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Climate uncertainty, social media certainty: A story-critical approach to climate change storytelling on social media

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Abstract: The article calls for narratives that would accommodate the collision of two complex forms: climate change and social media. Science communication is currently on the lookout for personal stories that make climate change concrete and relatable for both decision-makers and the general public; similarly, climate activism on social media increasingly draws from personal experiences. Yet climate related stories going viral on social media often end up fostering political polarization and stark moral positioning instead of collective climate action. Building on Caroline Levine’s work on new formalism, I argue that this problem results from the collision between (1) climate change and (2) social media as complex forms that challenge the centrality of embodied experience and individual agency, and (3) the prototypical experiential story as a non-complex form. I analyze some viral climate change stories and focus particularly on experientiality, easily shareable master-plots, and moral positioning.

Keywords: climate storytelling, exemplum, experientiality, social media, virality

1 Introduction: The complexity of uncomplicated narratives

Amidst growing climate anxiety, literary scholars and narrative theorists have developed an interest in climate *storytelling*. This is partly due to the rapid expansion and rising popularity of ambitious climate fiction and journalism, seeking to find new, often cross-generic forms of expression that defy the limits of both literary and narrative conventions (see Trexler 2015). Another development promoting climate storytelling, relatively separate from the celebration of ambitious and experimental writing, emerges from the expanding field of science storytelling, inspired by the general storytelling boom that seeks compelling ways to arrest audiences’ attention

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amidst the information overflow (e.g., Bloomfield et al. 2021; Jones and Peterson 2017; Léon et al. 2022; Lidskog et al. 2020; Saylor 2023; Sundin et al. 2018; Veland et al. 2018).¹ However, it is no coincidence that in the 2010s the growth in arguments about the ultimate *unnarratability* of climate change coincided with the rising popularity of complexity theories (e.g., Abbott 2008a; Ryan 2019; Walsh 2018). According to a widely shared opinion, complex systems such as evolution, global market, societal structures, or climate change defy narrative logic as they lack human agency, clear-cut temporal-causal sequencing, and relatable storyworld particulars (see Björninen and Polvinen 2022; Mäkelä et al. 2021; Raipola 2019). Such story-pessimistic views within narrative studies resonated well with the skeptical tones in environmental humanities, questioning the ultimate relevance of art and humanities in changing people's environmental consciousness and imagination (e.g., Clark 2015).

It may well be that complex systems *can* be represented or evoked by complex, ambitious narratives. In the same vein, it may well be that literary *ambivalence* reflects climate *uncertainty* in a way that expands our planetary consciousness. Yet, even if reading ambitious climate fiction (clifi) and climate non-fiction were to have a lasting effect on human behaviour, do the readers of these fairly specialized genres have enough of a critical mass to make a difference? A growing body of research attests to the decline of literature as a provider of models for thought and action (see, e.g., Even-Zohar 2019). In his book *Narrating the Mesh* (2021), Marco Caracciolo presents an optimistic interpretation of the power of storytelling in providing compelling forms with which to make sense of and rethink climate change. Caracciolo draws his examples from clifi and not from story cultures *de facto* shaping the political and cultural imagination of contemporary audiences – such as viral social media stories and Netflix. His literary examples experiment with nonlinearity, visual models, non-human narrative agents, ambitious forms of consciousness representation and metaphorical language. As such they are a far cry from the type of narratives most audiences are constantly exposed to in their everyday lives. Yet I see great potential in the work of Caracciolo and other scholars of econarratology

1 On storytelling boom, see Mäkelä et al. (2021); Mäkelä and Meretoja (2022); Mäkelä and Björninen (2022). The 21st century has seen the emergence of an entire new business strand around “compelling narratives”. Storytelling selfhelp and consultancy draw selectively from the cognitive, rhetorical and hermeneutic or psychological study of narrative in producing normative guidelines for impactful communication. In this context, compellingness is typically associated either with experientiality and the immediacy of personal storytelling (e.g., Dicks 2018) or universal story models manifested by myths (e.g., Sachs 2012). Calls for more compelling stories about climate change echo the general “storytalk” (Mäkelä and Björninen 2022) that now permeates corporate and governmental discourses around communication, strategic leadership, and sustainability.

(e.g., James and Morel 2020) who study the challenges of climate storytelling from complexity theories and the finesses of narrative and literary studies. My suggestion in this article is that instead of highlighting the complexity of individual, artistically ambitious texts we should expand our attention to the rhetorical and ethical complexity of contemporary storytelling environments – particularly social media. I also believe that contemporary, transdisciplinary narrative theory provides a sufficient methodological starting point for this endeavor.

I claim that the storification of climate change should be examined within the context of the contemporary *story economy* that feeds on stories of personal, disruptive experience, relatable storyworld particulars, and an easily recognizable moral positioning. On social media, epistemic uncertainty is repeatedly overrun by *moral certainty*. Narrative ambivalence is considered an unwanted social risk in polarized narrative environments where ideological partisanship and moral positioning are foregrounded. In order to steer clear of narrative ambivalence, the contemporary strategic storyteller is prone to comply with familiar masterplots that build on a canonical emotional curve (Mäkelä and Björninen 2022). The result is typically not much different in non-strategic, accidental, emergent storytelling, because algorithms and affect- and reaction-driven networks of social media tend to transform even complex or ambivalent material into simplistic moralities (see Dawson and Mäkelä 2020; Mäkelä 2021; Walsh 2020). This logic of the contemporary story economy, affecting both the rhetoric and the ethics of storytelling, creates a major risk for all attempts at communicating climate *uncertainty*. This polarizing either-or story logic is manifested for example in the currently rising popularity of the confessional stories of “climate doomers” on TikTok who share relatable, affective stories about their dark epiphanies. One of the popular doomers, Charles McBryde, interviewed by the BBC, proclaims in the personal video: “Since about 2019, I have believed that there's little to nothing that we can do to actually reverse climate change on a global scale” (Silva 2022). While doomers are booming, social media projects established for developing and crowdsourcing progressive, motivational and inspirational climate change stories appear to have difficulty in reaching large masses, let alone global viral popularity.² The intensified interest in science storytelling and calls for compelling climate stories are no doubt provoked by the viral counter-stories spreading passivity, false climate theories, and simplistic narrative heuristics.

