Communication without Community

How Information Shapes Our Society

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Abstract

This essay explores the relationship between the fragmentation of online information and social polarization in contemporary democratic societies. By examining how individuals consume and share information in digital environments, we investigate the mechanisms through which confirmation bias, homophily, and echo chambers contribute to societal division.

The analysis focuses on the theoretical framework that connects the fractured media landscape to the emergence of polarized communities, where users increasingly cluster in homogeneous groups that reinforce pre-existing beliefs. Drawing on sociological theory and empirical observations from the Digital Society Project covering 164 countries, this work highlights how the democratization of information access—while potentially liberating—has paradoxically contributed to the erosion of social cohesion.

We argue that in highly fractionalized online environments, individuals are more likely to segregate into "digital tribes" that operate as closed epistemic communities, ultimately threatening the foundations of deliberative democracy.

1 Introduction: The Information Age Paradox

The rapid and indiscriminate entry into the process of producing and consuming information has an unparalleled potential impact on society, with effects that are not fully measurable. The Internet and social media represent, in many ways, the realization of the culmination of human freedom on a global level in a seemingly barrier-free world.

Facilitating access to information makes it possible for individuals to participate in public life with awareness and knowledge, thus achieving that famous *agora* that politics has been pondering for centuries. In theory, immediate access to a boundless domain of information should enable more conscious and informed participation in public discourse.

However, as a result of disintermediated access to information and algorithms used in content promotion, communication has become increasingly personalized, both in the way messages are framed and how they are shared across social networks. Recent studies show that, online, we seek information that supports existing viewpoints and predominantly engage with communities of like-minded people, leading to the problem of **confirmation bias**.

This essay focuses on the fracturing of information which—combined with the negative influence of online discussion on users' emotions—intensifies polarization, creating **echo chambers**: closed, mostly non-interacting communities with different narratives, where beliefs become amplified or reinforced.

1.1 The Rise of Social Polarization

According to the World Economic Forum Global Risks Report, erosion of social cohesion and societal polarization has been climbing in the ranks of perceived severity in recent years. Defined as the loss of social capital and fracturing of communities leading to declining social stability, individual and collective wellbeing and economic productivity, polarization is now recognized as one of the most severe global risks.

Polarization on issues such as immigration, gender, reproductive rights, ethnicity, religion, climate and even secession and anarchism have characterized recent elections, referendums and protests around the world. This phenomenon fundamentally **undermines social trust**, and technology serves as an amplifier of dissatisfaction caused by other structural drivers.

2 Theoretical Framework

2.1 Data Context and Scope

This analysis draws upon data from the **Digital Society Project (DSP)**, founded in 2018 with the goal of analyzing the complex effects of internet and social media on different layers of society. The project utilizes the infrastructure of the Varieties of Democracy (V-Dem) Institute, an independent research institute based at the Depart-

ment of Political Science at the University of Gothenburg in Sweden.

The Digital Society Survey contains questions pertaining to the political environment of the internet and social media, with data collected through expert-coded surveys from hundreds of country and area experts covering virtually all countries in the world from 2000 to 2020. The analysis examines 164 countries for the year 2021, focusing on nations where online media consumption is sufficiently widespread to meaningfully impact public discourse.

2.2 Key Definitions

The Internet encompasses all information that people access over public and private digital networks worldwide, including both publicly accessible digital spaces and private or gated information transmission platforms. It does not include traditional media transmission mechanisms such as paper, television, traditional voice telephone, and radio.

Social media are a subset of Internet platforms that enable normal individuals to create and share content with networks of other people. This includes publicly visible platforms like Facebook, Instagram, Twitter, and Weibo, as well as private social networking and messaging platforms like Signal, WhatsApp, and Snapchat.

Fractionalization refers to the degree of division or fragmentation within a society or group, describing the extent to which different groups have limited interactions or commonalities. In the context of online media, it measures how divided and antagonistic the digital information landscape has become.

Polarization describes the tendency of group members to move toward more extreme positions in the direction indicated by their initial inclinations, intensifying their positions during discussions or interactions.

