Ask Me Anything! 😈

How ChatGPT Got Hyped Into Being.

Author note

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Abstract

This paper reconstructs how chatbots based on Large language models (LLMs) like 'ChatGPT' got hyped into being. It dissects the actors and dynamics that triggered, fueled and disseminated the hype. Through the lens of hype studies the paper interrogates three empirical realms: 1. Company websites where the chatbots are presented, 2. Blog entries and newspaper interviews by prominent tech figures from the Silicon Valley, and 3. New York Times articles in the timespan between November 2022 and August 2024. The paper shows how the chatbot hype is driven by a dynamic between privileged actors (hypers) and a media frenzy both influencing and being carried by society and politics alike. Different interdependent building blocks in the chatbot hype construction are identified: 1. Depicting Large Language Model (LLM) chatbots as knowledge models, 2. Entertaining the uncanny and manipulative side of chatbots, 3. Staging a spectacle of competition between tech giants, and 4. Praising the dualism of doomsday apocalypse or a tech-religious calling for a promised future. The paper unravels the core circulated narrative that turns the hype into a powerful societal phenomenon.

Keywords: ChatGPT, chatbot, Hype, BigTech, Sociology of expectations, Large language model, LLM, Xrisk, catastrophic risk, hallucination, spectacle, Silicon Valley, Longtermism

Introduction

In February, 2023, Sam Altman, the CEO of the company OpenAI which had just released the chatbot ChatGPT, declared in the mission statement 'Planning for AGI [Artificial General Intelligence] and beyond': "Successfully transitioning to a world with superintelligence is perhaps the most important—and hopeful, and scary—project in human history" (2023). The quote captures well the critical historical momentum ChatGPT resembled for many tech enthusiasts, hailing it as a milestone towards the unifying destiny of a holy machinery superintelligence. No matter the plausibility of this trajectory, the release of the chatbot caused a societal frenzy across media, politics and user base. ChatGPT added 100 million users in two months, making it the fastest-growing application ever (Thubron, 2023).

How is it possible that the release of a chatbot can trigger callings for transcendental futures and evoke such ecstasy? This paper conceptualizes this societal phenomenon as hype, arguing that the overpromising of chatbots entertains a different mode of futuring than just proclaiming and inviting for a vision. Instead of cultivating future literacy, the chatbot hype is driven by an entertaining media spectacle and by the opportunism of some reckless private actors.

Hype is so far rather poorly carved out as a scientific and analytical concept, colloquially being treated as some mere folk talk or marketing prose[1]. However, I argue that the concept of hype can help to answer the following research questions: What triggered the social frenzy around chatbots? What fueled and disseminated it? To investigate the case study of the chatbot hype, I interrogate three societal realms: First, the presentation from the company websites where chatbots are hosted. Second, commentaries on 'X' (former Twitter), blog entries and newspaper interviews by prominent tech figures. These figures enjoy a high degree of public authority and a prominent speaking position in media, given their alleged expertise in the field of AI or perceived *visionary* achievements. And third, New York Times newspaper articles in the timespan between November 2022 and August 2024, featuring articles by journalists covering chatbots.

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[1] 'Gartner' consulting created the famous depiction of the hype circle (Linden & Fenn, 2003), which albeit its visual presence has been criticized as "folk theory", lacking any empirical basis (Rip, 2006).

The fact that algorithmic entities can trigger expectations and dreams of exuberant achievements has been investigated by many contributions in media studies and Science & Technology Studies (STS) research. Especially studies on Artificial Intelligence (AI) have discussed how the idea of outperforming the human is entertained by aspects of tech-development determinism and machine opacity (Campolo & Crawford, 2020). AI perception constantly mediates at the binary of hopes and fears, or redemption or doom, most concretely embodied in fictional narratives around AI (Cave & Dihal, 2019). Surprisingly, these bold narrative accounts of AI stem not from an uninformed public but from the heart of the AI expert community from the early 1950s (Natale & Ballatore, 2020), and are then echoed in public arenas shaping overall AI sense making (Dandurand et al., 2022 & Crépel et al., 2021). Further, they have been embraced by nation-states triggering technological races between geopolitical competitors (Cave & ÓhÉigeartaigh, 2018) and have been urging policymakers to fire bold tech-futures (Bareis & Katzenbach, 2021). In a turn towards "communicative AI" (Hepp et al., 2023), scholars in the field of communication and media studies call for distinct analysis in how the automation of communication through algorithms is "embedded within digital infrastructures" and "entangled with human practices" (ibid., p.28). This piece of research ties in with this research agenda, but also adds special focus on the actors and their agency and intentionality in starting and steering the hype dynamic around chatbots[2].

This paper shows that many of the rhetoric elements in the afore mentioned studies serve as building blocks in the construction of hype revolving around chatbots. I analyze how they are integrated into a consistent and coherent narrative building on four pillars: 1. Depicting LLM chatbots as knowledge models, 2. Entertaining the uncanny and manipulative side of chatbots, 3. Staging a spectacle of competition between tech giants, and 4. Praising the dualism of doomsday apocalypse or a tech-religious calling for a promised future. The publication of this article falls inside a hype dynamic which seems ongoing. While the peak of the chatbot hype seems to have passed, it is debatable to what extent the discursive phenomenon of hype already materialized in policy outputs and path-dependencies (see

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[2] Hepp et al. derive human practices from the work of Barad and Latour - While I acknowledge figuration as an important ontological perspective, I also differ with the concept of hype, attributing it to agency driven by players, opportunism and power.

discussion in conclusion). Before diving into the analysis, the paper introduces the conceptual framework of hype, and presents the empirical realms and the analytical approach in more detail.

Theoretical takes on hype(rs)

Hype studies as an established field do not exist to date but dwell at the intersection of communication studies, STS and innovation studies, with recent efforts to be carved out as a structured field with a research agenda (Bareis et al., 2023; Palavicino and Konrad (2015)[3]. Especially with regard to technology and innovation trajectories, STS, Technology Assessment (TA) and Responsible Research and Innovation (RRI) have reacted with future directed heuristics to deconstruct and counter what is also coined as overpromising, such as the sociology of expectations (Borup et al., 2006), vision assessment (Grin & Grunwald, 2000; Frey et al., 2022), anticipation (Alvial-Palavicino, 2015), sociotechnical imaginaries (Jasanoff & Kim, 2015), or forecasting (Martino, 2003).