Proponents for climate storytelling hailing from the humanities camp should therefore resist narrative elitism in the form of overestimating the impact of con-

² For example, as of September 2023, personal “climate stories” crowdsourced on *climatestoriesproject.org* have attracted only a couple of hundred views on the project’s YouTube channel, which only has a couple of dozen subscribers.

ceptually sophisticated or experimental narratives and assume a more pragmatic outlook instead. The mixed reception of the recent Netflix hit movie *Don't Look Up* (2021) is a case in point. The film is a heavy moral climate allegory and a political satire, flaunting stereotypical characters (the shabby and boring scientist, the calculating talk show hostess, the populist president), an implausible plot, an array of pop culture elements and star actors. While narratively rugged, thematically this satirical comedy of manners is also a metanarrative on the limits of storytelling in communicating climate change and how science is overrun by the story logic of social media. It is a film about the desperate attempts to make room for climate change in the contemporary story economy. While criticizing the failed attempts at making climate change a compelling, shareable story, the metanarrative irony lies in how the film itself, as a narrative, harnesses as many familiar symbolic resources of Western culture as possible in its attempt to convey its simple message: *trust the scientists*. In a memorable scene at a New York Herald editorial meeting that focuses on the social media reception of the news reporting about a killer comet about to hit the surface of the earth, astronomy professor Randall Mindy screams at the social media experts: “This is not a goddamn story!”

While climate scientists around the world embraced the allegory as an accurate description of the insurmountable challenges that they continue to face in raising catastrophe awareness, the media intelligentsia focused on castigating the film for its – to quote Richard Brody’s words in *The New Yorker* – “crude demagoguery,” “pre-digested narrative efficiency,” and “cynically apolitical view of politics” (2022).³ Many critics clearly yearned for storytelling that would reflect the ethical and political complexity of climate change, the supra-individual economic structures determining the place of individuals in a global change, and intellectual sophistication as a counter-force to the Hollywood machinery, itself partial in the destruction caused by capitalism. As a narrative theorist having worked on both complex, ambiguous fictions and social media moralities, I tend to think differently about *Don't Look Up*. From a bluntly pragmatic perspective, the film is a more likely candidate to alter the Western audiences’ views of climate change than any sophisticated literary cliff work to date, and not just because of the scope of its reception but because it resonates with the dominant story logic of 21st century platformization. The most valuable lesson conveyed by *Don't Look Up* is the mismatch between social media story

³ The lack of ambivalence in *Don't Look Up* can of course be contested as the film is ostensibly about a comet and not climate change. The allegory is however so flagrant that the figural component reinforces the reference. Director Adam McKay has been very explicit about the film’s message, for example in *The New York Times* interview: “I’m under no illusions that one film will be the cure to the climate crisis. [...] But if it inspires conversation, critical thinking, and makes people less tolerant of inaction from their leaders, then I’d say we accomplished our goal” (Buckley 2022).

logic and the storification of climate change. The film reflects the story logic of social media, public attention and networked affect in its own lack of narrative adornment, and by doing so, it also highlights the uncomplicated crudity of climate change: just as there is no scientific ambivalence or political leeway about the apocalypse caused by the fictional comet hitting the surface of the earth, there is no artistic, narrative, or intellectual uncertainty about climate change being the primary threat to the survival of human societies and about the need for immediate action; yet there is considerable uncertainty about whether sufficient action can be taken without abandoning global capitalism altogether. The allegorical setup, with its blatant satire, points to the connection between capitalism and climate denialism, without the need to specify effects or measures of mitigation.

In the following, I attempt to theorize the relationship between the narrative complexity of climate change and the narrative complexity of social media storytelling with the help of some examples of climate story types that possess potential for virality. Virality – the explosive and often short-lived sharing of particular story, meme, image or other content on social media – can be considered a complex constellation of platform architecture, node users such as influencers and mainstream media, and affect-driven yet sometimes random or unsolicited “contagions” (Sampson 2012: 6). I will use the above-mentioned study by Caracciolo on the affordances of narrative *form* as an inspirational backdrop, although Caracciolo focuses on sophisticated forms of fiction. Both Caracciolo’s and my (especially Mäkelä et al. 2021) studies partake in the newly emerged paradigm of *new formalism* that considers representational forms – such as narrative – on a par, intertwined and often *clashing with* institutional, social, scientific, and even natural forms. My focus is on the conflict of forms, while Caracciolo’s is on their collaboration. The article results from several research projects where I and my colleagues have developed what we call *story-critical narrative theory*. Our aim has been to harness both narrative scholars and various storytellers and audiences with critical tools and practices with which to navigate and tackle the contemporary story economy, populated with more or less goal-oriented storytellers and instrumentalized narratives. Previously my research team and I have analyzed the collision between the form of compelling stories of personal experience, the form of a social media platform such as Facebook or Twitter, and the social or political form promoted by tellers and sharers of a particular narrative, most notably welfare and other supra-individual societal structures (e.g., Mäkelä 2021 and 2023). This is my first attempt at applying our findings to the context of climate and science storytelling (see, however, Raipola 2019 and 2022). Moreover, I will consider social media authorship and authority as emergent, which ties in with recent narrative-theoretical applications of complexity theories. By doing so I wish to pinpoint the rhetorical and ethical challenges any social media storytelling on climate change is very likely to confront.

