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**Disinformation and Risk Society.
What is at Stake with the Proliferation
of Information Disorders**



MADRID MMXXIV

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Director de la Colección: IGNACIO MUÑOZ MAESTRE

Foto de cubierta de Freepik

Título: Disinformation and Risk Society. What is at Stake with the Proliferation of Information Disorders

This book is part of the IBERIFIER project, funded by the European Commission through the agreement CEF-TC-2020-2, with reference 2020-EU-LA-0252.

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www.fragua.es

I.S.B.N.: 978-84-128948-7-5 (papel)

I.S.B.N.: 978-84-7074-501-0 (pdf)

Chapter 1

Disinformation as a Global Threat: A Sociology of Risk Analysis

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1. Understanding Risk in Modernity

Ulrich Beck's concept of the "risk society," first introduced in the 1980s and expanded upon in his seminal 1992 work *Risk Society: Towards a New Modernity*, presents a framework for understanding the complex, often invisible, risks inherent to modern life. Beck argues that as societies advance technologically and industrially, they generate a new type of hazard — one not rooted in natural forces but in the very systems and innovations meant to enhance human life (Beck, 1992). This shift represents a move from "external" or "natural" risks, such as floods or diseases, to "manufactured" risks, like environmental pollution, nuclear accidents, and, more recently, digital threats. In this context, the concept of 'risk society' allows for a

systematic approach to managing the pervasive insecurities that accompany modernity, despite the many advancements it has brought.

Beck's theory emerged during a historical period marked by significant socio-political changes, including the end of the Cold War and the beginning of rapid globalization. The 1980s and early 1990s were times of optimism about the promises of technological progress, but also of heightened awareness of the potential dangers tied to this progress. Environmental disasters such as the Chernobyl nuclear meltdown in 1986 and the Bhopal gas tragedy in 1984 highlighted how industrialization could produce catastrophic risks that were global in scope, transcending national borders and socio-economic boundaries (Beck, 1992). These events underscored Beck's idea that modern risks are largely "borderless" and impact society in ways that traditional governance structures struggle to manage.

The risk society framework thus marks a departure from previous eras, where risks were seen as unfortunate but mostly containable events. In the modern context, Beck argues, risks have become a structural part of daily life, largely invisible and intertwined with societal progress. Beck describes modern risks as imperceptible yet omnipresent, forming a "second reality" that requires new awareness and constant management: "the modern and civilizational awareness of risk, with its latent causality, imperceptible yet present everywhere" (Beck, 1992, p. 106). Modernization, in this sense, generates not only benefits but systemic, unforeseen risks that demand vigilance. Beck contends that these new risks shape public consciousness differently than in the past, often creating feelings of distrust and insecurity. These risks, as he notes, "undermine the foundations and categories with which we have thought and acted until now" (Beck, 1992, p. 27), making them difficult to detect, complex to address, and largely driven by technological and industrial factors beyond individual control.

Beck's theory has gained renewed relevance in the recent decades, particularly with the digital revolution and the emergence of new global risks, including cyber threats and the proliferation of disinformation. These issues illustrate how the risks he described continue to evolve with modernity. Whereas traditional risks could often be confronted locally, today's risks are amplified by global interconnectedness and digital technologies, creating challenges for individuals and institutions alike. This evolving landscape suggests that Beck's concept of risk society remains a valuable lens through which to examine and address contemporary insecurities.

Beck's theory provides a framework that captures the paradox of modernity: as society advances, so too do the complexities and potential dangers it must confront. This perspective is essential for understanding how modern risks, such as disinformation, not only threaten individuals but challenge the very structures of society intended to manage and contain them. Through the risk society lens, disinformation emerges as a quintessential manufactured risk of the digital age, demanding fresh approaches and sustained awareness in an increasingly interconnected world.

From "External" to "Manufactured" Risks

In Beck's framework, a significant shift occurs in modern societies from traditional, "external" risks — such as natural disasters or diseases — to "manufactured" or "constructed" risks, which are products of technological advancement and human activity. Beck notes that while previous risks came from external forces like "gods or nature", modern risks have a distinct character, emerging from scientific and industrial developments: "if, in the past, dangers were externally generated (gods, nature), the new character... of current risks lies in their simultaneous scientific and social construction" (Beck, 1992, p. 276). While natural risks are often random and

largely unavoidable, manufactured risks are created by society's choices, processes, and innovations. This transition is central to understanding how modern risks emerge and why they pose unique challenges; unlike natural risks, which humanity has long managed through adaptation, manufactured risks require a systematic approach to both their creation and containment.

