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The Rhetoric of Bitcoin: Media Narratives and Public Perception from 2013 to 2018

I. Introduction

Since its launch in 2009, Bitcoin has been more than just a cryptocurrency—it has become a cultural flashpoint, a technological symbol, and a rhetorical battleground. In its early days, it was heralded by libertarians and cypherpunks as a revolutionary escape from centralized banking. A few years later, headlines warned of blackmarket deals and energy consumption nightmares. Today, it stands on Wall Street with institutional adoption, mainstream ETFs, and daily media cycles tracking its every move.

But beneath the technical charts and blockchain jargon lies a deeper question: how has public perception of Bitcoin been shaped—not by what it is—but by how it's talked about? From its portrayal as “digital gold” to its vilification as a tool for criminals, Bitcoin's meaning has shifted again and again in the public eye. These shifts didn't just happen—they were constructed through rhetorical strategies, media framing, and narrative repetition.

This paper argues that the cultural identity of Bitcoin has evolved through strategic rhetorical reframing in media coverage from 2013 to 2018. By combining digital methods—like sentiment analysis of thousands of headlines—with close rhetorical readings, this study reveals how narratives around Bitcoin have moved between utopia and dystopia, hype and fear, legitimacy and scandal. In doing so, it explores the power of language to not only reflect financial realities but to shape them.

II. Background and Literature Review

Bitcoin's origin story is as much rhetorical as it is technical. Introduced in 2009 by a mysterious creator using the pseudonym Satoshi Nakamoto, Bitcoin entered the world through a nine page whitepaper titled "Bitcoin: A Peer-to-Peer Electronic Cash System." The pseudonym added intrigue, but Nakamoto's self-reported birthdate—April 5, 1975—fueled speculation about deeper symbolism. April 5, 1933, marks the signing of Executive Order 6102, which banned U.S. citizens from owning gold. That year was later reversed in 1975. The implication is clear: Bitcoin's ideological roots draw from a resistance to centralized financial control, presenting itself as a digital alternative to suppressed monetary freedom.

This framing helped shape Bitcoin's early identity. In his article "Bitcoin and the Future of Digital Payments," economist William J. Luther describes how Bitcoin began as an "obscure piece of code" and traded for mere pennies in its first year. Yet its potential for decentralization and pseudonymous exchange gave it unique appeal among early adopters. According to Luther, Bitcoin's growth was constrained by the "incumbent monies problem"—the difficulty of

convincing users to abandon existing, government backed currencies. Still, Bitcoin overcame early barriers and developed a powerful first mover advantage, bolstered by community driven innovation and media attention.

Media rhetoric has played a central role in constructing Bitcoin's public identity. From initial depictions of it as a fringe tech experiment to later portrayals of it as either a speculative goldmine or a criminal tool, the press has continually reshaped what Bitcoin "means." As coverage expanded, so did the tension between optimism and skepticism—a dynamic reflected in headline tone, framing devices, and symbolic language like "digital gold," "bubble," or "revolution."

This paper builds on these scholarly perspectives by combining digital media analysis with rhetorical critique. It tracks how Bitcoin's narrative has changed across four major themes: Bullish optimism, Bearish fear, Crime and moral panic, and Technological futurecasting. By categorizing headlines, analyzing sentiment trends, and examining close readings of key media moments, this study argues that Bitcoin's cultural identity has been in constant flux—shaped not just by markets or code, but by the stories told about it.

III. Methodology

This project combines digital text analysis, economic data visualization, and rhetorical categorization to examine how media narratives shaped public perception of Bitcoin between 2013 and 2018. The analysis integrates sentiment scoring using natural language processing,

price correlation through log transformed data, and manual thematic coding to track rhetorical frames over time.

The study draws from two primary datasets. The first, `Headline_Crypto.csv`, is a custom curated collection of over 5,000 news headlines referencing Bitcoin, dated from 2013 to 2018. Headlines were scraped or archived from mainstream sources including Reuters, CoinDesk, The New York Times, and Bloomberg. Each entry includes a timestamp and headline text.

The second dataset, `btcusd_1min_data.csv`, was downloaded from Kaggle user Michal Czielinski's "Bitcoin Historical Data" project and contains minute level Bitcoin trading data, including open, high, low, close, and volume prices from 2012 onward (Czielinski).

To assess media tone, each headline was analyzed using the VADER sentiment analysis tool from the `nlTK` Python package. VADER (Valence Aware Dictionary and sEntiment Reasoner) is a lexicon and rule based model optimized for short, informal text such as tweets and headlines (Hutto and Gilbert). Each headline received a compound sentiment score between -1 (very negative) and $+1$ (very positive).

Monthly sentiment scores were calculated by averaging all headline scores per month. To suppress short term volatility, a 3 month rolling average was applied. Bitcoin's monthly average closing price was computed from the Kaggle dataset and log transformed to normalize exponential growth. A dual axis plot was generated with smoothed sentiment on one axis and log transformed price on the other.

Key historical moments were annotated with vertical lines, including the Silk Road seizure (October 2013), the Mt. Gox collapse (February 2014), and the 2017 bull run peak (December 2017).