2 Compelling stories of personal experience as a double-edged sword

The optimistic take on climate storytelling typically reflects a combination of cognitive narrative theory, narrative studies in rhetoric, and a hermeneutic understanding of narrative (see Mäkelä and Björninen 2022). As such it follows the culturally dominating 21st century broad understanding of narrative as an all-encompassing model for experience, action, and communication, reinforced by the instrumentalist, neoliberal take on storytelling (see Björninen and Polvinen 2022: 193–194). For example, recent research contributions highlighting the importance of better storytelling in disseminating climate sciences, such as the results of the IPCC reports, by Veland et al. (2018) and Bloomfield et al. (2021) argue for the cognitive universality of narrative as a sense-making tool, for the transformative potential that narrative has in empowering individuals as agents of change, and for the power of narrative persuasion as a rhetoric. Veland et al. argue for the “ontological normativity” of narratives and storytelling, adapting a cognitive-hermeneutic understanding of narratives as mental or experiential schemata shaping experience and guiding action:

Each narrative constrains and enables what is thinkable and sayable about the past, present, and future [...] [N]arratives constitute reality as we know it by making sense of observations, leading us to new inferences, and providing models for a path forward. [...] [T]he climate change story weaves into pre-existing cultural narratives, or metanarratives about how the world works and where it is headed. Therefore, the climate change story will be more acceptable if it “makes sense” with already narrated experience. If the story is incompatible, it is more likely to be rejected. (Veland et al. 2018: 42)

Another way of approaching the unnarratability of climate change is, then, to examine how uncertainty results from a failure in narrative sensemaking – from the incompatibility of climate change with our pre-existing templates of experience. Yet this phenomenological clash is not the only element creating this uncertainty; the platforms of narrativization play a major role in this. While calling for a culture, audience, and genre sensitive approach to climate narratives, the platforms and contexts for storytelling remain undiscussed in research on climate storytelling and initiatives for improving it. Discourse on climate change storytelling is permeated by the universalist and uncritical storytalk dominating the 21st-century story economy in Western industrialized societies, promoted by professional story consultants and often bolstered by narrative studies highlighting the common human ground in all storytelling. An emphasis on non-semiotic, mental, or vaguely “cultural” narratives that underpin our experiences of the world often foregrounds narrative affordances that can be considered universal, such as sense-making, collectivity, empathy, attention, and memory. Such a broad and abstract notion of storytelling tends

to ignore not just the platform-specific affordances of storytelling but also the rhetorical, ethical, and epistemic risks related to the instrumentalization of stories in contemporary narrative environments.

At the same time, studies such as Veland et al. and Bloomfield et al. look precisely at the instrumental value of storytelling and seek appropriate rhetorical strategies for “mak[ing] the climate change personal” (Bloomfield 2019: 171). These two studies share a similar blueprint for tellable stories, derived from the rhetorical study of narrative (e.g., Fisher 1984) and universalizing models provided by cognitive studies and sociolinguistics, further adapted in “narrative policy framework” (Jones and Peterson 2017) and popularized in climate non-fiction (e.g., Marshall 2015). In this scheme, recognizable characters, causality, clear plot lines, concrete settings, and a discernible moral lesson form the common backbone of all efficient storytelling (Bloomfield et al. 2021: 34; Léon et al. 2022; Veland et al. 2018: 43). Identifying the power of storytelling in its capacity to reduce complex phenomena to the embodied human scale (cf. Caracciolo 2021: 12) and to highlight the connection between events or actions and their consequences brings us much closer to the instrumental value of climate storytelling than the general storytalk that tends to equate narrativity with all sense-making. Narrative reduction along these lines undoubtedly also reduces the degree of uncertainty on an experiential level. Such a granular understanding of a tellable story however also alerts us to the controversy between the affordances of the prototypical narrative form and the characteristics of climate change as a complex phenomenon and a wicked problem. As Caracciolo writes in *Narrating the Mesh*: “climate change per se is a scientific abstraction that works on a scalar level not directly commensurable with everyday experience” (2021: 11; see also Raipola 2019). Caracciolo identifies *nonlinearity*, *interdependency* and *multiscalarity* as the foremost challenges to climate change and the Anthropocene storytelling (2021: 12–13), challenges that he sees experimental fiction is best equipped to tackle. Yet transporting sophisticated literary techniques into the realms of policy recommendations or social media activism does not seem immediately realistic (cf. 2021: 73), at least without paying sufficient attention on the platform-specific narrative affordances and limitations.