3 The Digital Exclusion Threshold

Before examining the relationship between information fractionalization and polarization, it is essential to establish which countries have sufficient digital penetration for online media to meaningfully influence social cohesion.

Countries with low indices of online media consumption experience **e-exclusion**—a term indicating digital exclusion or limited access to digital technologies such as the internet and electronic devices. According to the World Economic Forum, the two main causes of e-exclusion are lack of physical access and limited technological skills.

The distribution of polarization levels across countries reveals that high polarization exists both in nations with extensive online media consumption and those with limited digital access. However, the *mechanisms* driving polarization differ fundamentally between these contexts.

The case of North Korea exemplifies this distinction: the country exhibits extremely low online media consumption alongside the absence of measured polarization. This does not indicate social harmony or ideological diversity; rather, it reflects a monolithic information environment where only one extreme position is permitted. This authoritative control represents a fundamentally different phenomenon from the digital tribalism observed in open societies.

For this reason, our analysis focuses on countries where citizens have meaningful access to diverse online information sources, as these are the contexts where digital fractionalization can drive polarization through voluntary self-segregation rather than imposed uniformity.

4 The Fractured Information Landscape

4.1 Understanding Fractionalization

As Cass Sunstein observes in "The Law of Group Polarization," every society contains innumerable deliberating groups, and group discussion can theoretically lead to better outcomes when competing views are stated and exchanged. However, economic, psychological, and social mechanisms may lead deliberating groups in unexpected and undesirable directions.

In an interconnected digital system, information paradoxically becomes a tool of division rather than genuine communication. While the presence of diverse perspectives serves as a strong indicator of liberal democracy—distinguishing it from autocratic regimes where information is controlled and uniform—the characteristics observed in many democratic societies go beyond healthy pluralism into pathological fragmentation.

The distribution of fractionalization across countries reveals that approximately 47.5% of nations exhibit moderate to extreme fractionalization, with 17% experiencing particularly severe fragmentation. In these contexts, the media landscape is characterized by antagonism and mistrust, with individuals tending to segregate themselves according to their values and beliefs.

4.2 The Infodemic Phenomenon

When fractionalization reaches extreme levels, societies face what has been termed an **infodemic**. This concept was coined by David J. Rothkopf in a 2003 article in *The Washington Post* titled "When the Buzz Bites Back," describing how during the SARS epidemic, the proliferation of information had consequences on econ-

omy, politics, and security that were disproportionate to the actual impact of the disease.

More recently, the World Health Organization's director-general called for governments, companies, and news outlets to tackle an infodemic of fake news, characterizing it as being as dangerous as the coronavirus itself.

The metaphor of an "information epidemic" extends beyond infectious diseases. The Oxford Dictionary defines it as: *"A proliferation of diverse, often unsubstantiated information relating to a crisis, controversy, or event, which disseminates rapidly and uncontrollably through news, online, and social media, and is regarded as intensifying public speculation or anxiety."*

The consequences of highly fractionalized online media landscapes are vast. Evidence suggests a real possibility that public opinion can be intentionally distorted by exploiting information overload and confirmation bias, with significant political, social and economic consequences. The challenge is that strategies for mitigation remain uncertain.

5 The Three Mechanisms of Digital Polarization

Understanding how fractionalized information environments produce polarization requires examining three interconnected behavioral patterns that emerge in online spaces. These mechanisms create a self-reinforcing cycle that drives communities toward extremism.

5.1 Confirmation Bias: Selective Information Consumption

Research demonstrates that users not only tend to seek information that supports their current convictions, but this tendency shapes their decisions about whether to spread content, thus creating informational cascades within identifiable communities.

When individuals with pre-existing convictions are confronted with a wide range of information or opinions on the same topic within a fractionalized media environment, they selectively engage with content that aligns with their beliefs. As Quattrociocchi and colleagues document, experimental evidence shows that **confirmatory information is accepted even if it contains deliberately false claims**, while dissenting information is mainly ignored or might even increase group polarization.

This selective exposure is not merely passive; it actively shapes the information ecosystem. Users curate their information diet by choosing sources, platforms, and communities that validate their worldview, effectively constructing a personalized reality that may diverge significantly from shared facts.