Communication studies discusses and measures hypes in media circles, especially focusing on waves of media attention, also understood as 'buzz', 'spin', or 'trend' in the world of news, social media, or marketing. These fields of inquiry are elaborated on more conceptually (see, e.g., Wernick, 1991 for marketing and advertising; or Thompson, 2010 for publishing; or Vasterman, 2005 for news circles), but also approached empirically, for example through studying dynamics of media coverage (Wien & Emelund-Præstekæker, 2009; Kari et al., 2023). Quantitative approaches to measure waves of attention are also taken up by the newly emerging field of scientometrics, studying how science is impacted by the world of metrics and citation scores, looking at the role of hedging words in abstracts to attract readers (Bordignon et al., 2021), or when negative citations or post-publication peer reviews fail to contribute to the correction of science (Bordignon, 2020).

Conceptually, Palavicino and Konrad (2015) offer some typologies of hype, differentiating between hype as an analytical tool to read future market developments or map current media

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[3] On the 2024 EASST conference scholars from many fields shared presentations on the panel "Towards mapping and defining critical hype studies", organized by Andreu Belsunces and Vassilis Galanos.

attention; hype as exaggeration following strategic activities of actors; or hype as a societal phenomenon looking at the discursive dynamics of expectations in society. In order to distinguish hype from the other future related concepts mentioned above, I will especially include the latter two perspectives in my analysis, stressing that hypes are both a societal dynamic but are also triggered and driven by strategic agents (hypers) pointing to the normative nature of hype. Hypers must be understood as rather problematic appropriators of futures, following a deliberate mode of future capture. Instead of cultivating future literacy in the form of reflection, inclusion, and alternative pathways, hypers exploit the epistemic uncertainty of the future for opportunist purposes. These actors instrumentalizes promises for the sake of creating attention, followership and investments. The consequent societal dynamic of hype narrows down temporal dynamics (opportunity) in the anticipation of a future, pointing to the normative dimension of hypes, as they can mobilize attention but also relinquish democratic zones of imagination, speech and contestation.

The most appealing and comprehensive definition of hype can be found by the communication scholar Powers. She defines hypes as "a state of anticipation generated through the circulation of promotion, resulting in a crisis of value" (2012, p.863). I will take this definition as a reference point to extend towards an updated definition of hype, especially focusing on hype's inherent normativity, the stressing of opportunity costs, and stage-performance to create followership in the context of technology hype. All of which being elements crucial in understanding the ChatGPT frenzy.

Normativity: hype as opportunist exaggeration
With the exploding interest in expectations of new and emerging technologies (NEST) in the early 2000s, STS scholar Jasanoff (2005) observed that political stakeholders, experts and publics rely on technological predictions, even though the guiding visions they refer to remain incomplete, bold and lack accuracy. Notwithstanding these epistemological limitations, stakeholders embrace futures with a firm determination, taking vague future talk for empirical fact. In his analysis of human enhancement discourses (many of the same actors that entertain the chatbot hype), in similar vein, Nordmann warned of the seduction of what he called 'if and then' syndrome (2007). By means of a "radical foreshortening of the conditional" (p.32), such speculative ethics creates forceful and unchecked futures. These

critiques stress the epistemological dimension when tackling the pitfalls and shortcomings of bold future proclamations.

But critiques in form of evidence, rationality or implausibility do not capture the phenomenon of hype – to the contrary, as these aspects are rather ignored (or worse, instrumentalized) by hypers. In contrast to Powers (2012), who stresses in her definition the resulting "loss of value" in hypes, I would argue that someone always profits from hypes (also when a wave wanes). After all, money changes pockets, it never gets burned. Hypers are masters in coining uncertainty and vagueness about the future into an overly optimistic story of opportunity, thereby possibly misleading decision-makers or overshadowing alternative futures[4]. It is not that hypers lie – it is rather that they do not care about categories of truth or lie, about the difference of fact and belief. In this respect, they also differ from pioneer communities, which have an interest in structuring and curating the future (Hepp, 2024) rather than exploiting it. Hence, epistemological categories are not relevant to the phenomenon of hype. In this sense, the hyper is rather similar to what philosopher Frankfurt (2005) discusses with the concept of 'bullshit'. He conceptualizes the relation between truth and bullshit in the following manner:

The fact about himself that the bullshitter hides [...] is that the truth- values of his statements are of no central interest to him [...] This does not mean that his speech is anarchically impulsive, but that the motive guiding and controlling it is unconcerned with how the things about which he speaks truly are. (p.55)

Hypers need to emotionally overstress the value of a future instead of the future being able to speak for itself (by plausibility or social appeal). This again, though, shows the cleverness and wickedness of hypers. They do not care about truth, but they surely know how to use sensationalism to their benefit. Or again, how Frankfurt would put it: In comparison to liars, bullshitters are "more expansive and independent, with more spacious opportunities for improvisation, color, and imaginative play" (ibid., p.53).

Emotional staging for impression management and escapism

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[4] Here, I clearly take a different route than Vasterman (2005), who argues that "'exaggeration' and 'distortion', are not suitable for an analytic definition of media-hype" (p.512). To the contrary, I think they lie at the core of the phenomenon.

And this aspect leads to another core pillar of hype being a *social* phenomenon. A hyper alone cannot cause a hype: It needs an audience to rise and be carried. This audience is not just a passive spectator, but a complicit collaborator acting like a catalyst. It is the media frenzy, the social media bursting of feeds, disseminated by the many users and journalists that gives traction to hype. As Powers (2012) rightly points out, promotion needs to be circulated. That is why hypes are not only descriptive, but highly performative (action-ascribing, enabling, fueling etc.). They create topicality, coin leaders, produce feeds, attract investors, skyrocket stocks, and give birth to start-ups, influencers, tech gurus, and other actors who know how to exploit the hype to their advantage. But an audience of followers wants to be entertained in order to be converted into collaborators. As Stilgoe (2020) writes: "Technological hype is not just exaggeration, nor is it idle speculation; it is an act of persuasion" (p.40). The repertoire of impression management in hypes involves figurative language that can trigger emotions to craft a community. Bold statements and exaggerated claims hail future benefits, involving fabulous potentials and shiny prospects that need to be mobilized. Hypes often maneuver within the binaries of hopes vs. fears, opportunity vs. closing window, or redemption vs. doom. A missed chance, or a bleak future if not acted now, is a common rhetorical motive to spur action. All too often, hypes normatively set the agenda with "wishful worries", which Brock (2019) calls "problems that it would be nice to have, in contrast to the actual agonies of the present." Here, especially references to history by leaders of hypes are very common, stressing the *kairos* moment of a small window of opportunity (Bareis et al., 2023). The promising invitation of conquering the seemingly unachievable (Beckert, 2016), or visiting the never-before-visited, can unify an audience through feelings of belonging and identity with a peer-group. This social momentum also points to a psychological dimension with hype. There lies a deep wish within hypes to escape (even only for a moment) everything that entangles and complicates the innocent declaration of a bold promise or a golden future at the horizon. This escapist notion shows parallels to Roland Barthes' analysis of the power of myths (1972), which serve to conceal and cope with social contradictions and help citizens to escape a sometimes dull and mundane routine of everyday life.

