather than some unusual deviation of a specific group of individuals. Thus, this concept does not presume the presence of a previous historical period with optimal information flows (as the concept of post-truth would suggest) but instead points to a continuous and problematic relationship between truth-seeking and sense-making, between information flow and human perception. The current period may indeed be described by the excess of information, but the lack of it is just as problematic. The nature of informational vulnerability evolves and changes with technological advancements, but the phenomenon itself is a fixed feature of the human social world. Starting with this baseline, it is then possible to consider in greater detail how informational vulnerability functions in connection to conspiracy theories.

8. Informational vulnerability in conspiracy theories

The arguments laid out above regarding the ever-presence of informational vulnerability apply to conspiracy theories that are also seen as a 'common part of people's understanding of the world, just as various other forms of belief are' (van Prooijen 2018: 17). Douglas and Sutton (2018: 259) insist that 'everyone is to some extent likely to believe in conspiracy theories' (see also Brotherton 2016, Butter 2020). Viewed as such, informational vulnerability becomes a key feature of conspiracy theories, but it also underlies other misinformed beliefs. Thus, the nature and scope of this link between informational vulnerability and conspiracy theories can help to provide a better understanding of the nature of the latter. To illustrate this point, we draw on van Prooijen and van Vugt's (2018: 771) and van Prooijen's (2018: 5–6) characterisation of conspiracy theories that are allegedly characterised as composed of five key ingredients:

1) They substitute *correlation with causation*.
2) They read *agency* into such a pattern by perceiving it as a matter of intentional actions by conspirators.
3) They ascribe such agency to a *coalition* of malign actors.
4) They imbue this imagined coalition with a sense of *threat* by ascribing to it goals that are harmful.
5) They imply that both the coalition and its aims are shrouded in *secrecy*, the corollary being that such theories are typically close to impossible to invalidate.

The first component clearly corresponds to the misdirected pattern of informational vulnerability, while the rest of the ingredients can be treated as specific features of

conspiracy theories (rather than some other types of beliefs/narratives). However, as demonstrated in the previous section, this characterisation appears to be overly narrow and ignores other possible patterns of informational vulnerability that may also underlie conspiracy theories. Thus, the concept of informational vulnerability serves as a useful device for understanding the potential scope of conspiracy theories.

Furthermore, informational vulnerability pinpoints a continuous and problematic relationship between information flow and human perception, where changes on both sides can have substantive implications. Exposure to a surplus of information (*a hyper-informational environment*) often requires critical sorting and selection skills in order to avoid the pitfalls of the DP or IP patterns, while information-deficit conditions (*a hypo-informational environment*) require openness to multiple future scenarios and possibilities in order to steer away from the LP, BP or MP patterns.

In an environment where e.g. state institutions or social media algorithms actively shape information flows, both of these elements can be present at the same time, establishing a *parallel informational environment*. Here some segments of the information flow exhibit hyper features, while others are intentionally truncated, producing the same or a mixture of the same vulnerability patterns: limited, biased, illusionary, distractive and misinterpreted. That is because vulnerability is a function not so much of information dynamics and technology but of human perception, sense-making capacity and its vulnerability. In other words, the tension between truth-seeking and sense-making provides a common foundation and a common gateway for various vulnerabilities to transpire in different informational spaces.

The analysis above demonstrates how inadequate information processing can generate vulnerability through the incorporation of flawed cognitive patterns into the narratives that we entertain. At the same time, the systematisation of cognitive patterns allows for a more nuanced understanding of conspiracy theories and their scope. In future research, the concept of informational vulnerability should be applied to other types of narratives and beliefs in order to gain a wider (comparative) perspective.

9. Conclusion

This paper engages with the existing literature on the current crisis of social cognition, which has popularly taken on a name of ‘post-truth’. It discusses different challenges that the digital age has posed on keeping factually truthful narratives at the core of the Habermasian public sphere. However, it has been argued that truth-utterings are by no means extinct and, likewise, the current epoch in no way truth-absent either. Instead, what comes to prominence because of the overabundance of information flow in our daily lives is the importance of meaningful narratives, so much so that these narratives are sometimes produced and reproduced at a cost of factual veracity. For the purposes of this article, narratives are understood as certain explanatory patterns, constructed by putting separate pieces of data together to form an explanation of the observed events and developments. Predictably, faulty

narratives then contain flawed data patterns, which can be analysed and understood using the approach proposed. Crucially, it is this narrative quality of our social cognition that lays ground for informational vulnerability.