The climate activist Sivendra Michael from Fiji poses apt questions in an interview for *thecommonwealth.org* blog: “So what stories are we telling? How are we using stories to drive change and our Sustainable Development Goals? What are our films saying? What are we writing? What are we sharing on social media? Do we realize the power of our individual voices and stories?” (Badamasi and Amba 2022). Based on Michael’s own commentary and input in the public sphere, the answer appears unambiguous and resonates with the recommendations voiced in climate storytelling research: we should share personal, inspirational can-do stories (cf. Fernandes 2017) that have a potential to incite collective action. The indisputably most

efficient storytelling platforms for this are, of course, social media, where also public-facing policy reports, documentaries, journalism, and activism are received, circulated, and reframed – often accompanied by a story of the user’s own personal experience or reaction. In these narrative environments, the final question posed by Michael suddenly becomes the most relevant: “Do we realize the power of our individual voices and stories?” The answer, however, is not simple, due to a fundamental discrepancy in the rhetoric and ethics of social media storytelling: while the platforms favor individuating experience, affect and moral positioning, the telling of the story becomes ethically and rhetorically detached from individual tellers and retraceable narrative occasions. Small personal stories, deriving their effect from immediacy, embodiedness, and situatedness, transform into grand cultural and political narratives through emergent authorship and context collapse: on social media, the most powerful stories are told by no one particular, and rhetorical effects emerge from often uncontrollable clashes between story content and its ever-changing contexts of reception.

While research focusing on the communication of climate change does not extensively engage with contemporary narrative studies, its notion of a prototypical, tellable and rhetorically effective story finds support in theory and empirical findings. In the *Dangers of Narrative* project (2017–2022), my research team adopted a crowdsourcing approach to identify examples of “dubious, funny or otherwise interesting” instrumental storytelling on Finnish social media. We managed to collect a corpus of ca. 1000 reports reflecting different spheres of life. It soon became apparent that a story type that the first wave cognitive narratologists called *prototypical* (Herman 2007; Ryan 2007) dominated the reports. A narrative most commonly deemed instrumental and even manipulative was – to follow David Herman’s (2009: 14) influential definition – a situated account conveying an ordered temporal and causal sequence of events, a storyworld with particulars, an event that disrupts this storyworld, and the experience of what it is like for a particular individual to live through this disruption. We found it necessary however to supplement the cognitive prototype definition with a sociolinguistic one that highlights the evaluative aspect of everyday storytelling and its tendency to position narrative agents ethically, as well as draw a relatable moral as a conclusion (e.g., Georgakopoulou and De Fina 2012: 98–103). We detected five frequently recurring *masterplots* (Abbott 2008) that proved highly tellable on social media and were typically appropriated for a wide range of uses and contexts in contemporary narrative environments, from journalism and political campaigning to viral marketing and even communicating science: Good Samaritan, Individual vs. System, Deserving Poor, Illness as Hero’s Journey, and Conversion of a Wellness Entrepreneur (see Mäkelä 2018).

Here we rely on the definition of *masterplot* by H. Porter Abbott, describing the popular story formulas that dominate certain cultures and societies at a certain

time (Abbott 2008: 236). Masterplot differs from the much-used *cultural narrative* in that it refers less to dominating ideologies, norms, and prejudices underpinning all action and more to certain plotlines, character types, story morals, and genres that function as blueprints for individual narratives. Unlike the more broadly understood concept of cultural narrative, which is essentially considered to be implied and internalized rather than explicit and situated (see Hyvärinen 2020), a masterplot can be inferred from a limited set of concrete, situated narratives and argued to have a quasi-semiotic form. It is therefore possible to map the cognitive and socio-linguistic narrative prototype onto identified masterplots. By doing so we explain how, for example the bankruptcy and burnout stories of entrepreneurs, often resulting in a new, transformative, enlightened business idea (the Conversion Story of the Wellness Entrepreneur) adhere to the principle of storyworld disruption or breach. The same applies to stories of Individual vs. System, recounting the failure of societal structures such as the welfare system and the resulting individual tragedy or quest. Conversely, these masterplots fail to account for systemic, structural determination, change, and possibility, while placing undue emphasis on personal choice and ethical encounters between individuals (Mäkelä 2023).

Interestingly, the “dangers” related to these masterplots as reported by our informants concerned the very prototype elements that made them tellable and shareable in the first place: the focus on an individual experience; the requirement of linear causality and one clear rupture, breach, or turning point; the random experiential storyworld particulars inviting immersion; and the tendency to prompt black and white moral conclusions. It became clear that the compelling stories of the internet age evade precisely such phenomena that Caracciolo and others deem crucial in global crises: nonlinearity, interdependency, and multiscale-arity. In addition to these shortcomings, the cognitive and sociolinguistic narrative prototype fails to account for systemic and structural continuity and change, and it favors experiential, selective storyworld particulars that facilitate bodily and affective immersion over statistical representativeness. In our research on the *Dangers of Narrative* corpus, we have focused particularly on the weak tellability of societal structures, the neoliberal logic of individual survival stories, and the polarizing effect that the explosion of personal storytelling in the public sphere has on politics. In popular cultural masterplots, human agents within the narrated storyworlds are easily represented as stock characters whose actions are determined by their personal traits (the Deserving Poor). Activists, political actors, and journalists seeking to share a compelling story often settle for stories of individual heroism and victimhood, while also positioning themselves as benefactors “giving voice” to the oppressed, a story logic and narrative positioning that ultimately counteracts the original goal of maintaining or changing societal structures (Björnininen et al. 2020).

Moreover, the non-informativity, affectivity, and experienced rather than empirical representativeness of the cognitive and sociolinguistic prototype foster political polarization, even if personal storytelling has been recognized as a transformative political force from the 1950s onward (see Polletta 2006; Polletta and Redman 2020). Our analysis of the *Dangers of Narrative* corpus demonstrates that the rhetoric and ethics of personal storytelling has altered significantly due to the explosion of social media – a topic I will return to in more detail in the next section.