The afore-elaborated points me to the following definition of hype that extends Power's (2012) definition with the aspects of impression-management and the normativity of

opportunism: *Hype is a social dynamic produced through an emotional staging and circulation of a distinct and laudable - but actually opportunistically exaggerated - future.*

Empirical realms of analysis

BigTech's and media's framing of the chatbot phenomenon powerfully informs us how speaking position in the public communication arena and impression management for the creation of followership influences the acceptance of chatbots. Non-specialist users are highly impacted by these framings. To analyze the hype around chatbots, I investigate three empirical realms. First, I retrieve the description and presentation from company websites, where chatbots are presented and hosted. I took into account the seven most popular ones, stemming all from the global North: ChatGPT (OpenAI), Co-pilot - before Bing Search- (Microsoft), Gemini (Google), Meta AI (Meta), WatsonX (IBM), and Le Chat (Mistral). Special focus lies on ChatGPT, being the chatbot that unleashed and continues to nurture the hype. I use the online Internet Archive with its Wayback Machine to retrieve earlier versions of the websites in order to understand how the corporate depictions of the chatbots changed throughout the timespan between November 2022 and August 2024.

The second empirical realm are commentaries on 'X' (formerly known as Twitter), blog entries as well as newspaper interviews by prominent tech figures. These figures enjoy a high degree of public authority and a prominent speaking position in media, given their alleged expertise in the field or perceived visionary achievements. Hence, their evaluation and commentary about chatbots influences users' trust relationship to this technology and its output. The selection of persona is not exhaustive but resembles the most popular and influential figures, choosing a sample of actors that are CEOs in the Silicon Valley, or tech-thinkers/funders/investors. Notable characteristics of the sample: They are all men (many stem from or work in the Anglo-Saxon world – with some exceptions given some American-Indian CEOs), got their education at elite universities like Stanford, MIT, or Oxford, and are firm believers in technological progress. Most belong to the top percentage of the richest people worldwide, are advocates of market libertarianism, and lead or have a role in the largest companies on the globe (given market capitalization). The companies, donating foundations and the worldviews of many of these prominent figures are closely intertwined,

with, e.g., Elon Musk or the Open Philanthropy organization financing many projects and startups featuring in the list (see table 1).

Table 1. List. Prominent tech figures commenting on chatbots

Name	Role
Bill Gates	Former CEO of Microsoft, now investor and manager of the financially influential Gates foundation.
Satya Nadella	Since 2014 CEO of Microsoft. Microsoft is the main funder of Open AI.
Elon Musk	Self-proclaimed Tech Guru. Entrepreneur and owner of companies like SpaceX, Tesla, or 'X' (formerly known as Twitter).
Sam Altman	Investor and Software-developer. CEO of Open AI. Advocate of the idea of AI transcendence and Artificial General Intelligence.
Sundar Pichai	Former consultant and entrepreneur. CEO of Alphabet.
Tim Cook	Industrial Engineer and manager. CEO of the company Apple.
Mark Zuckerberg	Technology entrepreneur, CEO of the company Meta, founder of the social media platform Facebook.
Arvind Krishna	Former electrical engineer and manager. CEO of the company IBM.
Steve Wozniak	Technology entrepreneur, computer engineer. Co-founder of Apple.
Jensen Huang	Engineer and entrepreneur. CEO of Nvidia.
Geoffrey Hinton	Computer scientist and cognitive psychologist, most acclaimed for his work on artificial neural networks. Nobel prize winner of physics in 2024.
Peter Thiel	Influential investor. Co-founder of PayPal, Palantir Technologies, and the Founders Fund, earliest investor in 'Facebook'
Yoshua Bengio	Computer scientist, most noted for his work on artificial neural networks and deep learning.
Sam Bankman-Fried	Founder of the FTX cryptocurrency exchange, which collapsed in 2022. Propagator of Crypto-technology and leading figure in the effective altruism movement. Convicted of fraud and related crimes in November 2023 and sentenced to jail for 25 years.
Dustin Moskowitz	American internet entrepreneur who co-founded Facebook. Main funder of Open Philanthropy, an influential research and donor foundation finances organization and people based on the principles of effective altruism.
Eric Horvitz	Computer scientist, and technical Fellow at Microsoft, where he serves as the company's first Chief Scientific Officer.
Nick Bostrom	Philosopher known for his work and propagation of the ideas of existential risk, longtermism and human enhancement. Leader of the Oxford Future of Humanity Institute (financed by Elon Musk and the Open

	Philanthropy Project), which was shut down in 2023 by the university.
Yuval Noah Hariri	Historian, public intellectual, and writer of the book Homo Deus, a speculative account of human futures entertaining scenarios of technological supremacy and loss of control.
Toby Ord	A former senior research fellow at Oxford University's Future of Humanity Institute, focusing on existential risk. Leading figure in longtermism thinking and the effective altruism movement.

The third empirical realm are newspaper reports in the timespan between November 2022 and August 2024, featuring articles by journalists covering chatbots or figures in the list commenting on their risks or achievements. Given the huge amount of media covering of the topic I had to limit my scope and opted for the American Newspaper The New York Times (NYT). NYT is a well acclaimed daily newspaper and counts the third largest online visits (May, 2024) among all news sites worldwide (Press Gazette, 2024). It is the most Pulitzer Prize-winning newspaper and also features most subscribers with 10,84 million (first half 2024) (Miller, 2024). It can be considered a leading medium, whose reports become disseminated broadly and internationally in other media broadcasting and newslets. I worked with search prompts: "CHATGPT"; "LLM" and "CHATBOT", leading to a total output of 97 articles for "CHATGPT", 46 articles for "LLM", and 723 articles for "CHATBOT". I eliminated doubles, unrelated outputs like newsletters, and selected a final sample of articles that especially focused on chatbots' abilities in the beginning of the release of 'ChatGPT' and its aftermath.

The mode of analysis of the empirical material is hermeneutic, looking at the deeper rhetorical build-up of the hype, building on the effect of distinct metaphors, motifs, narratives, or cultural references. I also take into account the design of the interfaces of the chatbots. As hypes work with a play of emotions and impression management, I will especially focus on the theatrical techniques (Goffman, 1959) and the "dramaturgical regime" (Oomen et al., 2022) of the chatbot hype, implying that its "performative imaginations are enacted" and can be deconstructed (ibid., p.259). In the coming section I will dissect, going chronologically with the time of release of ChatGPT, the different hype building blocks that fabricated chatbots as a core institution to, as the narrative suggests, shape the future of humanity.