Informational vulnerability is a structural part of the changing information and media environment. It is a coping mechanism in which out of a slew of information reduced narratives are being formed. As such, they can often be factually false. With reference to the survey on the perception of conspiracy theories in Lithuania, this article has distinguished five cognitive patterns that demonstrate different ways in which information can be distorted in the process of producing meaningful narratives: *limited, biased, illusionary, distractive and misinterpreted* patterns. In order to demonstrate the explanatory capacity of the proposed approach, conspiracy theories were chosen as an illustrative example of flawed narratives.

This article has, therefore, distinguished between different patterns of informational vulnerability, understanding them as different ways of making cognitive-performative mistakes. Since these mistakes are embedded within the social and political processes that constitute the fabric of everyday life, they performatively begin to structure narratives and worldviews in a way that ultimately gives birth to counter-factual knowledge and skewed narratives, thus producing what is sometimes titled as post-truth. What this approach demonstrates, nevertheless, is that informational vulnerability, rather than being framed in epochal terms (such as an 'era' of post-truth), is part of normal and typical processes of human cognition. As a corollary, then, the debate should also be reframed from one focused on the presence or absence of vulnerability and non-factual understandings of the world to one focused on the *degree* of any given person's informational vulnerability.

Data availability statement
All data supporting the findings of this study are contained within the article.

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Addresses:
Ignas Kalpokas
Kaunas University of Technology
K. Donelaičio g. 73
LT-44249 Kaunas, Lithuania
Email: ignas.kalpokas@vdu.lt

Ainius Lašas
Kaunas University of Technology
K. Donelaičio g. 73
LT-44249 Kaunas, Lithuania
Email: ainius.lasas@ktu.lt

Arvydas Grišinas
Kaunas University of Technology
K. Donelaičio g. 73
LT-44249 Kaunas, Lithuania
Email: arvydas.grisinas@ktu.lt

References

Adam-Troian, J. et al. (2021) "Investigating the links between cultural values and belief in conspiracy theories: the key roles of collectivism and masculinity." *Political Psychology* 42, 597–618. DOI: https://doi.org/10.1111/pops.12716

Andrejevic, Mark (2020) *Automated media*. London and New York: Routledge.

Ball, James (2017) *Post-truth: how bullshit conquered the world*. London: Biteback Publishing.

Baron, Ian Z. (2018) *How to save politics in a post-truth era*. Manchester: Manchester University Press.

Bermes, Andreas (2021) "Information overload and fake news sharing: a transactional stress perspective exploring the mitigating role of consumers' resilience during COVID-19". *Journal of Retailing and Consumer Services* 61, 102555. DOI: https://doi.org/10.1016/j.jretconser.2021.102555

Brotherton, Robert (2016) *Suspicious minds: why we believe conspiracy theories*. Bloomsbury: Sigma.

Bufacchi, Vittorio (2021) "Truth, lies and tweets: a consensus theory of post-truth". *Philosophy and Social Criticism* 47, 3, 347–361.

Butter, Michael (2020) *The nature of conspiracy theories*. Cambridge: Polity Press.

Couldry, Nick and Andreas Hepp (2017) *The mediated construction of reality*. Cambridge and Malden: Polity.

d'Ancona, Matthew (2017) *Post truth: the new war on truth and how to fight back*. London: Ebury Press.

Dahlgren, Peter (2018) "Media, knowledge and trust: the deepening epistemic crisis of democracy". *Javnost – The Public* 25, 1, 20–27. DOI: https://doi.org/10.1080/13183222.2018.1418819

Douglas, Karen M. et al. (2019) "Understanding conspiracy theories". *Advances in Political Psychology* 40, 13–35.