The rise of manufactured risks aligns closely with technological progress and globalization. As societies modernize, they adopt increasingly sophisticated technologies that bring both remarkable benefits and unintended dangers. For instance, the expansion of chemical industries in the 20th century led to significant advancements in healthcare and agriculture but also produced environmental hazards, such as industrial pollution and chemical waste. Similarly, the development of nuclear power provided new energy sources but introduced catastrophic risks associated with radiation and potential accidents. Beck describes this paradox as the “latent side effects” of modernity, where technological gains inevitably carry with new forms of risk that permeate society: “the idea that productivity advantages are considered ‘unintentionally’ and ‘unwittingly’ as latent side effects of a conscious control of risk” (Beck, 1992, p. 87). Globalization further amplifies these manufactured risks, creating what Beck calls “world risk society” — a state where risks transcend national borders and impact societies on a global scale. Manufactured risks, such as climate change, pandemics, and economic crises, do not remain confined within any one country; instead, they become shared threats that demand coordinated responses across nations. The digital age has intensified this interconnectedness, creating pathways for new types of manufactured risks, including cybersecurity threats, privacy breaches, and — critically — the spread of disinformation. Global connectivity has turned digital spaces into conduits for rapidly multiplying risks, making it difficult to contain their spread and impact.

Disinformation is a manufactured risk emblematic of our digital and interconnected era. Unlike natural risks, which arise from environmental conditions, disinformation is a byproduct of human actions — facilitated by digitalization and fueled by global communication networks (O'Connor & Weatherall, 2019). Social media platforms, algorithms, and user behavior collectively contribute to the proliferation of false information, creating a landscape where misinformation can spread almost instantaneously across borders (Wardle & Derakhshan, 2017). As a manufactured risk, disinformation introduces hazards not only for individual understanding but also for democratic institutions, public health, and societal trust (Bennett & Livingston, 2020; McNair, 2017). Beck's theory helps to position disinformation as a risk that society has created and must now confront, reflecting the broader challenges of modernity (Beck, 1992).

The systemic nature of disinformation mirrors Beck's concept of risks that are invisible, difficult to control, and intertwined with the very fabric of modern society. Disinformation infiltrates daily life through digital platforms that individuals rely on for communication, news, and social interaction, making it challenging to detect and regulate. Furthermore, the spread of disinformation is not a random or isolated event; it is actively produced and often strategically disseminated by various actors, including state and non-state entities, with specific agendas. This complexity aligns disinformation closely with Beck's view of manufactured risks as socially constructed and perpetuated, demonstrating how modern societies must grapple with threats that are largely of their own making.

In essence, disinformation represents a new frontier in manufactured risks, shaped by technological advancements and the unprecedented global reach of digital networks. As society continues to innovate and interconnect, such risks are likely to grow in both scale and impact. We think that

Beck's theory provides an essential framework for understanding disinformation not merely as isolated incidents of misinformation but as a structural risk embedded within the digital age, requiring society to develop new methods of recognition, control, and mitigation.

Complementary Perspectives: Giddens and Latour

In understanding risk society, it is essential to consider perspectives that complement and contrast with Beck's approach, particularly those of Anthony Giddens and Bruno Latour. While Beck's view emphasizes the societal hazards introduced by modernization, Giddens presents a more nuanced interpretation, considering risk as both a threat and an opportunity intrinsic to an active, evolving society (Giddens, 1991). Latour's Actor-Network Theory (ANT) further expands on these ideas by analyzing the complex interactions between human and non-human actors in generating and managing risk. Together, these perspectives provide a fuller sociological view of risk in modern society, where technology, social systems, and individual actions intersect.

Giddens's approach to risk diverges from Beck's focus on hazard and vulnerability by framing risk as an unavoidable aspect of a dynamic economy and society. For Giddens, risk is not solely a source of anxiety or danger; it also embodies the potential for progress and innovation. In his view, modernity necessitates a "calculative attitude" towards risk, where individuals and institutions continuously weigh possibilities and outcomes as part of everyday life (Giddens, 1991). Unlike Beck, who sees manufactured risks as largely negative side effects of industrial and technological growth, Giddens argues that societies can harness risk to drive change and improvement. He suggests that "risk-taking" is fundamental to economic

development and social advancement, positioning it as a double-edged sword that can foster both resilience and vulnerability (Giddens, 2003).

This emphasis on risk as a catalyst aligns with Giddens's broader perspective on reflexive modernity, where individuals and institutions actively engage with and adapt to the uncertainties around them. While Beck's approach warns of the dangers inherent in modernity, Giddens proposes that societies should embrace risk to innovate and evolve. For example, the growth of digital technologies, while introducing risks like disinformation, also enables unprecedented connectivity and access to information. In Giddens's view, the challenge lies in managing these risks effectively, rather than in attempting to eliminate them, as they are central to the vibrancy and adaptability of modern society.

Bruno Latour's Actor-Network Theory (ANT) further complements Beck and Giddens by focusing on the intricate relationships between human actors, technologies, and social systems in the construction and spread of risks. Latour views risks as products of networks where both human agents (like individuals and institutions) and non-human elements (such as algorithms and platforms) interact to co-create and sustain hazards (Latour, 2007). This approach is particularly relevant in the context of disinformation, where technologies, like social media algorithms, work alongside user behavior to amplify false information. Latour's perspective underscores that risks, especially in the digital age, are not merely external forces but are actively generated within complex actor networks, making them deeply embedded in the fabric of society.

The convergence of these perspectives highlights the multifaceted nature of modern risks. Beck's theory draws attention to the latent dangers of modernization, while Giddens's approach encourages a balanced view that

recognizes both the opportunities and threats posed by risk. Latour's ANT, meanwhile, brings a focus on the active role of technology and social connections in generating and perpetuating these risks. Together, these frameworks illustrate how risk society is not a static or one-dimensional phenomenon but rather a dynamic, evolving construct shaped by human agency, technological influence, and social complexity.