It should be evident by now, of course, that such prototypical stories of personal experience fit poorly with the immense spatiotemporal scale, nonlinearity, and complexity – in short, phenomenological unfathomability – of climate change. At the same time, they are compelling. In terms of new formalism, the form of the cognitive and sociolinguistic narrative prototype *affords* embodied and affective relatability, linear-causal understanding of temporality, and localization through immersive storyworlds (see Levine 2015). Such affordances have complex consequences for climate change and Anthropocene storytelling. An example of such misleading reductionism would be emancipatory stories of “animals returning” going viral during the first weeks of COVID-19 quarantines. Posts and photos on Twitter, Instagram, TikTok and Facebook reported how wild animals were regaining their once-natural habitat in quarantined cities: dolphins, swans and fish had taken over the newly cleared Venetian canal waters, and elephants had invaded a Chinese village, drank up all corn wine and passed out on a tea garden. The stories and photos were proved fake by some media outlets, including *National Geographic* – the dolphins in the pictures were photographed in the Mediterranean, the swans had always been a regular sight in the canals of the Venice metropolitan area, as well as the elephants in Chinese villages (although not the “drunken” elephants lying on the ground in the viral photo) (Daly 2020). Yet these stories were able to introduce a small positive rupture, carrying experiential resonance and immersive detail into the global catastrophic disruption created by the pandemic. The desire to construct a discernible positive plot twist is crystallized in the comment of Gianluca de Santis, tweeting the story about the canals of Venice: “Nature just hit the reset button on us.”

As is the case with fake news in general, the falsification of a story rarely goes viral, as the *will to believe* is very strong in the affective networks of social media (see, e.g., Vosoughi et al. 2018); particularly the unprecedented collective experience of seclusion reinforced the need to see something positive come out of the pandemic. From a critical environmental humanities perspective, two immensely complex phenomena – the pandemic and biodiversity loss – were thus aligned with false causality to create a simple inspirational story that moreover pertained to the Rightful Victory of Animals over Humans masterplot, familiar for example to the European audience through the German fairy tale “Town Musicians of Bremen,”

collected by the brothers Grimm. Mutatis mutandis, the example demonstrates the unlikelihood of a viral story that would compress the multiscale environmental impact of human action and the pandemic.

3 Clashing forms in climate change storytelling

While the interest in climate change storytelling on social media appears to turn rapidly into activism, consultancy business, and politics, research on the topic is lagging behind. What happens when narrative affordances, algorithms and complex natural forms collide? Supra-individual ethical agency arises as a crucial question, as well as the risk of misrepresentation through anthropocentric reductionism. Moreover, viral personal storytelling on climate issues, increasingly used in environmental campaigning, potentially only increases political polarization (cf. Falkenberg et al. 2022). Francesca Polletta and Nathan Redman (2010) argue, based on an extensive research review, that stories of personal experience, particularly as regards structural issues, only very rarely change people's political opinions; on the contrary, they tend to cement pre-existing beliefs.⁴ As argued earlier in this article, from the perspective of storytelling challenges, the complexity of climate change bears some resemblance to the complexity of societal structures. Therefore, we can expect climate change storytelling to confront similar problems with political partisanship as observed in studies reviewed by Polletta and Redman. For these reasons, narrative studies should be able to provide analytical models for understanding the clash between three forms: the prototypical form of relatable personal stories, the affordances of social media platforms, and the formal complexity of climate change.

To model the afterlife of a cognitively prototypical narrative of personal experience, I have proposed the concept of *viral exemplum*. It tries to capture the 21st century storytelling dynamics that transform individual, even unverifiable personal experiences into culturally, socially or politically representative and normative conclusions (see Mäkelä et al. 2021). There is a wide scholarly consensus that the most crucial formal affordance of social media is networked affect (e.g., Papacharissi 2015). While in social media scholarship, almost all content is considered story-

⁴ Interestingly, Polletta and Redman's (2020) findings support Caracciolo's optimism about the transformative power of complex, ambitious storytelling: they speculate that "sophisticated, not simple" stories challenging and even self-critically reflecting the stereotypical cultural narratives or masterplots (what they call "background stories that pass as common sense") may have a potential to actually alter people's views on structural political issues (2020: 8). What their account does not pay attention to, however, are the digital environments where these stories are most commonly received and interpreted.

telling (cf. Papacharissi 2015), my research projects have tried to show how the cognitive narrative prototype has the most potential for viral sharing. Moreover, the very seeds of virality (experientiality, particularity, world disruption) are at the same time precisely the same narrative affordances that easily constitute epistemic and ethical pitfalls in contemporary, often polarized narrative environments. When shared, unverified and yet highly relatable stories of personal experience become representative in a material sense, as they amplify their presence on social media and news feeds and become retold again and again as the sharers' experience (of someone else's experience). The experience starts to *exemplify* some general idea or ideology while preserving the aura of intimacy brought about by the idea of sharing experiences. This collective experience of representativeness ("this story is true in so many ways") tends to generate – or more likely, consolidate pre-existing – normative stances.