The enormous amount of information to which each individual is exposed daily offers a range of narratives to choose between. Rather than fostering informed deliberation, this abundance paradoxically enables users to avoid cognitive dissonance by finding communities and content that reinforce their existing beliefs.

5.2 Homophily and Echo Chambers: Seeking Similitude

Research on online behavior demonstrates that users belonging to different communities tend not to interact and are predominantly connected only with like-minded people. This pattern of **homophily**—the tendency to associate with similar others—is amplified by platform algorithms and user choices.

In Solomon Asch's vivid experiments on group influences, individuals were willing to abandon the direct evidence of their own senses under social pressure. Asch concluded that his results raised serious questions about whether "the social process is polluted" by the "dominance of conformity."

5.2.1 The Tribalism of the Internet

German philosopher Byung-Chul Han argues that we are witnessing the decline of convergent interpretive horizons. Globalization and hyperculturalization are leading to what he calls *"the tribalism of the Internet"*: a world where information no longer represents a source of knowledge but rather **identity propositions**.

In response to the de-factualization of the world, an online re-factualization is proposed as an identity proposition. Contrary to filter bubble theories, digital tribes within their bubbles fully engage with facts and circumstances that contradict their beliefs. However, these contradictions are simply ignored because they do not conform to the identity narrative, and relinquishing their convictions would be equivalent to losing their sense of identity.

This leads to conflicts between tribes, creating a world filled with angry people, because it is through opposition that they strengthen their own identities. Han concludes that **listening is a political act, and democracy is a community of listeners**. Digital communication, as communication without community, annihilates the politics of listening. Thus, we only listen to ourselves—this is the end of communicative action.

Companies that run social media platforms face a commercial incentive to ensure that their users are presented with content with which they are more likely to engage—which, in political terms, implies presenting con-

tent with which they are likely to agree. The resulting emergence of self-reinforcing communities of like-minded people undermines the health of democracy.

5.3 Group Polarization: Radicalization Through Reinforcement

In a striking empirical regularity documented by researchers, deliberation tends to move groups, and the individuals who compose them, toward a more extreme point in the direction indicated by their own predeliberation judgments. Like polarized molecules, group members become even more aligned in the direction they were already tending.

As Patricia Wallace observes in *The Psychology of the Internet*, "Each person can share what he or she knows with the others, making the whole at least equal to the sum of the parts. Unfortunately, this is often not what happens... As polarization gets underway, the group members become more reluctant to bring up items of information they have about the subject that might contradict the emerging group consensus."

When people hear echoes of their own voices, the consequence may be far more than support and reinforcement. Particular forms of homogeneity can become breeding grounds for unjustified extremism, even fanaticism. As Sunstein argues, to work well, deliberating groups should be appropriately heterogeneous and contain a plurality of articulate people with reasonable views.

The aggregation of favored information within homogeneous communities reinforces both selective exposure and group polarization. Users provide empirical evidence through their behavior that because they focus on their preferred narratives, they tend to assimilate only confirming claims and to ignore apparent refutations.

Patterns of users' online actions in fractionalized media scenarios lead them to become polarized on certain topics through the creation of isolated communities that select and interpret information aligning with their shared belief system. This self-reinforcing cycle transforms political or social preferences into tribal identities, making compromise and mutual understanding increasingly difficult.

6 The Relationship Between Fractionalization and Polarization

The analysis of countries with significant online media presence reveals a meaningful association between the degree of information fractionalization and levels of social polarization. In societies where the online landscape is more divided and antagonistic, populations exhibit correspondingly higher levels of polarization.

Approximately 60% of countries examined show polarization levels that, according to World Economic Forum assessments, threaten social stability. This distribution suggests that the fractured information environment is not merely reflecting existing divisions but actively contributing to their intensification.

The relationship manifests across different contexts: as the online landscape becomes more segmented, there is a corresponding increase in societies exhibiting higher polarization. Countries with extremely fractionalized information environments consistently show elevated polarization, while those with more integrated media landscapes tend toward greater social cohesion.

This pattern supports the theoretical framework: when individuals have access to highly fragmented information environments, they are more likely to self-segregate into echo chambers, where the three mechanisms—confirmation bias, homophily, and group polarization—operate synergistically to drive communities toward extremism.