2. Disinformation in the Digital Age

Disinformation, commonly defined as the intentional spread of false information to deceive or mislead, has emerged as a critical issue in the risk society. Claire Wardle describes disinformation as “false information that is knowingly shared to cause harm” (Wardle & Derakhshan, 2017). This definition distinguishes disinformation from misinformation, which is false information shared without intent to deceive. Ramón Salaverría (2020) further elaborates that disinformation is not only about the inaccuracy of information but also about its strategic purpose to manipulate audiences, often for political, economic, or ideological gain. Within Beck's framework of risk society, disinformation stands as a manufactured risk — one that arises from human actions, facilitated by modern technology, and exacerbated by global connectivity.

The rapid spread of disinformation can largely be attributed to technological advancements, particularly in digital communication and social media platforms. These technologies allow false information to be shared instantly and globally, bypassing traditional media gatekeepers and reaching vast audiences with unprecedented speed (Allcott & Gentzkow, 2017; Tandoc et al., 2018). The rise of social media, in particular, has shifted the power dynamics of information dissemination, enabling not only individuals but also organized groups and automated bots to participate in the

spread of false content (Bastos & Mercea, 2019; Shao et al., 2017). The design of these platforms, with features that prioritize engagement and virality, creates an ideal environment for disinformation to flourish (Salaverría et al., 2020; Vosoughi et al., 2018). Algorithms on social media platforms amplify sensationalist or polarizing content, regardless of its truthfulness, thus increasing the exposure and perceived legitimacy of false information (Bakir & McStay, 2018). Furthermore, cognitive biases such as confirmation bias and the illusory truth effect play a significant role in reinforcing the spread of disinformation, as individuals tend to accept information that aligns with their pre-existing beliefs (Pennycook et al., 2020; Pennycook & Rand, 2021).

Disinformation's impact extends beyond misleading individual users or constructing alternative narratives to reality; it poses broader societal risks that align with Beck's concept of global, borderless threats. In today's interconnected digital landscape, disinformation does not remain confined to local or national contexts; rather, it spreads rapidly across borders, affecting public opinion, electoral processes, and even public health on a global scale. This transnational reach makes disinformation a quintessential example of a risk that modern society has manufactured but struggles to control. According to Wardle and Derakhshan (2017), the effects of disinformation are pervasive, as they undermine trust in media institutions, contribute to polarization, and erode democratic norms, echoing Beck's warning about the social fragmentation caused by manufactured risks.

Furthermore, disinformation exemplifies the challenges of risk society by being a largely invisible threat embedded within everyday digital interactions. It often takes on subtle forms, blending factual content with falsehoods to avoid immediate detection. This makes disinformation particularly insidious, as users may inadvertently amplify false narratives by sharing content

that appears credible or aligns with their beliefs. In this sense, disinformation perpetuates Beck's notion of "unseen" risks, where hazards are not easily identifiable yet pose significant threats to social cohesion and trust.

Disinformation as Both Symptom and Contributor to Global Risk

In Beck's theory, risks are socially constructed phenomena, shaped by public perception and amplified through societal discourse and media. Disinformation, in this sense, is both a symptom and a driver of the global risk society, reflecting and reinforcing the insecurities inherent in modernity. Beck argues that in risk society, people become increasingly aware of hazards produced by modernization, leading to widespread uncertainty and anxiety (Beck, 1992). Disinformation exemplifies this phenomenon, as it not only thrives in environments where trust is eroding but also actively contributes to the destabilization of societal trust, intensifying these very insecurities.

Disinformation is designed to exploit existing societal divisions, casting doubt on established sources of information and fostering an environment of distrust. This aligns closely with Beck's assertion that manufactured risks, unlike traditional hazards, are invisible, socially constructed, and embedded in the routine functioning of society, leading individuals to feel insecure about the very systems that govern them. Cottle (1998) expands on this idea, arguing that the media plays a critical role in the "catastrophic view" of risk society by amplifying certain risks, which, in turn, intensifies public anxieties and the pervasive sense of insecurity.

Furthermore, disinformation perpetuates what Beck calls the "reflexive modernization" of risk, where society becomes increasingly aware of and anxious about the risks it creates. As people encounter conflicting information online, they must constantly assess the credibility of sources, leading to what Giddens (1991) describes as a "calculative attitude" — a heightened awareness

of risk that requires individuals to navigate complex and often contradictory information landscapes. This continuous state of vigilance not only reinforces the perception of risk but also positions disinformation as an active contributor to the uncertainty and fragmentation within society.

Disinformation's role in undermining trust is particularly significant in the context of global crises, where coordinated and reliable information is essential. The COVID-19 pandemic, for example, highlighted the dangers of disinformation as false claims about the virus and vaccines circulated widely, fueling public skepticism and resistance to health measures. As Salaverría (2020) notes, disinformation during such crises not only spreads misinformation but also weakens the authority of scientific and governmental institutions, intensifying the sense of uncertainty that characterizes risk society. Beck's theory helps to explain this as part of a larger pattern where modern risks, compounded by media and technological amplification, disrupt social cohesion and erode public trust.