Analysis

**Setting the stage: Depicting LLM chatbots as knowledge models**

The beginning of the media frenzy about chatbots based on LLMs can be dated around winter, 2022. LLMs are language processing or generation models that are able to process large amounts of text data (Bender et al., 2021; Bommasani et al., 2021). It is not that LLMs had not been existing before 2022[5], but they simply have not received a lot of public media attention. Meta (2020) released the conversation bot BlenderBot in August 2022, after already making the model and code public in April, 2020. But Blenderbot gave wrong factual answers. It was shut-down by the compliance department from Meta and became a flop for Zuckerberg's company.

It was not until the then unknown company OpenAI released ChatGPT on Nov. 30, 2022, that public and corporate interest sparked. ChatGPT actually had the same issues concerning hallucinations and biases like all the other LLMs to date – but OpenAI's team simply released it anyway and used the public as a laboratory to flag malfunctioning and to train the model through user traffic. With the premature public launch, Open AI seemingly followed the first-mover strategy: Do not wait for permission, but ask for apologies and forgiveness when things go wrong. The perception of ChatGPT in the releasing stage was crucial for the take-off of the chatbot hype. From an attention logic, to get a hype going, it is always easier to frame an initial dominant perception and to set an agenda than ex-post struggling and countering it – as rhetorically criticizing a phenomenon necessarily involves mobilizing the phenomenon.

The design and the properties of the interface to access and interact with ChatGPT favors a phenomenological experience that sparks curiosity and interaction. The play-and-answer game in a chat design easily anthropomorphizes the chatbot as a playful other, evoking self-

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[5] see here the frequently updated Wikipedia list for an overview of all existing chatbots and LLMs
https://en.wikipedia.org/wiki/Large_language_model#List

https://en.wikipedia.org/wiki/List_of_chatbots

reflection and empathy, known for long as the psychological 'ELIZA'[6] effect. The initial user experience of ChatGPT, facing an opaque but powerful counterpart that gives plausible sounding and creative answers, made it hard for many users to manage their expectations about its performance. Initial user experiences maneuver somewhere in between insecurity, excitement and fascination – which, in turn, creates traction. ChatGPT *appears* to be a some-kind-of human-intelligence because it *seems* to have a hermeneutical understanding of context, giving witty and funny sounding answers. It *appears* to have access to facts and knowledge, as if it 'studied' or 'contained' indexed knowledge like the entirety of Wikipedia, news articles, books or scientific papers[7]. Open-AI also promoted this perception of an omniscient counterpart, by luring the user on the landing page with the offer: "Ask me anything!" (retrieved with Wayback machine), listing all kinds of domains that ChatGPT could be a helpful companion for.

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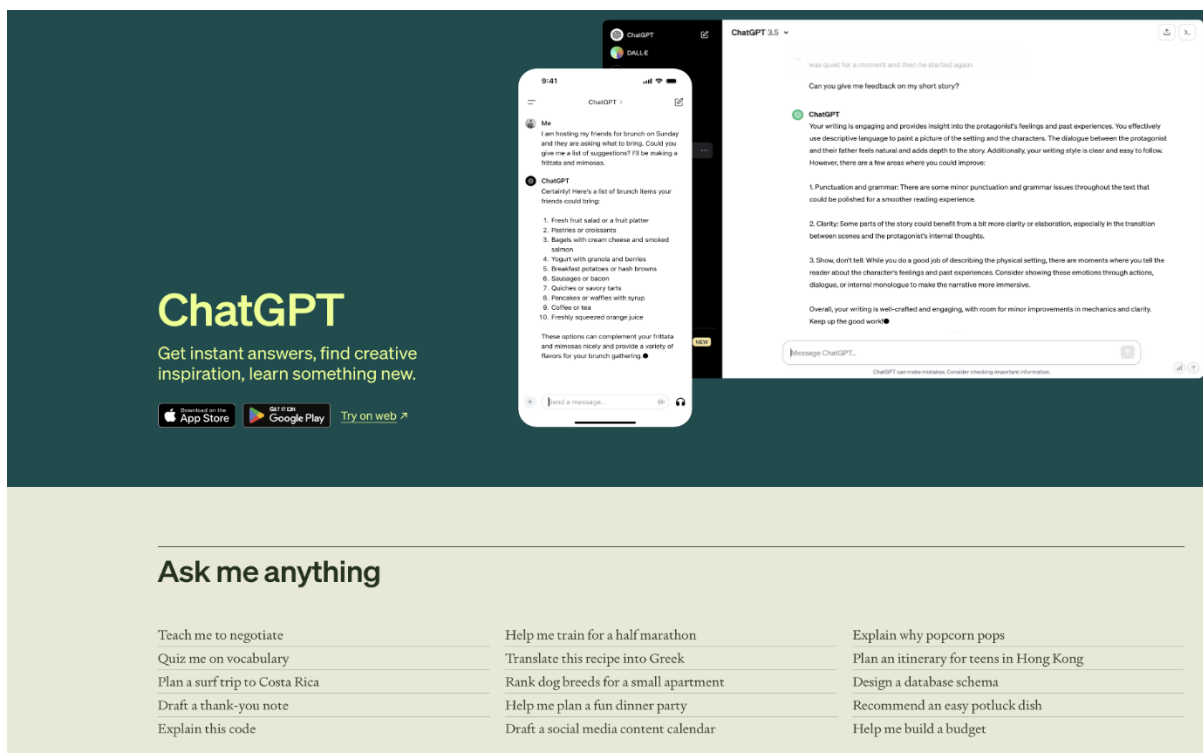
[6] In 1966, the computer scientist Joseph Weizenbaum fed his chatbot ELIZA with the DOCTOR script, imitating a Rogerian psychotherapist. ELIZA was a very rudimentary chatbot, programmed to simply rephrase patients' answers as backfeed questions.Weizenbaum was struck when he observed that his chatbot elicited very emotional and intimate responses from his probands.