As Professor Maxwell McCombs of the University of Texas argues, the media play a key role in directing public attention towards public issues, shaping public understanding of public affairs. Such a phenomenon is particularly evident on the web where users, immersed in homophilic and polarized clusters, process information through a shared system of meaning.

7 The Broader Implications

7.1 Democracy Under Strain

The cultural polarization of democratic societies has been exacerbated by profound changes in how news and information are produced, distributed, and shared. As one researcher noted: *"We were being rewarded for being division entrepreneurs. Each individual term referring to your political outgroup increases the odds of that post being retweeted or shared by 67%."*

Leading voices in academia and technology argue that rather than simply reflecting polarization in society, platforms like Facebook and Twitter are helping to create it. Tristan Harris, cofounder of the Center for Humane Technology, observes that social media platforms were designed to be addictive to maximize profit; now they generate billions by making us angry.

With users on social media aiming to maximize engagement through likes and shares, information is frequently oversimplified and emotionally charged. Misinformation has always represented a political, social, and economic risk, but social media's power to misinform, manipulate, and distort public opinion has become severe.

7.2 The Erosion of the Democratic Center

Consequences of societal polarization are vast, ranging from economic drag to civil unrest and deepening political fissures. There are indications that increasing polarization is contributing to the decline of democracies and the accompanying rise in hybrid regimes. According to recent data, the share of the world's population living in autocratizing countries rose from 5% in 2011 to 36% in 2021. Only 13% of the world's population currently lives under a liberal democracy, compared to 44% living under an electoral autocracy.

The erosion of the social and political center risks becoming self-perpetuating. Divisions incentivize the adoption of short-term, more extreme policy platforms to galvanize one side of the population and perpetuate populist beliefs. The problem arises when the fears cultivated in online communities find a place within the halls of real politics, giving substance to and amplifying concerns that previously existed only in virtual spaces.

Notably, contests between two non-centrist candidates or positions are often extremely close, reflecting a deeply divided electorate. The Brazilian presidential election of 2022, for instance, was won by President Lula by just 1.8 points—the slimmest margin recorded since Brazil became a democratic nation.

8 Conclusion: Breaking Out of Echo Chambers

In 1962, President John F. Kennedy stated: *"We like the convenience of our opinions, without the discomfort of thought."* Six decades later, Samantha Power, former United States ambassador to the United Nations, observed that the problem has only worsened.

As Power notes: *"From Facebook and Twitter, which we monitor, to algorithms that determine the results of our searches based on our browsing history, our main sources of information are increasingly designed to reflect the world as we already see it. They give us the comfort of our opinions without the discomfort of thought."*

She continues: *"We need to find a way to break out of our echo chambers. This is more challenging than it seems, especially when it comes to the issues that matter most to us. But it is in our interest to engage with people who disagree with us rather than silencing them. Not only because it gives us the opportunity to confront their point of view, and perhaps even change our own. But mainly because sometimes they may be right."*

The Internet represents, in many ways, the culmination of human freedom on a global level. Facilitating access to information enables more conscious and informed participation in public life. However, the mechanisms through which this information is organized, promoted, and consumed have created unforeseen challenges to social cohesion.

The evidence presented demonstrates that in highly fractionalized online environments, the natural human tendencies toward confirmation bias and homophily are amplified, creating echo chambers where group polarization transforms differences of opinion into tribal identities. This dynamic threatens the foundational requirements of deliberative democracy: the ability to encounter diverse viewpoints, to change one's mind in light of evidence, and to find common ground with those who hold different values.

Addressing this challenge requires understanding that the problem is not information abundance per se, but rather how that information is structured and consumed in ways that facilitate self-segregation rather than genuine deliberation. Strategies for mitigation remain uncertain, but acknowledging the severity and mechanisms of the problem represents a crucial first step.

The future of democratic societies may depend on our collective ability to design information environments that foster genuine dialogue across difference, resist the commercial incentives that profit from division, and cultivate citizens capable of sitting with the discomfort of encountering views that challenge their own. Only then can we fulfill the promise of the digital age: not merely communication, but true community.

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