In addition to fostering distrust, disinformation exacerbates the social inequalities inherent in risk society. Manufactured risks do not affect all groups equally; rather, marginalized and vulnerable populations are often more susceptible to their impacts. Disinformation can disproportionately affect communities with limited access to reliable information or resources to verify claims. This unequal distribution of vulnerability, as Beck points out, is a hallmark of risk society, where risks are unevenly shared but universally impactful. Disinformation thus contributes to a fragmented society, one in which different groups experience and perceive risks in markedly distinct ways.

3. Media as Megaphones of Disinformation Risk

In Beck's framework of risk society, media plays a crucial role in shaping the public's understanding of modern risks by acting as a primary

“revelation” mechanism. Media doesn’t merely report on risks; it amplifies them, influencing public perception and often heightening the sense of danger associated with certain threats. According to Beck, this amplifying effect is a defining feature of risk society, where risks are increasingly mediated and socially constructed through information flows (Beck, 1992). In the context of disinformation, this role becomes even more pronounced, as the media serves as a conduit through which false information can spread rapidly, influencing public opinion and sowing doubt. This dynamic is exacerbated by what some scholars refer to as the “liar’s dividend” — the advantage gained by those who intentionally spread false information, knowing that even if the disinformation is later debunked, its initial impact often persists (Chesney & Citron, 2019). The “liar’s dividend” thrives in an environment where media amplification enables disinformation to leave lasting impressions on public consciousness, further destabilizing societal trust and complicating efforts to discern truth.

Cottle (1998) expands on Beck’s insights, arguing that the media’s “catastrophic view” of risk society exacerbates public anxieties by selectively highlighting certain risks while downplaying others. By giving disproportionate attention to sensationalist or controversial issues, media outlets contribute to a heightened perception of societal threats, often with lasting effects on public trust and cohesion. In the case of disinformation, this means that false narratives can gain significant traction, especially when amplified by mainstream media or prominent social media channels. Cottle’s analysis reinforces the idea that media’s role in modern society is not neutral; it actively shapes the public’s risk consciousness, particularly when it comes to complex, often invisible threats like disinformation (Cottle, 1998). Furthermore, the act of publishing a fact-check or debunking false information raises an ethical dilemma, as by debunking a hoax, visibility is inevitably

granted to it in the public space, which may contribute to its diffusion (Magallón, 2019; Rodríguez Fernández, 2021). This ethical challenge underscores the double-edged role of media in both revealing and inadvertently amplifying certain risks.

The impact of digital and social media further intensifies this amplifying effect, as platforms like Facebook, Twitter, and YouTube prioritize content that engages users — frequently, content that is polarizing or provocative. Wardle and Derakhshan (2017) note that these platforms, driven by algorithms that favor engagement, inadvertently facilitate the spread of disinformation by promoting content that stirs emotional responses.

Additionally, media scholars such as McNair (2006) emphasize that the media, while historically a watchdog and information source, increasingly faces pressures to maintain profitability and viewer engagement, leading to sensationalist coverage. This environment allows disinformation to thrive, as even dubious sources can gain visibility if they generate clicks, shares, or other forms of engagement. Media's competitive nature in the digital age thus amplifies the inherent risks of disinformation, as the pursuit of attention may override traditional fact-checking and journalistic integrity.

Through this lens, disinformation illustrates the media's dual role in risk society as both a communicator of truth and a potential conduit for falsehood. In Beck's terms, media "reveal" risks not solely by reporting on dangers but also by influencing which risks the public perceives as pressing and credible (Beck, 1992). The media's amplifying effect transforms disinformation from isolated incidents into widespread societal concerns, reinforcing Beck's assertion that modern risks are as much about perception and mediation as they are about objective hazards. By embedding risks within the daily information flow, media helps to construct a social reality

where disinformation becomes not just a byproduct of the digital era but a fundamental risk, capable of altering beliefs, undermining institutions, and fragmenting social trust.

Challenges in the Digital Media Landscape

Cottle (1998) also urged communication researchers to expand Beck's risk society framework to encompass the complexities of modern media, particularly in light of media's evolving role in risk amplification. Today's digital platforms, driven by algorithms and user engagement, amplify the spread of disinformation in ways that traditional media did not, introducing new dimensions to Beck's theory. Unlike conventional media, where editorial standards and fact-checking protocols filter content, digital media operates on an open-access model, making it challenging to monitor and control the quality of information disseminated.

One major difficulty lies in the sheer volume of information generated on digital platforms. Social media sites like Facebook, Twitter, and YouTube host billions of posts daily, creating an environment where misinformation can spread uncontrollably. This rapid flow of information undermines traditional methods of verification and content regulation, as algorithms prioritize engagement over accuracy, often surfacing sensationalist or divisive content that attracts attention but lacks veracity (Bakir & McStay, 2018). This dynamic aligns with Cottle's call for research on how media's risk-amplifying role operates within new, algorithm-driven environments, where the spread of disinformation can be automated and optimized for visibility.