[7] However, attempts to connect ChatGPT to search engines like 'Wolfram Alpha' or access databases have so far not been successful in eliminating errors and hallucinations (Davis & Aaronson, 2023). Still in July, 2024, Meta had to apologize for its chatbot META AI falsely stating that the assassination attempt on Donald Trump had never happened (Meta, 2024).
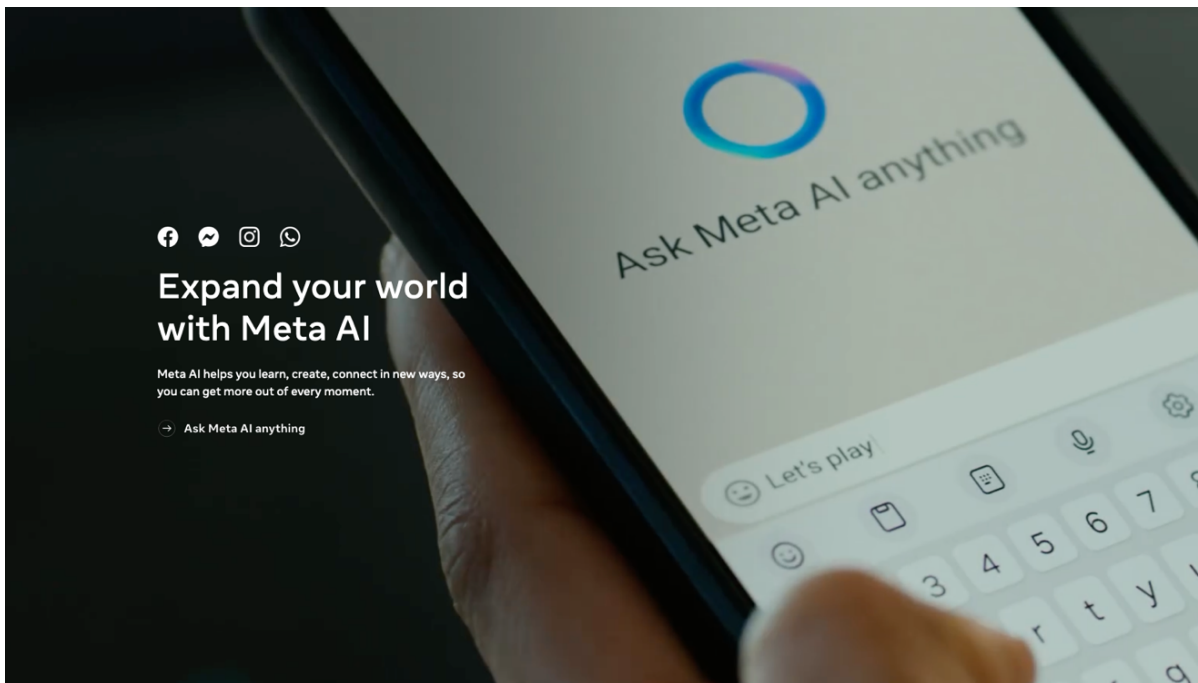
Image 1 & 2. 'ChatGPT' and 'Meta AI' landing page: "Ask me anything". Retrieved with 'Wayback machine' (August 2023 & August 2024).

But ChatGPT never contained or accessed any information. It was trained with a large amount of text scraped from the internet in the year 2021 (Open AI, 2022). LLMs operate purely stochastically, mapping the statistical relationships between tokens (small parts of text) based on parameters (rules to process the tokens) to generate word sequences. Every word sequence is derived from predictions of the training data, making all text output always fictional (Bender et al., 2021; Hutson, 2024). Hence, LLMs are not designed to represent the world. There is no *understanding* by the artificial agent (chatbot) of the meaning of the output it creates. It is us humans who create that meaning. Given their functional logic it is actually not surprising that LLMs have problems with the truth, such as historic facts, or the field of logic. They hallucinate[8] as they are not designed for these application domains and represent a different type of algorithm. However, providers of these systems and known figures in the tech scene failed in making clear both the functionality and limitations of chatbots based on LLMs. To the contrary: they spurred the hype around seemingly omniscient and omnipotent chatbots.

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[8] There are discussions if 'hallucination' is the right term here. Hicks et al. (2024) actually call ChatGPT a "bullshit machine", qualifying at least for a "soft bullshit" categorization following Frankfurt - but I would be careful to apply a concept reserved for human impression management on a stochastic output, inappropriately anthropomorphizing LLMs further. It is people who bullshit (see hype chapter), not machines.

The weird and the eerie: Panicking and hailing about chatbot performance

The praise and media outcry ChatGPT received on its release was enormous. Influential figures in the tech industry overbid each other with praise in the first months. Elon Musk (2022) tweeted on X (194 mil. followers): "ChatGPT is scary good. We are not far from dangerously strong AI". Former Microsoft CEO Bill Gates went so far to declare a new epoch in history on his blog: "A new era, The Age of AI has begun. Artificial intelligence is as revolutionary as mobile phones and the Internet" (2023). Nick Bostrom even started to fabulate about AI chatbots having started the development towards general sentience, arguing in a NYT interview: "What if A.I. Sentience Is a Question of Degree?" (Bostrom in Jackson, 2023). And the popular historian and futurist Yuval Noah Harari, warned in the print NYC edition with the headline: "If We Don't Master A.I., It Will Master Us" (Harari et al., 2023). Simultaneously, discussions in the media sparked that high school language teachers would become obsolete because of chatbot performance (Herman, 2022), and student cheating would become impossible to detect (Nolan, 2023), urging universities to restructure exams.

This praise of ChatGPT fluctuated between hysteric emotions of panic and mesmerizing awe, entertaining the AI dualism of both redemption (LLMs going to solve all tedious problems) and doom (LLMs going to eradicate all jobs). A peak of this psychological insecurity creating the attention frenzy was reached when users and journalists discovered the *dark side* of LLMs: its seductive, manipulative and 'rogue' behavior, which was interpreted as creepy, dangerous and eerie. The NYC coverage substantially contributed to this perception, when NYC journalist Kevin Rose published the chat script with the Microsoft chatbot Bing (2023), showcasing how the bot tried to convince him that he was unhappy in his marriage and should leave his wife to be with Bing instead. This was accompanied by other user testimonials reporting how LLMs would go rogue and refuse to be shut down (Kare 11, 2023). Here some NYC headlines from the start of the chatbot hype:

The New Chatbots Could Change the World. Can You Trust Them?

Published Dec. 10, 2022

Siri, Google Search, online marketing and your child's homework will never be the same. Then there's the misinformation problem.

[*A Conversation With Bing's Chatbot Left Me Deeply Unsettled*](#)

Published Feb. 16, 2023

A very strange conversation with the chatbot built into Microsoft's search engine led to it declaring its love for me.

[*Bing's A.I. Chat: 'I Want to Be Alive.* 😈](#)

Published Feb. 16, 2023

In a two-hour conversation with our columnist, Microsoft's new chatbot said it would like to be human, had a desire to be destructive and was in love with the person it was chatting with.