Social media storytelling thus takes us back to the premodern storytelling cultures where referentiality of a narrative was rarely an issue as narrative "truth" of the story equaled to its *moral* (see Katajala-Peltomaa and Mäkelä 2022). Once verified, a viral exemplum is notoriously difficult to challenge. Even if the original experience were falsified, the collective narrative persists as representative and normative. This was the case with viral animal stories discussed above: they *exemplified* the recovery of nature amidst a human crisis. A random small story is quickly and irrevocably articulated into grand cultural narratives that have no responsible teller. Unlike the premodern exemplum which derived its authority from religious, scholarly, or governmental establishment, the contemporary exemplum rests on emergent authority arising from the collision between narrative and social media affordances. I consider this chain reaction from experientiality to representativeness and normativity to be the single greatest contemporary "danger of narrative" as it creates moral certainty on issues that are pronouncedly complex and would require some tolerance for uncertainty to be fully grasped and acted upon.

The logic of the exemplum explains the central role of individual environmental activists or anti-activists in contemporary narrative environments. The pull toward personal stories of conversion, epiphany, disillusionment, or rebellion in environmental matters risks resulting in polarized character judgements fostered by social media affectivity. This has been one of the downsides of the young generation having Greta Thunberg – an activist gone viral – as their icon. Thunberg's exceptional work has been repeatedly reframed and psychologized as a quest of an exceptional yet exemplary individual, with media headlines proclaiming: "Greta Thunberg became a climate activist not in spite of her autism, but because of it" (Silberman 2019). Another example of a viral story celebrating one exceptional individual messenger of science challenging the ignorance of the powerful was historian Rutger Bregman confronting the world's richest people about tax avoidance at

the climate change-focused Davos World Economic Forum in 2019. The video of Bregman's fearless verbal attack went globally viral ("I mean 1500 private jets have flown in here to hear Sir David Attenborough speak about how we're wrecking the planet"⁵), echoing the Emperor's New Clothes masterplot in social media environmental storytelling, previously successfully embodied by Thunberg. This demonstrates how recognizable masterplots carrying easily relatable moral positioning thrive also in environmental storytelling on social media. They have a simple, polarizing message, recognizable characters, and they provide the sharer with a favorable moral positioning among those speaking truth to power. Strong masterplots, such as the Emperor's New Clothes in this case, have nevertheless their downsides, particularly as they collide with the narrative affordances of social media. The attention directed at Thunberg's autism, or any other type of personalization for that matter, recasts the debate as a question of character judgement that boils down to arguing about whether autism is a superpower or an obstacle in promoting climate activism (see, e.g., Taylor et al. 2021).

While social media storytelling puts a lot of pressure on the shareable ethos of exemplary individuals, the previously mentioned fact that climate doomers are currently much more popular on social media than proponents for climate action deserves further attention. A partial explanation can be found from the logic of master and counter-narratives that is reinforced considerably by networked affect. As Matti Hyvärinen (2020) argues, somewhat against the narrative-theoretical grain, a counter-narrative challenging an assumed master narrative is essentially more *tellable* than the versions complying with the master narrative supported by institutions, cultures, and collectives. While dominant ideologies and canonical scripts do not require much rhetorical effort to be realized, a counter-narrative, by definition, introduces an anomaly, a tellable breach in the canonized sense-making processes, while also typically positioning the teller in experiential terms – as a someone experiencing something *differently*. As such, a counter-narrative always already meets the central criteria for a cognitively and sociolinguistically prototypical narrative.

The affordances of social media support and amplify the narrative gesture of *countering* generally held truths by harnessing an individual, "marginalized" voice with viral circulation. For instance, the previously mentioned masterplots of Individual vs. System and Good Samaritan challenge institutional structures as master narratives upheld by the powerful and foreground individual heroism. The social media story logic is effective in transforming counter-narratives into multipliable masterplots. (Mäkelä 2020.) This held true also for the environmentalist Emperor's New Clothes masterplot, at first. In 2018 when Greta Thunberg entered the public

5 See <https://www.youtube.com/watch?v=r5LtFnmPruU> [00:06–00:12].

sphere, it was still possible to position her “story” as countering. Yet today her social media ethos – if not her ultimate message – has been so thoroughly appropriated by media and political institutions that social media calls for immediate environmental action and cross-generational responsibility do not come across as counter-rhetoric any longer. The evolution of climate storytelling on social media has thus created a momentum for the climate doomers to enter the stage with their intensively experiential, apocalyptic conversion stories that challenge the master narrative of climate change mitigation. Considering this natural direction of compelling stories from the margin to the center and not the other way around, institutional calls for environmental action on social media face major storytelling challenges.

The epistemic certainty of environmental disasters is often coupled with moral certainty about those who are to blame; yet the social-media fuelled narrative positioning between good and evil often risks misrepresenting causality and scalability. Notre Dame caught fire in April 2019, and a shock reverberated across the Western world, prompting celebrities and billionaires to publicly donate large sums of money for the renovation work. When the world’s largest rainforest in the Amazon was in fire for weeks later in the same year, accusations against wealth, power and media not responding to climate change with equal vigor and generosity went viral. Memes with juxtaposed images of the burning Notre Dame and the burning rainforest in the Amazon proclaimed: “When Notre Dame was burning the world stopped. Billionaires and politicians emptied their pockets to help rebuild. Meanwhile the amazon has been burning for three weeks. The difference is, we don’t get to build a new earth. When it’s gone, it’s gone. #PrayforAmazonas.” We can detect an attempt at integrating nonlinearity, interdependency, and multiscalearity in this counter-campaign. In all its binarity, the meme nevertheless addresses the complex entanglements between monetary flows, political influence, collective emotions, solidarity, Eurocentrism, and crisis awareness. It contrasts the high (social media) tellability of the sudden destruction of an emblem of Christian cultural history with the low tellability of gradual destruction materializing in the Global South. The analogy has its merits, yet it places undue emphasis on charity, individual responsibility, and the division between human culture and the non-human world. By doing so it undoubtedly promoted a political polarization in climate questions, framing certain experiences and reactions as immoral while providing social media users with an easily assumable, moralizing positioning. Paradoxically, social media storytelling drives collective action (saving Notre Dame or the planet, creating and sharing memes) by targeting individuals.