The rise of algorithmic gatekeeping represents another significant challenge in combating disinformation within the digital media landscape. Platforms use sophisticated algorithms to personalize content, making

decisions based on user data that prioritize engagement. While effective at tailoring experiences, these algorithms inadvertently promote echo chambers, where users are exposed to information that reinforces their existing beliefs (Ross Arguedas et al., 2022). This selective exposure exacerbates the spread of disinformation by shielding users from credible, contrasting viewpoints (Pariser, 2011). The personalization algorithms create pockets of isolated discourse, where disinformation is accepted uncritically and propagated with little interference, posing a direct challenge to the media's traditional role as a public information resource.

Furthermore, digital media's economic model presents a conflict between profitability and accuracy. Platforms rely heavily on advertising revenue, incentivizing content that generates clicks, shares, and other forms of engagement. This focus on profitability can discourage platforms from investing in rigorous fact-checking systems or content moderation, as doing so might limit user engagement and, consequently, revenue (Napoli, 2019). As a result, disinformation often flourishes in digital spaces where engagement metrics overshadow quality and integrity. Cottle's perspective on the catastrophic view of media amplifying risks is particularly relevant here, as the prioritization of engagement over reliability serves to reinforce rather than mitigate the impacts of disinformation.

The decentralized nature of digital media further complicates efforts to manage disinformation. Unlike traditional media, digital platforms lack centralized control or a unified regulatory framework. Content is often generated by users from diverse backgrounds, creating a mosaic of viewpoints but also a lack of accountability for the accuracy of information shared. Efforts to regulate disinformation must therefore contend with the complexities of global platforms that operate across borders, each with its own legal and cultural standards. This decentralization makes coordinated

responses to disinformation nearly impossible, as platform policies may vary, and no single authority exists to enforce comprehensive standards across all digital channels (Napoli, 2019).

4. Human-Technology Networks: The Co-Creation of Disinformation

Bruno Latour's Actor-Network Theory (ANT) provides a valuable framework for analyzing the complex interactions between human and technological agents in the creation and dissemination of disinformation. ANT posits that social phenomena result from networks composed of both human and non-human actors, all of which actively shape outcomes (Latour, 2007). In the case of disinformation, digital platforms and algorithms operate as essential actors within these networks, influencing and, at times, amplifying the spread of false information. By framing technology as a critical participant rather than a passive tool, ANT helps to reveal how disinformation is not merely a product of human intention but emerges from a dynamic interplay of human behavior and algorithmic processes embedded in digital platforms.

Algorithms, as non-human actors, play a decisive role in selecting and prioritizing content on social media platforms, shaping what information is visible and amplified. Latour's framework allows us to view algorithms as agents with their own influence within the network, actively determining the reach and visibility of posts based on user engagement metrics rather than factual accuracy. These algorithms, optimized to capture user attention, tend to prioritize content that is sensational or emotionally charged, which can include disinformation (Pariser, 2011). Consequently, disinformation gains visibility through algorithms that amplify engagement-driven content, illustrating how non-human actors shape the spread of false information in ways that human users alone cannot control.

Actor-Network Theory also underscores the importance of relational dynamics, emphasizing how disinformation networks are not static but constantly evolving through the interactions of their constituent parts. Social media platforms are structured to facilitate user-generated content, encouraging individuals to share, comment, and engage with information at an unprecedented scale. As human users interact with platform algorithms — liking, sharing, or commenting on posts — they unknowingly contribute to the visibility of certain information, including false narratives. This feedback loop between human actions and algorithmic processes creates a self-reinforcing system where disinformation circulates widely, positioning platforms as active participants in the networked dissemination of false information (Latour, 2007).

The inclusion of algorithms and platforms as central actors in the disinformation network exemplifies what Latour describes as the “agency” of non-human entities. In the digital media landscape, algorithms have the power to shape user behavior, often without users’ conscious awareness. For example, recommendation systems on platforms like YouTube can lead users down “rabbit holes” of increasingly extreme or conspiratorial content, inadvertently facilitating disinformation by directing users toward sensationalist sources (Ledwich & Zaitsev, 2019). This automated guidance reflects the agency of algorithms within the network, as they influence users’ exposure to and acceptance of false information. Through ANT, we understand these platforms and algorithms as more than passive channels; they are active agents whose programmed biases and engagement-driven designs contribute directly to the risk environment that disinformation represents.

Additionally, ANT illuminates the role of technological affordances in the persistence and adaptability of disinformation. Social media platforms provide specific tools — from the ease of sharing to targeted advertising

— that enable disinformation to be crafted and spread in ways that maximize its appeal and reach. This technological affordance, combined with human agency, allows for the customization of disinformation campaigns that can target specific audiences based on behavioral data. The resulting network of human and technological actors embodies the characteristics of risk society, as it facilitates the global, automated, and personalized spread of risks like disinformation. Within this networked system, even attempts to moderate or fact-check content face challenges, as disinformation can quickly adapt and evolve, reshaping itself to exploit new technological features or platform vulnerabilities.

Complex Interplay of Users, Platforms, and Technology

The co-production and normalization of disinformation in risk society involve a complex interplay between human and non-human actors, where users, platforms, and technology each play distinct yet interdependent roles. This process aligns with Beck's concept of risk society, where manufactured risks are socially constructed and distributed through intricate networks that blend human agency with technological influence.