Douglas, Karen M. and Robbie M. Sutton (2018) "Why conspiracy theories matter: a social psychological analysis". *European Review of Social Psychology* 29, 1, 256–298.

Douglas, Karen M., Robbie M. Sutton, and Aleksandra Cichocka (2017) "The psychology of conspiracy theories". *Current Directions in Psychological Science* 26, 6, 538–542.

Doyle, William and Christina Roda, eds. (2019) *Communication in the era of attention scarcity*. London and New York: Palgrave Macmillan.

Ecker, Ullrich K. H. (2018) "Why rebuttals may not work: the psychology of misinformation". *Media Asia* 44, 2, 79–87.

Enroth, Henrik (2023) "Crisis of authority: the truth of posttruth". *International Journal of Politics, Culture, and Society* 36, 179–195. DOI: https://doi.org/10.1007/s10767-021-09415-6

Foroughi, Hamid, Yiannis Gabriel, and Marianna Fotaki (2019) "Leadership in a post-truth era: a new narrative disorder?". *Leadership* 15, 2, 135–151.

Gil de Zúñiga, Homero, Brian Weeks, and Adriana Ardèvol-Abreu (2017) "Effects of the news-finds-me perception in communication: social media use implications for news seeking and learning about politics". *Journal of Computer-Mediated Communication* 22: 102–123.

Grišinas, Arvydas (2025) *The Western crisis of truth in the early 21st century: as the enlightenment dims.* London and New York: Routledge.

Guo, Jing and Hsin-Tien Chen (2022) "How does multi-platform social media use lead to biased news engagement? Examining the role of counter-attitudinal incidental exposure, cognitive elaboration, and network homogeneity". *Social Media + Society* 8, 4. DOI: https://doi.org/10.1177/20563051221129140

Harambam, Jeroen, Kristina Grusauskaite, and Loeske de Wildt (2022) "Poly-truth, or the limits of pluralism: popular debates on conspiracy theories in a post-truth era". Public Understanding of Science 31, no. 6: 784–798.

Harjuniemi, Tiina (2022) "Post-truth, fake news and the liberal 'regime of truth': the double movement between Lippmann and Hayek". *European Journal of Communication* 37, 3, 269–283.

Harsin, Jayson (2019) "Political attention: a genealogy of reinscriptions". In William Doyle and Christina Roda, eds. *Communication in the era of attention scarcity*, 75–113. London and New York: Palgrave Macmillan.

Hepp, Andreas (2020) *Deep mediatization*. London and New York: Routledge.

Hepp, Andreas, Andreas Breiter, and Ulrike Hasebrink, eds. (2018) *Communicative figurations: transformative communications in times of deep mediatization*. London and New York: Palgrave Macmillan.

Holmstrom, Mikael (2015) "The narrative and social media". *Defence Strategic Communications* 1, 1, 119–133.

Hopkin, Jonathan and Ben Rosamond (2017) "Post-truth politics, bullshit and bad ideas: 'deficit fetishism' in the UK". *New Political Economy* 23, 6, 641–655. DOI: https://doi.org/10.1080/13563467.2017.1373757

Kalpokas, Ignas (2019) *A political theory of post-truth*. London: Palgrave Macmillan.

Kavanagh, James and Michael D. Rich (2018) *Truth decay: an initial exploration of the diminishing role of facts and analysis in American public life*. Santa Monica: RAND Corporation.

Kim, Jihwan W. (2018) "Rumor has it: the effects of virality metrics in rumor believability and transmission on twitter". *New Media & Society* 20, 12, 4807–4825. DOI: https://doi.org/10.1177/1461444818784945

Lašas, Ainius (2023) *Backstage democracy: the dynamics of business-politics nexus in Lithuania*. Cham : Palgrave Macmillan.

Lašas, Algirdas, Arvydas Grišinas, and Ignas Kalpokas (2025) "Dystopian perception: determinants of popular support for conspiracy theories in Lithuania". *Journal of Baltic Studies,* 1–28. DOI: https://doi.org/10.1080/01629778.2025.2579551

Mazarr, Michael J. et al. (2019) *The emerging risk of virtual societal warfare: social manipulation in a changing information environment*. Santa Monica: RAND Corporation.