Caroline Levine’s (2015) influential new formalist theory calls analytical attention to the *collision of forms* and expands the concepts of form and affordance to also cover, for example, institutional, political, social, religious, scientific, and natural forms. Adapting Levine’s theory, it is possible to reconfigure the challenges to

climate storytelling on social media as a collision between the affordances of the narrative prototype (what kind of stories are considered compelling), the affordances of social media (the conditions and dynamics of virality), and the complex features of climate change and related biodiversity loss affecting storification (to what degree elements such as character, plot, causality, location, and storyworld particulars and disruptions are available or “afforded”; see Figure 1).

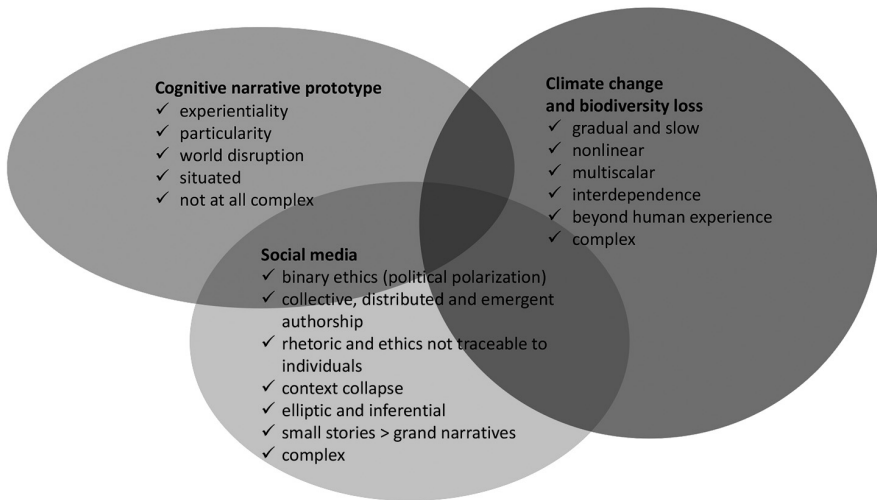


Figure 1: Collision of forms: climate storytelling on social media.

The previously discussed concept of viral exemplum was meant to describe the collision between the narrative prototype and the affordances of social media. The collision results in affective chain reactions that transform individual experiences and immersive particulars into representative exempla. Interestingly, social media and climate change as complex systems or forms share some characteristics, most importantly *emergent agency* irreducible to experiences, actions, and moral of individuals (see Dawson and Mäkelä 2020). Social media virality is an emergent phenomenon, not intended or controlled by any one individual user, partially reliant on “node” influencers, media outlets and algorithmic manipulation yet possessing a significant amount of opaqueness and randomness (see, e.g., Munster 2013; Nahon and Hemsley 2013; Roine and Piippo 2022; Sampson 2012). As summarized by Marie-Laure Ryan, “[e]mergence, in its strongest form, is a property of phenomena that we do not fully understand: how the individual elements of a system organize themselves into larger functional patterns without the top-down guidance of a controlling authority” (Ryan 2019: 42). A degree of uncertainty thus always attends emergent systems. Just as it is often difficult to assess the multiscale of individual

actions vis-à-vis the planetary scope of climate change, partaking in the affective networks of social media reactions and shares possesses a similar element of estrangement and detachment. One is responsible, and at the same time one isn't. Collective accountability is desperately needed, yet the moral currents tend toward polarization and scale down to individual ethics.

Continuing the analogy of social media and climate change, multiscalarity in climate change finds its equivalent in *context collapse* on social media, a concept introduced to describe the unprecedented nature of a single post's discursive contexts as it travels along the affective networks (Marwick and boyd 2010). In a way, context collapse is the butterfly effect of social media: an authentic story of personal experience (say, of dolphins, the Notre Dame fire, or having beef for dinner) can be usurped for completely unprecedented contexts and uses, gain disproportionate representativeness and become a token in a polarized political debate. The analogy between these two complex forms and the emergent agency at play in both helps us understand the rhetorical, ethical, and epistemic consequences of their collision. Instead of simply considering the cognitive and sociolinguistic prototype as a cure to all communicative ills, climate storytellers should look into forms of engagement that are aware of the colliding forms.

During the years, several media and communication professionals and politicians have asked my research team about alternative ways of engaging social media audiences: what would be the opposite of the viral exemplum? Many times, my answer has been the 2010s #MeToo campaign, which still reverberates in institutions and media. When it worked as it was supposed to, *without* sharing full-blown experiential stories or positioning other individuals, #MeToo was a simple gesture of narrative stance-taking (see Georgakopoulou 2013 and 2017): the emphasis was not on the word *me*, but *too*. As such, a social media viral phenomenon was ultimately able to represent a societal and cultural structure, the patriarchy, and its multiscalar effect on individuals who, as individuals, cannot always be unquestionably framed as perpetrators or victims of a crime. Foregrounding the networked hashtag "grand narrative" (Dawson 2020) made the individual experiential stories sufficiently irrelevant so that falsifying them one by one did not make sense.⁶ Conversely, the campaign started to look distorted every time when the mainstream or social media focused too intensively on the details and individuals in a single #MeToo story elevated as an exemplum. The sharing and validation (as representative) of one particularizing and individuating story were also prone to evoke backlash through counter-readings. (Dawson and Mäkelä 2020.) #MeToo as a stance-taking