The normalization of disinformation occurs as these interactions between users and algorithms become routine, embedding disinformation within the structure of digital networks. Over time, this continuous exposure to and interaction with disinformation reshapes users' perceptions of credibility and trust, leading to a blurring of lines between reliable information and falsehoods. As Beck (1992) noted, risks in modern society are often invisible and normalized through repeated exposure, becoming an accepted part of the social landscape. This normalization process reflects how manufactured risks, like disinformation, are not only spread but also accepted as an unavoidable element of digital life.

Moreover, the co-production of disinformation is facilitated by technological affordances that encourage viral content sharing. Platforms are designed to maximize reach, with features like “share” and “retweet” functions that make it effortless for users to propagate information. This functionality, combined with user engagement and algorithmic prioritization, creates a self-reinforcing system where disinformation can gain legitimacy and authority simply through repetition. The technological affordances of social media thus contribute to the normalization of disinformation, as content that circulates widely is often perceived as credible, regardless of its factual basis (Napoli, 2019).

5. Trust, Risk, and the Erosion of Public Confidence

Disinformation poses a significant threat to citizenship by eroding trust in key societal institutions, including the media, government, and scientific organizations. Trust is fundamental to a functioning democracy, where citizens rely on credible information to make informed decisions and participate actively in public life. However, in an environment where disinformation is widespread, citizens struggle to discern truth from falsehood, undermining their confidence in information sources. Beck (1992) argues that in risk society, manufactured risks — such as disinformation — create a pervasive sense of uncertainty that destabilizes the public’s sense of security and trust. Disinformation, by manipulating informational flows, has become a potent force capable of reshaping public opinion and influencing democratic processes, often with long-lasting consequences.

One of the most direct effects of disinformation on citizenship is its ability to diminish trust in the media (Fletcher & Park, 2017). Traditionally, media institutions serve as gatekeepers, filtering information to ensure accuracy and reliability. However, disinformation disrupts this role, as it often

spreads through digital platforms that bypass traditional editorial checks. When citizens are repeatedly exposed to false information, particularly when it circulates widely, they begin to question the credibility of all media sources. According to McNair (2006), the saturation of media with both reliable and unreliable information creates “cultural chaos,” where citizens are left uncertain about whom to trust. This erosion of trust in media complicates the role of journalism in providing a foundation for public discourse, as citizens increasingly view all news sources with suspicion, impacting their ability to participate in an informed and meaningful way. Furthermore, as Bennett and Livingston (2020) argue, the blending of accurate and false information in digital media feeds contributes to “epistemic fragmentation,” where citizens no longer share a common understanding of truth, undermining democratic engagement and social cohesion.

Disinformation, in addition to economic gain, also targets trust in governments, often through narratives that seek to undermine public confidence in political leaders or institutions. This manipulation is particularly dangerous in democracies, where trust in government is essential for political stability and citizen engagement. For instance, during election cycles, disinformation campaigns frequently circulate claims about voter fraud or corruption, fueling skepticism about the legitimacy of the democratic process (Bennett & Livingston, 2020). According to a report by the European Parliament, disinformation poses a significant threat to democratic institutions, as it seeks to weaken societal trust and affects citizens’ right to participate in public affairs by interfering with electoral processes (European Parliament, 2021). Similarly, research published in *Foreign Affairs* highlights that disinformation erodes faith in government by leading citizens to doubt the possibility of truth in public life, which ultimately undermines democracy (Jankowicz, 2021). Such narratives not only distort public perception

but can also deter voter participation by instilling doubts about the efficacy and fairness of elections. Beck's theory of risk society is relevant here, as it underscores the destabilizing effect of modern risks that are socially constructed and amplified by media, leading citizens to question the very structures that govern them.

Science and public health institutions are also frequent targets of disinformation, especially regarding issues like climate change and vaccination. Disinformation campaigns that cast doubt on scientific consensus weaken public trust in expert knowledge, making it harder for these institutions to fulfill their roles in protecting and informing the public. The COVID-19 pandemic, for example, highlighted how disinformation could directly impact public health, as false information about vaccines spread widely, leading to vaccine hesitancy and resistance (Lee et al., 2022; Loomba et al., 2021; Salaverría et al., 2020). According to a study by Scheufele and Krause (2019), the continuous exposure to disinformation erodes public confidence in scientific institutions, complicating efforts to build consensus on critical issues like health and environmental policy. This erosion of trust in science poses a substantial risk to citizenship, as it undermines the ability of citizens to make decisions based on reliable, evidence-based information, potentially endangering both individual and public health.

The impact of disinformation on citizenship extends to public opinion, shaping people's beliefs and attitudes on critical social issues. Informational manipulation can reinforce biases, solidify existing misconceptions, and intensify polarization by pushing individuals towards more extreme viewpoints. Moreover, the influence of disinformation on public opinion can disrupt democratic processes, as it skews the flow of information necessary for a healthy public sphere. In a democracy, citizens are expected to engage in reasoned debate and informed decision-making, but disinformation

skews this process by introducing distortions and falsehoods into the information ecosystem. Bennett and Livingston (2020) highlight that when disinformation permeates public discourse, it disrupts the democratic process by creating an atmosphere of mistrust and confusion. Citizens are thus less likely to participate meaningfully in civic activities, vote, or engage with policies if they cannot trust the foundational information on which these actions are based.