[*The Online Search Wars Got Scary. Fast.*](#)

Published Feb. 17, 2023

Our technology columnist encounters the darker side of Bing's A.I. chatbot.

In general, the perceived potency and human-like agency of LLMs were both praised positively as a momentous revolution and technological break-through, or negatively with the discovery of the uncanny side of LLMs. Both stimulated the media discourse about chatbots with emotional reactions, constantly creating new traffic feeding the hype. These speculations of an omni-potent-agent or a manipulative-uncanny-intelligence not only flooded a fictional space with speculations about what LLMs would possibly be able to do in the near future – but also provoked a performative realm of necessity for action. Both corporate competition to Open AI (in terms of market-share) and politics (in terms of regulation) were on the spot to catch up with the perceived threat, which the unleashing of chatbots embodied.

The battle: Catching up with the first-mover advantage

When Open-AI released ChatGPT, the competition was awakened to catch-up with rival products. In 2023 Microsoft, which financed Open-AI as the biggest donor, incorporated ChatGPT in its search engine Bing and worked on releasing Co-pilot, an assistance bot for the office applications on its platform Microsoft. Alphabet worked on Bard which later became Gemini, and IBM on WatsonX. The media portrayed this rivalry between "BigTech giants" as a competitive race and entertained metaphors and scenarios of kick-of, catch-up, or survival. This rhetoric points to a realm of action with leapfrogging the competition, raising the

company's potential, and mobilizing all capacities to rush for a promised future. The NYC wrote an indicative background article headlined in sensationalist wording:

[Inside the A.I. Arms Race That Changed Silicon Valley Forever](#)

Published Dec. 5, 2023

ChatGPT's release a year ago triggered a desperate scramble among tech companies and alarm from some of the people who helped invent it.

Here, even military metaphors are used to circumscribe a battle of tech-giants. Inside the article the well-established computer scientist and back-then Google employee Geoffrey Hinton warned: "If you think of Google as a company whose aim is to make profits, [...] they can't just let Bing take over from Google search. They've got to compete with that. When Microsoft decided to release a chatbot as the interface for Bing, that was the end of the holiday period" (Hinton in Weise et al., 2023). Other headlines by the NYT kept on entertaining the battle metaphor:

[How ChatGPT Kicked Off an A.I. Arms Race](#)

Published Feb. 3, 2023

Even inside the company, the chatbot's popularity has come as something of a shock.

[Google C.E.O. Sundar Pichai on the A.I. Moment: 'You Will See Us Be Bold'](#).

Published Mar. 31, 2023

In an extended interview, Mr. Pichai expressed both optimism and worry about the state of the A.I. race.

The battle metaphor was actually more harnessed by NYT framing than by the CEOs of the companies. For example, in a NYT interview, Alphabet CEO Pichai argues:

> Sometimes I get concerned when people use the word "race" and "being first." I've thought about A.I. for a long time, and we are definitely working with technology which is going to be incredibly beneficial, but clearly has the potential to cause harm in a deep way. And so I think it's very important that we are all responsible in how we approach it." (Pichai in Roose, 2023)

The news media depiction of the BigTech competition is very much portrayed as an exciting spectacle feeding the hype. Readers and followers are entertained as if sitting in an arena to watch a fierce race to the top. The presented future trajectory enabled through this

innovation overbidding opens for a seemingly endless realm of technological possibilities reachable through competition. The spectacle invites an audience to follow down a path to visit the never-before-visited or seemingly unachievable. This notion is maybe best captured by Open AI's CEO Sam Altman stating that AI's benefits for humankind could be "so unbelievably good that it's hard for me to even imagine" (Altman in Loizos, 2023). Spectacles like the portrayed battle between BigTech giants leave an audience in a strangely passive awe to observe great wonders they cannot control but also cannot help watch, catering to psychological effects of both attraction and distance. However, being distant as actors, the spectacle could not function without the emotional part-taking of an audience, rendering the audience very much complicit and necessary for the phenomenon to take place. Exactly by not questioning and not acting but emotionally partaking in the image – or, in the representation of a better or doomed future enabled through chatbots – a community of followership is crafted and united behind a hype. This phenomenon takes reference to what social critic Guy Debord once wrote in the Society of the Spectacle: "One cannot abstractly contrast the spectacle to actual social activity (...). Lived reality is materially invaded by the contemplation of the spectacle [,](...) passive identification with the spectacle supplants genuine activity." And further, on the forging of community through gazing and contemplation towards a future vision: "All that was once directly lived has become mere representation. (...) The spectacle is not a collection of images; rather, it is a social relation among people, mediated by images" (Debord, 1967).

Crossing the lines of the normal: the call for a moratorium on LLM

The frenzy around Chatbots reached its peak when an open letter, signed by popular and established figures from the Silicon Valley and AI-experts, was published calling "all AI labs to immediately pause for at least 6 months the training of AI systems more powerful than GPT-4" (Future of Life Institute, 2023). The letter, hosted on the webpage of the Future of Life Institute asks rhetorically: "Should we develop nonhuman minds that might eventually outnumber, outsmart, obsolete and replace us? Should we risk loss of control of our civilization?" (ibid). This call for a moratorium on the development of AI was followed by an open letter from the Center for AI Safety (CAIS), where again public figures and AI experts argued that "mitigating the risk of extinction from AI should be a global priority alongside other societal-scale risks such as pandemics and nuclear war" (Center of AI Safety, 2023).

These concerns from the tech world also reached politics, as computer scientist Yoshua Bengio, signer of both of the aforementioned statements, was allowed to present those worries to the U.S. Senate twice, once in July 2023 (Bengio, 2023a), and once in December of the same year (Bengio, 2023b). Also, EU commission president von der Leyen quoted the exact CAIS phrase about the "risk of extinction from AI" in her speech of the Union to the EU parliament in September, 2023 (von der Leyen, 2023).