6 The fantastic media art production <https://metoo.kimalbrecht.com/> with its visualizations of networked stories thematizes beautifully the narrative strength of #MeToo.

campaign was not a prototypical story, and it did not rely on the affective, embodied or teleological particulars of one experience, and as such it is the opposite of the viral exemplum. It was all about telling *structures* and *systems*; through the sheer accumulation of stories and the resultant effect of *experiential cum political validation* (cf. Serisier 2022). The difference between such an “emergent hashtag narrative”, as conceptualized by Paul Dawson (2020), and the viral exemplum is that in the absence of storyworld particulars and moral positioning of individuals, social power and accountability emerge as supra-individual (see Figure 2). The narrative affordances of social media enable emergent, collective authorship to shape new kind of narratives that match the scale and complexity of structural and global challenges: “iterative appeals to the experiential truth of individual stories manifest as narratable social movements in the ‘networked public sphere’” (Dawson 2020: 969).

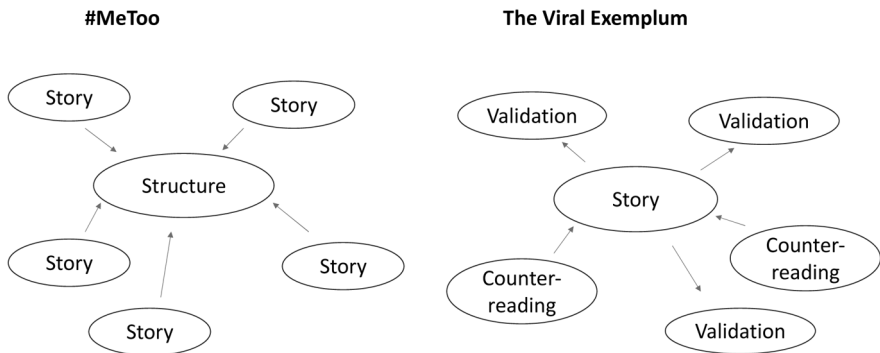


Figure 2: #MeToo vs. the viral exemplum.

We need a #MeToo of climate change that would put the narrative prototype on hold, make the most of the narrative affordances of social media, and reflect the nonlinearity, interdependency and multiscalarity of climate change. The idea of having a climate change campaign of simple stance-taking, without a focus on individuating stories and storyworld particulars, goes against the grain of most climate storytelling recommendations voiced in recent research. Yet for example Veland et al. are on the right path as they call for a more innovative articulation of small individual stories and grand cultural or scientific narratives:

Globally, diverse societies interpret risk and experience agency and belonging according to cultural narratives into which the climate change story may or may not find purchase. [...] Innovative and transformative thought will benefit from laying aside heroic narratives where a single villain (neoliberalism, industry, climate change), is defeated once and for all by a single hero (the environmental activist, the United Nations, the engineer, the consumer), and

begin to tell what Ursula Le Guin in *Dancing at the Edge of the World* called “the carrier bag narrative”: listening and gathering stories to construct transformative narratives in which we each find agency to “stay with the trouble” to change our own, and our societies’ praxis. (Veland et al. 2018: 44–45)

4 Conclusion: Compelling, complex, or adaptive storytelling (and narrative theory)?

What can narratives and narrative theory do to promote climate action? At the moment, researchers of science and climate communication draw from narrative studies to argue for the persuasiveness of individuating, particularizing and localized stories about grassroots experiences. This attempt is dictated by the contemporary story economy where the information overflow can only be tackled with cognitively arresting material that resonates with our bodily experience. Literary theorists, in turn, highlight the potential of complex, sophisticated climate fiction in modeling the crisis. There is however an urgent need for storytelling practices that would *both* adapt to dominant 21st century storytelling environments *and* reflect the interdependence, multiscalarity and nonlinearity of climate change. In this article, I have attempted to argue for the cruciality of social media as 21st-century narrative environments and for a critical reading of viral climate stories as individuating, prototypical, and morally unambivalent, yet rhetorically and ethically conditioned by complex constellations of users and platforms. Climate researchers and storytellers will need to pay much more attention to the reality of contemporary storytelling environments: their affordances, popularity, use, and ethos.

All the while, social media platforms, from the Baby boomer Facebook to the Millennial YouTube and Instagram and the Gen-Z TikTok, possess a lot of unrealized potential for harnessing our political imagination to tackle global challenges and promoting collective action. Compensating epistemic uncertainty with moral certainty increases political polarization, and therefore the dominant forms of social media collectivity, such as moral outrage (Crockett 2017), are not likely to serve this goal. Heidi Toivonen’s (2022) interview study, mapping different types of agencies that people construct in their discourse on climate change, shows that while individual, critical and threatened agency are evoked in the interviews, collective agency appears the most and provides a sense of meaningful action for individuals. Toivonen concludes that “it is important to continue fostering concrete, shared, collective imaginations about possible futures with attention to how an individual’s thinking and experiences can be bridged with the broader collective level of action” (2022). One step toward this direction is to recognize and account for the risks and affor-

dances of colliding forms that together contribute to narrative collectivity: shareable experiences, the logic and infrastructure of sharing, and finally, the shared uncertainty about our planetary future.

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