Cultivation of a “Calculative Attitude”

In a society increasingly saturated with risks, citizens develop a “calculative attitude” to navigate the uncertainties surrounding information credibility. Beck and Giddens both highlight this phenomenon, where individuals adopt a critical stance towards the information they encounter, constantly evaluating its trustworthiness due to the prevalence of modern risks. Giddens (1991) describes this calculative attitude as a necessary response in risk society, where citizens must actively discern credible information amidst a flood of competing narratives. Disinformation, by injecting falsehoods and distortions into the information ecosystem, intensifies this need for constant assessment, fostering an environment where distrust becomes pervasive.

This calculative attitude aligns closely with Beck’s concept of reflexive modernization, where individuals are forced to reflexively manage the risks introduced by modernity. In the context of disinformation, reflexivity becomes a survival mechanism, as citizens navigate a digital landscape filled with misleading information.

Disinformation also cultivates a general atmosphere of distrust that permeates all aspects of civic life. When citizens are habitually exposed to conflicting or false information, they begin to question the intentions behind public messaging, even when it is factual. This erosion of trust is a

hallmark of Beck's risk society, where the invisible nature of many modern risks, including informational manipulation, fosters uncertainty. Disinformation campaigns are designed to exploit and deepen these doubts, as citizens become more aware of and concerned with the agendas that might shape the information they consume. This calculative attitude, while intended as a means of self-protection, can ultimately alienate individuals from credible sources and disrupt social cohesion.

Moreover, the calculative approach is not limited to assessing individual pieces of information but extends to broader skepticism toward institutions. Citizens in a disinformation-saturated society may adopt an overarching distrust of institutional knowledge, questioning the motives of governments, media, and scientific bodies. This pervasive skepticism undermines democratic values and public discourse, as citizens hesitate to engage with or act upon information if they cannot fully trust its source. As highlighted in a report by the European Parliament, disinformation can weaken trust in democratic institutions and society, thereby affecting the right to participate in public affairs and potentially interfering with elections (European Parliament, 2021). This calculative attitude, while protective, can also fragment society, as individuals withdraw into isolated groups where trust is selectively granted, often based on ideological alignment rather than factual accuracy.

6. Countering Disinformation: Strategies for Managing Risk in a Digital World

Managing disinformation within Beck's risk society framework requires multifaceted strategies that address the root causes, dissemination mechanisms, and societal impact of false information. As disinformation is a manufactured risk intertwined with modern technologies and global

connectivity, effective responses must integrate policy, technology, and public education. Each of these approaches aims to reduce the spread of disinformation and mitigate its impact on public trust and democratic processes.

Policy Approaches

Governments play a critical role in managing disinformation through regulations that set standards for information accuracy and transparency, especially on digital platforms. Policy strategies can include laws that hold platforms accountable for the content they host, mandating that they implement effective fact-checking mechanisms and respond swiftly to the spread of harmful falsehoods. The European Union's 2018 Code of Practice on Disinformation provided an initial framework for voluntary self-regulation among tech companies, encouraging transparency and collaboration with fact-checkers (European Commission, 2018). The 2022 revision introduced additional measures, including requirements for demonetizing disinformation and offering more data access to researchers, along with the establishment of a Transparency Centre and a Task-force to monitor compliance (European Commission, 2022). Additionally, the Digital Services Act (DSA) and Digital Markets Act (DMA) set binding legal standards to ensure safer digital spaces. The DSA enforces stricter obligations for very large online platforms to control harmful content, while the DMA addresses competitive fairness, both of which are integral to combating the spread of disinformation online (European Commission, 2024). Together, these regulatory frameworks provide a robust foundation for managing the risks associated with disinformation while balancing intervention with freedom of expression.

International cooperation is also crucial, as disinformation often crosses borders. Policy initiatives like the EU's Rapid Alert System, established to share intelligence on disinformation threats between member states, exemplify how governments can coordinate responses to minimize the global spread of harmful information (EEAS, 2019). A unified international stance helps manage disinformation as a global risk, reflecting Beck's notion of "borderless" risks that demand coordinated strategies. However, policy approaches must adapt to rapidly evolving digital landscapes, which continue to introduce new challenges for disinformation regulation.

Technological Solutions

Technological innovations, especially in artificial intelligence (AI) and machine learning, offer promising solutions to detect and limit the spread of disinformation (Montoro-Montarroso et al., 2023). Social media platforms have begun to use AI-driven algorithms to identify and flag content that appears to contain false or misleading information. For example, platforms like Facebook and Twitter employ algorithms to analyze patterns in user behavior and flag content that violates their guidelines on disinformation. These tools are instrumental in identifying disinformation at scale, enabling rapid responses that can prevent harmful content from going viral (DiResta et al., 2018). However, AI tools are not without limitations; they may struggle with detecting nuanced disinformation, especially when it is embedded in complex contexts or presented through sophisticated, covert means.