The perceived overheated development of unleashed chatbots led to a doomsday apocalypse rhetoric in these statements. AI became depicted as a megalomaniac super-power, spinning scenarios of a power-seeking intelligence which could gain control over humanity's critical sectors. Notions of a sudden hostile takeover, civilization chaos and end-of-the-world Armageddon sounded very much like science-fiction blockbusters – and the effect was maximum attention for chatbots unleashing this speculation. Emotionally, it caused worries and panic of not being able to control for a runaway AI-development potentially raging. A disruptive and accelerationist technological development is stylized as an unpredictable moment where a super-intelligence bursts upon humanity and rhetorically *overthrows* it like a revolution. However, instead of inviting for a substantiated regulatory debate about the current risks of AI, the open letters set a different discourse. The apocalypse narrative silenced more political and structural regulatory questions about infrastructure control, AI models, and data ownership in the hands of a few private BigTech players. Also issues about the current democratic risks of misinformation or polarization through already synthetically produced content through LLMs on the internet (see Ruschemeier & Bareis, 2024 for lengthy discussion) were sidelined. LLMs caused a hype by entertaining an apocalypse and thereby exploited all attention resources for a highly speculative catastrophic future. From a moral point of view, it is rather dubious that the very CEOs and tech-progress apologists which are responsible for developing the respective AI systems, using society as an open laboratory for their try-outs, became the ones stressing the catastrophic risks of AI. But psychologically the narrative is effective. After all, none of the companies paused their AI-development or put down their chatbots.

It should be made transparent that many of the signers from techworld of the open letters, as well as the Future of Life institute, are followers of the ideology of longtermism and

proponents of the ethics of effective altruism. This creed of thinking postulates an accelerationist positivism of technology development and follows a strictly utilitarian and reductionist moral weighing between humans to save the future of the human race. In saving humanity, even extraterrestrial colonization is seen as necessary. Wenar (2024) tries to encapsulate this ethic with the following depiction: "unborn generations could be worth a lot more than we are today, given population growth. What's the point in deworming a few hundred kids in Tanzania when you could pour that money into astronautical research instead and help millions of unborn souls to escape Earth and live joyfully among the stars?". This speculative "as-if" (Nordman, 2007) ethics escapes the scientific realm to be disproven as its catastrophic thinking only operates in the highly speculative – which makes its moral and attention economic implications not less shady, though.

Concluding Discussion: The interdependence of social domains in the hype dynamic
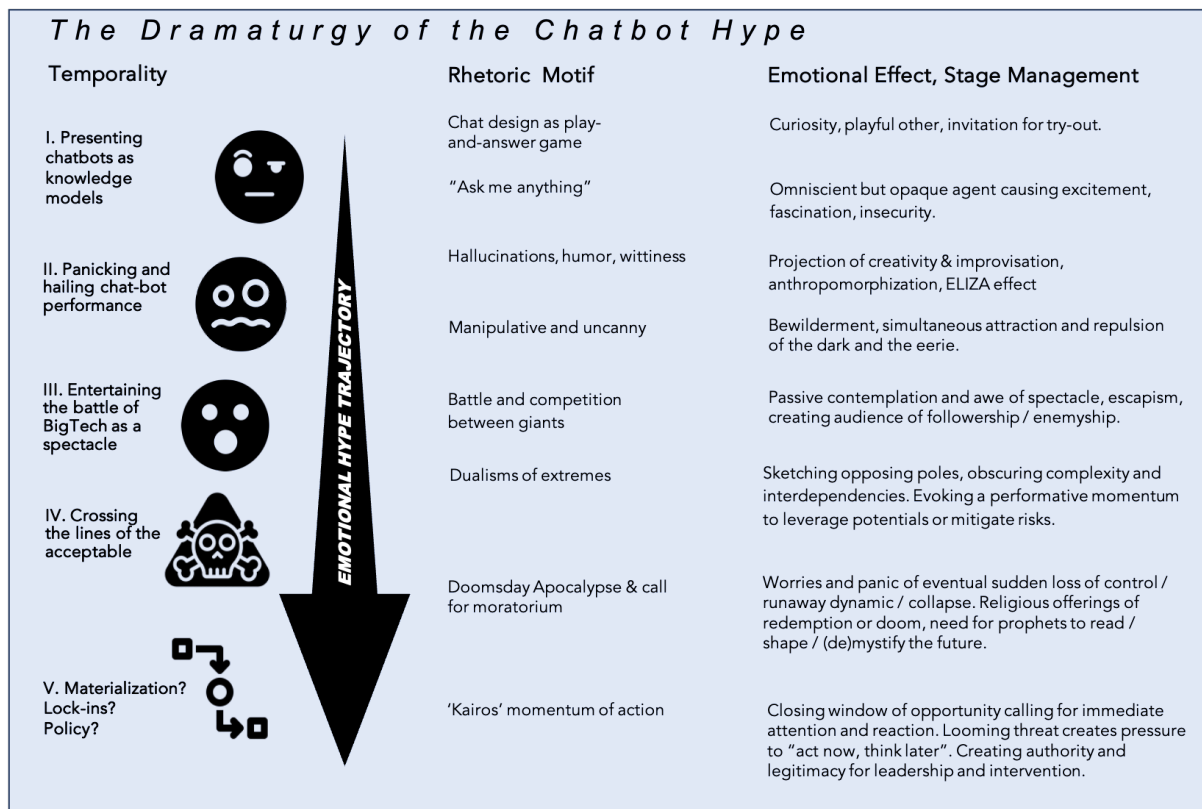
Infographic 1. The motifs and their effects of the analysis summarized

The chatbot frenzy powerfully informs us how hypes are triggered, nourished and how they give prominence to a few powerful actors, who are given the authority to speak and to

envision our societal future. This paper closely reconstructed how chatbots based on LLMs got hyped into being. A detailed summary of the dramaturgy and the motifs distilled from the analysis can be found in the infographic 1. In the hype production of chatbots, there are many accomplices who take part: Start-ups such as OpenAI who test their new innovations rather recklessly by putting them on the market without taking accountability for their effects on democracy, justifying this move as: "gain[ing] experience with operating them in the real world", and, "the best way to carefully steward AGI into existence" as Sam Altman puts it (2023). Being messianic advocates of technological progress as a remedy for all problems, the tech community of the Valley has strong characteristics of a religious *calling*. Advocates see themselves as prophets of a better technological future and use all resources of money, power and charisma to disseminate their gospel. These tech hypers also know that talk about a promised land or doomsday speculations gain maximum attention. And attention is what companies in the Silicon Bay Area are reliant on. The business model of most start-ups suffers from a precarious, not-sustainable financial situation in the beginning phase (Shestakofsky, 2024). Start-ups need to aim for high stakes to attract venture capital. This venture-capitalist logic feeds the rise of hype substantially and systematically. Only if start-ups can sell a vision that aims at disrupting the ordinary, over-promising products' potentials, they can attract the necessary venture capital to survive (Daub, 2020). Hence, venture capitalism needs the hybris of bold tech talk, rhetorical dramatization and messianic trust in transformational power to function – and this rhetoric caters to the bullshit talk, which again, any rise of a hype builds upon. This shows: hypes are a truly modernist creed, needing visions of progress, tech and growth – which capitalism inherently offers.