McDermott, Rose (2019) "Psychological underpinnings of post-truth in political beliefs". PS: Political Science & Politics 52, no. 2: 218–222. DOI: https://doi.org/10.1017/S104909651800207X

McIntyre, Lee C. (2018) *Post-truth*. Cambridge, MA, and London: MIT Press.

MITRE Corporation (1999) *Common Vulnerabilities and Exposures – CVE® The Standard for Information Security Vulnerability Names.* Bedford, MA. Available online at https://makingsecuritymeasurable.mitre.org/docs/cve-intro-handout.pdf. Accessed on 11.02.2026.

Nikžentaitis, Alvydas (2019) "Culture of memory and politics of history in Lithuania in 1989–2018". *Institute of National Remembrance Review* 1, 119–163.

Oleksy, Tomasz et al. (2021) "Content matters. different predictors and social consequences of general and government-related conspiracy theories on COVID-19". *Personality and Individual Differences* 168: 1–7.

O'Shaughnessy, Nicholas (2020) "From disinformation to fake news: forwards into the past". In by Philip Baines, Nicholas O'Shaughnessy, and Nick Snow, eds. *The SAGE handbook of propaganda*, 55–70. Los Angeles and London: SAGE.

Schindler, Sebastian (2020) "The task of critique in times of post-truth politics". *Review of International Studies* 46, 3, 376–394.

Scriven, Michael and Richard Paul (1987) "Defining Critical thinking". The Foundation of Critical Thinking. Available online at https://www.criticalthinking.org/template.php?pages_id=766. Accessed on 28.12.2022.

Sloman, Steven and Philip Fernbach (2017) *The knowledge illusion: why we never think alone*. New York: Riverhead Books.

Song, Ha, Homero Gil de Zúñiga, and Hajo G. Boomgarden (2020) "Social media news use and political cynicism: differential pathways through 'news finds me' perception". *Mass Communication and Society* 23, 1, 47–70.

Suiter, Jane (2016) "Post-truth politics". *Political Insight* 7, 3, 25–27.

Syvertsen, Trine (2020) *Digital detox: the politics of disconnecting*. Bingley: Emerald Publishing.

Tandoc, Edson C. and Hye Kyung Kim (2022) "Avoiding real news, believing in fake news? Investigating pathways from information overload to misbelief". *Journalism* 24, 6, 1174–1192. DOI: https://doi.org/10.1177/14648849221090744

Tuminez, Astrid S. (2003) "Nationalism, ethnic pressures, and the breakup of the Soviet Union". *Journal of Cold War Studies* 5, 4, 81–136. DOI: https://doi.org/10.1162/152039703322483765

Tversky, Amos and Daniel Kahneman (1974) "Judgment under uncertainty: heuristics and biases". *Science* 185, 4157, 1124–1131. DOI: https://doi.org/10.1126/science.185.4157.1124

Vaccari, Cristian and Andrew Chadwick (2020) "Deepfakes and disinformation: exploring the impact of synthetic political video on deception, uncertainty, and trust in news". *Social Media + Society* 6, 1. DOI: https://doi.org/10.1177/2056305120903408

van Dijck, José, Thomas Poell, and Martijn de Waal (2018) *The platform society: public values in a connective world*. Oxford and New York: Oxford University Press.

van Prooijen, Jan-Willem (2018) *The psychology of conspiracy theories*. London and New York: Routledge.

van Prooijen, Jan-Willem and Karen M. Douglas (2018) "Belief in conspiracy theories: basic principles of an emerging research domain". *European Journal of Social Psychology* 48, 7, 897–908.

van Prooijen, Jan-Willem and Mark van Vugt (2018) "Conspiracy theories: evolved functions and psychological mechanisms". *Perspectives on Psychological Science* 13, 6, 770–788.

Weick, Karl E., Kathleen M. Sutcliffe, and David Obstfeld (2005) "Organizing and the process of sensemaking". *Organization Science* 16, 4, 409–421.

Woolley, Samuel (2020) *The reality game: how the next wave of technology will break the truth and what we can do about it*. London: Endeavour.