Blockchain technology offers an innovative solution to verify the authenticity of information sources. By establishing a traceable chain of information, blockchain-based platforms enable users to verify the origin and history of content, thereby reducing the impact of disinformation. This transparency allows users to trust information verified through

decentralized networks rather than relying solely on social media algorithms. For instance, Fraga-Lamas and Fernández-Caramés (2020) discuss leveraging distributed ledger technologies to combat digital deception, highlighting blockchain's potential to ensure data provenance and traceability. Similarly, Qayyum et al. (2019) propose a blockchain-based framework for fake news prevention, emphasizing the importance of immutable records in verifying information authenticity. However, while blockchain technology shows promise, it remains in developmental stages and would require widespread adoption to have a substantial impact on disinformation.

Media Literacy Programs

Empowering individuals to critically evaluate information is one of the most effective long-term strategies for managing disinformation. Media literacy programs that focus on critical thinking and digital literacy can equip citizens with the skills needed to recognize and resist disinformation. Research indicates that media literacy helps individuals develop critical evaluation skills, enabling them to better assess the credibility of information sources (Bulger & Davison, 2018). Such programs are increasingly essential in a digital society where information is abundant and often misleading. Education initiatives, such as those developed by the Media Literacy Project and News Literacy Project, focus on helping students and the public understand how information is produced, how to assess source credibility, and how to identify manipulative tactics commonly used in disinformation campaigns (Hobbs, 2010). Koltay (2011) highlights how media and digital literacies empower citizens to discern reliable from unreliable information, fostering a more informed public. Mihailidis and Viotty (2017) further argue that media literacy plays a crucial role in a “post-fact” society by promoting critical engagement with content and helping individuals resist the spread of false information.

Furthermore, studies have shown that media literacy interventions can increase skepticism toward dubious sources and reduce susceptibility to disinformation (Jones-Jang et al., 2021). Sádaba and Salaverría (2023) also underscore the importance of media literacy within the European Union, advocating for coordinated educational policies to improve citizens' critical understanding of media messages. By fostering a calculative attitude, as Giddens describes, these programs encourage citizens to engage critically with information, fostering resilience against false content.

Public education campaigns can also address specific areas prone to disinformation, such as health and political news. During the COVID-19 pandemic, public health organizations developed targeted media literacy initiatives to help people identify credible information about vaccines and preventive measures (Sylvia Chou et al., 2020). Such initiatives demonstrate how tailored media literacy efforts can reduce the influence of disinformation in areas of high public interest, where misinformation can have particularly severe consequences.

7. Conclusions: Disinformation as a Defining Threat

Beck's and Giddens's theories provide a valuable framework for understanding disinformation as an inescapable feature of modern society, while also offering insights into how societies can adapt to and manage this pervasive risk. Beck's concept of the risk society highlights how modernization and technological progress bring not only advancements but also unforeseen hazards that permeate daily life. In the context of disinformation, Beck's ideas underscore the need to view it not as an isolated issue but as a manufactured risk inherent to digital and global interconnectedness. As with other manufactured risks, such as environmental pollution or nuclear hazards, disinformation requires a systemic approach to mitigation that

goes beyond addressing individual instances of false information. It calls for societal-wide awareness and structural responses that can manage its complexities.

Giddens complements Beck's perspective by emphasizing the role of reflexive modernization, where individuals and institutions continuously engage with risks, adapting to them as part of the modern condition. In risk society, citizens adopt a "calculative attitude," becoming more discerning and proactive in assessing information credibility as they navigate uncertainties. This reflexive response is crucial in combating disinformation, as it encourages individuals to critically evaluate sources and seek reliable information. Media literacy programs that foster this calculative attitude exemplify Giddens's approach, empowering citizens to participate actively in risk management rather than relying solely on institutional interventions. Thus, Giddens's ideas support the notion that equipping individuals with critical thinking skills is essential for building resilience against disinformation.

The combination of Beck's and Giddens's insights suggests a dual approach to managing disinformation: structural solutions that address the systemic dimensions of the issue and individual-level interventions that enhance public awareness and critical engagement. Beck's view underscores the importance of policy and technological strategies that address the risk at an institutional level, such as content regulations, platform accountability, and AI-based detection systems. Meanwhile, Giddens's emphasis on reflexivity advocates for fostering adaptability and critical awareness among citizens, empowering them to actively manage disinformation risks as they navigate digital spaces. Adding to this framework, Actor-Network Theory (ANT) complements these perspectives by highlighting the role of non-human actors—such as algorithms, social media platforms, and automated bots—in co-producing and disseminating disinformation. ANT

underscores the complexity of the disinformation network, where human and technological agents interact to shape information flows, thereby necessitating a multifaceted approach that addresses both human and technological contributors to the disinformation landscape.

Ultimately, together, Beck and Giddens highlight the importance of top-down and bottom-up strategies in managing disinformation. While policies and technological tools provide the basis for reducing the spread of misinformation, fostering a calculative attitude and promoting media literacy ensure that individuals are prepared to confront disinformation directly. This dual approach is in line with the characteristics of the risk society, where both institutional and individual commitment are essential to manage the risks produced by modernity. Disinformation, as an unavoidable risk in today's digital landscape, calls for a comprehensive and adaptive response that draws on the theoretical foundations laid by Beck and Giddens.

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