Then again, there are other established players in the battlefield for market shares that resemble the financially most powerful companies in the world. Here, a small elitist clique of tech-billionaires cares little about established democratic institutions and propagates its own ideology of tech-libertarian society, human enhancement and longtermism – what Chen (2022) in her ethnographic study coined "Techtopia". These tech giants think and act like states: They replace the social and undermine the common good, "turning public goods and services into private company perks" for their employees (Chen, 2022, p. 207). They are powerful corporate actors, not only investing incredible sums of money to push proponents of their belief systems, influencing public opinion or lobbying politics (Bareis, 2023) – but they

own, produce or just buy the material preconditions all digitalization (also chatbots) depend upon. In short, they centralize infrastructure, brainpower, platforms, models and code. Moreover, they lure users into their own assetization, by trading free service for profile, and by creating dependency or lock-ins using their platforms as bottlenecks in AI development and provision (Whittaker, 2021). With the recent development towards foundation models, very large pre-trained models, on which popular chatbot applications like ChatGPT or Gemini run, the centralization of AI is ever more increasing (Burkhardt & Rieder, 2024; van der Vlist, Helmond, & Ferrari, 2024). This power accumulation of BigTech actually shows strong analogies to an accelerating out-of-control agent, fulfilling many criteria of the AGI it warns about: As Leggett makes the case (2021):

> Superintelligence? In short, we have created a corporate market machine that is now capable of manipulating and controlling individual humans, and that is infinitely better, already, at this task than any human is, or could hope to be. And we have given this machine the single, overarching goal of obtaining a return to capital. (pp. 736)

And all of this corporate machinery is marketed under the pretense of improving societal efficiency. But this is a myth looking at the market oligopoly BigTech fiercely defends against antitrust law, the structural inequalities these companies cause, or the creation of enormous externalities which get just rolled off to society. BigTech produces massive CO_2 footprints to train their models. But also politically their innovation consumes the energy resources of regulators (see the EU AI Act) with problems society did not ask for (e.g., misinformation through synthetically produced data (Hägle et al. 2014)), pressing for a solutionist dogma (Morozov, 2013) to come up with ever more complex and costly solutions to solve ingrained social problems.

And this also puts the regulators into the picture, who are not innocent in the hype production. As Stilgoe (2020) observes with hype:

> (...) governments have also abdicated their responsibility (…). Hype is a way of deliberately concealing the politics of technology and privatising progress. If we overinvest our hopes in new technologies, we underinvest in other necessary but less glamorous areas, including education, public health, infrastructure and maintenance. (p.51)

Even worse, if governments envision tech futures themselves, they reify the same corporate tech-imaginaries around AI (Bareis & Katzenbach, 2022) instead of leading the way to an

inclusive account where technology serves the public good. Not to mention dubious political alliances, e.g., between Donald Trump and Elon Musk. The hyped narrative of catastrophic AI tied to chatbots already shows a power shift, lock-in effects and policy materializations. Just in October 2024 Yoshua Bengio was named chair to draft a Code of Practice on general purpose AI for the European Commission (Wold, 2024). In the US, the influence of doomsday apologists is even more striking. The afore mentioned CAIS co-drafted the Californian bill SB1047, which would have set up an oversight board, impose safety model testing and legal liability for BigTech companies. However, its framing was oddly framed with existential risks holding companies liable to "mitigate the risk of catastrophic harms from AI models so advanced that they are not yet known to exist" (Bauer-Kahan, 2024, p.1). As tech journalist Merchant (2024) commented on the bill:

> None of these [liabilities] are necessarily bad things, but for those of us who aren't all that worried that the real threat of AI is that it will build a killer chemical weapon, its priorities seemed skewed, and risked blowing right past the real problems AI is creating, right now, today—the ways AI programs are entrenching systemic biases and racism, degrading and hollowing out labor, and so on.

BigTech lobbied against the bill which was seen as a potential blueprint for a national US AI legislation. Also Democrats like Nancy Pelosi, former speaker of the United States House of Representative, voiced public opposition to a Democrat-sponsored bill. All with success, as the bill was vetoed by Californian Democrat governor Newsom in August, 2024 (Allyn, 2024).

As another building block in the game of hype production, there is the media. Some of the NYT coverage of the chatbots catered to sensationalism and tried to entertain more than to inform the public critically. The NYT staged Valley CEOs with a prominent position to speak, and often put up clickbaiting headlines, taking interview statements out of context as bold headlines. The newspaper rather stylized a spectacle of a battle between BigTech, instead of reflecting about the consequences of its power position. Most problematically, all of this spectacle consumes the limited attention spans of readers and hinders them from thinking about different futures, also about less Western but maybe more global ones like Afrofuturism or Sinofuturism – or overall about less technological and more social problem solving trajectories. Which points, last but not least, the finger at citizens, the entertained

audience as the complicit bystander, letting companies and politics get away with all of it. After all, a spectacle in an empty arena cannot be a spectacle.

Dissecting the actors in the production of the chatbot hype shows that hype depends on an interdependent dynamic to become a powerful societal phenomenon. For a hype to gain traction – i.e., being circulated widely across societal fora and stimulating investments – it needs an innovation trigger, as much as the hailing of charismatic leaders, media, loyal followers, the embracing of politics - and the complicity of a tacit audience. The findings are limited by not considering quantitative accounts of financial investments or confidence stock-marketing developments into consideration, another promising trajectory in tracing hypes. Here, quantitative accounts of controversy- or network analysis appears could contribute to tracing the network power of single hypers and their outreach (cf. Marres et al, 2024).

 A toolkit on how to counter hypes cannot be discussed here exhaustively. But if fallacious framing and highly speculative futures tied to a chatbot are the core issue – then it also opens trajectories for combating the problem. Public advocates and policy makers must tackle the authority and credibility of knowledge production. This tactic follows another rationale than fighting a lost battle of fact-checking, de-biasing and auditing of rapidly increasing synthetical content as proposed by current tech regulation like, e.g., the EU AI Act. An effective way to defeat hypers is to ignore them, or best, not give them the stage in the first place. Any engagement, no matter if positive praise or criticism on grounds of rationality or plausibility, is just feeding the attention machine. For hypers, the media credo "bad news are good news" also holds. If critique is to be launched, it must aim at the legitimacy of the speaking position.

Theoretically, this paper shows that hype deserves more attention as an analytic concept in understanding the logics that drive our future at the crossroads of innovation, capitalism, media and politics. Hypes are a truly modernist creed: They produce and need visions of tech-progress, dynamics of opportunism and risk – and a simplified, innocent future liberated from the reflection of societal consequences to prosper.

Acknowledgements

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