In addition to sentiment scoring, headlines were tagged into four rhetorical frames: Bullish, Bearish, Crime, and Innovation. Frame frequency was visualized in a heatmap showing quarterly changes from 2015 to 2018.

IV. Analysis: Media Narratives and the Construction of Bitcoin's Identity (2013–2018)

This section explores how sentiment and rhetorical framing in Bitcoin related media evolved from 2013 to 2018, using a combination of computational sentiment analysis, price overlay, and thematic frame categorization.

1. 2013–2014: Crime, Collapse, and Crisis

The early public identity of Bitcoin was forged in a volatile space dominated by fear and distrust. As shown in Figure 2, sentiment peaked in 2013, averaging +0.09 on the VADER scale, but collapsed in 2014 to just +0.02—the steepest drop across the six year window. This decline mirrors two major events: the FBI seizure of Silk Road in October 2013 and the collapse of Mt. Gox, Bitcoin's largest exchange, in February 2014. Both events triggered an explosion of headlines linking Bitcoin to illicit markets, theft, and loss.

These developments entrenched the “Illicit Use/Fear” and “Regulation/Control” frames in media discourse, as shown in Figure 3, which tracks quarterly rhetorical frame intensity. From Q1 2014 through 2015, the “Illicit Use/Fear” frame surged while innovation based frames remained marginal. Bitcoin’s identity during this period was defined by risk and disruption—not opportunity.

2. 2015–2016: Stabilization and Quiet Legitimacy

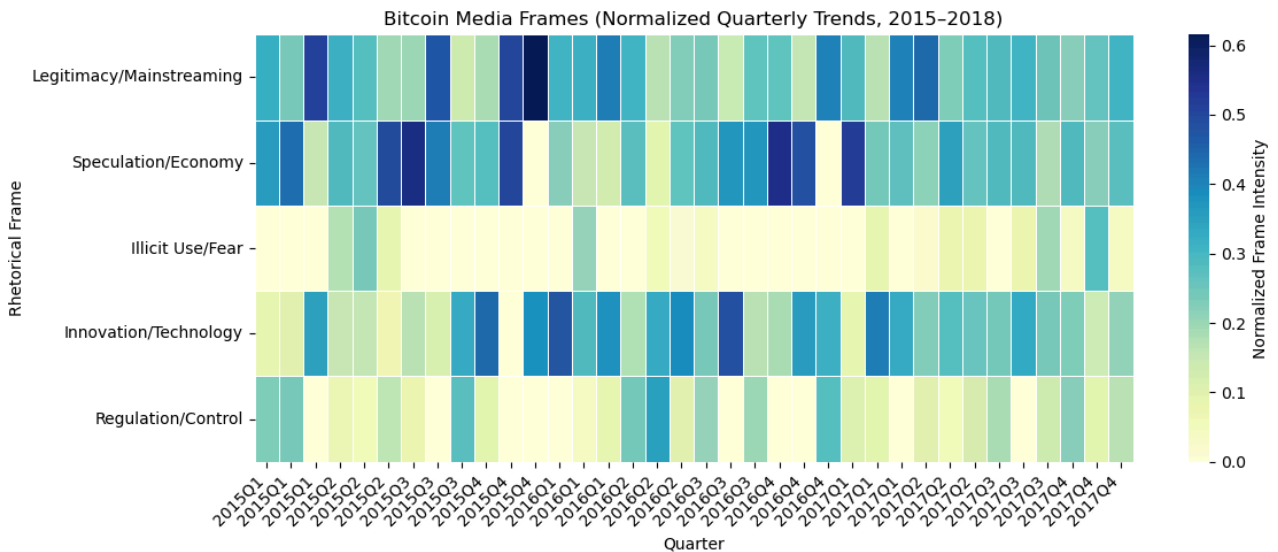
Despite continued volatility in Bitcoin’s price, media sentiment began to stabilize between 2015 and 2016. As shown in the rolling sentiment graph (Figure 1), headlines maintained a relatively flat tone, hovering around +0.02 to +0.05.

However, Figure 3 reveals a deeper shift underway. The “Innovation/Technology” and “Legitimacy/Mainstreaming” frames gained significant traction—particularly in Q4 2015 and Q1 2016. Headlines increasingly framed Bitcoin as a blockchain breakthrough, linking it to smart contracts, fintech platforms, and institutional interest. Though sentiment remained neutral, the language of credibility had begun to replace the earlier language of panic.

This period marked Bitcoin’s rhetorical “rehabilitation.” Media tone did not become bullish, but it became less alarmist—reflecting a cautious recognition of the technology’s broader potential.

3. 2017: Bull Market, Media Caution

2017 was the year of Bitcoin’s meteoric price rise—from under \$1,000 to nearly \$20,000 in December. However, the media did not match that enthusiasm rhetorically. As shown in Figure 1, sentiment barely rose during the bull run, with the smoothed VADER score peaking below +0.1. This decoupling of price and media tone reveals a key insight: the media continued to frame Bitcoin with skepticism and restraint, even as retail and institutional investors piled in.

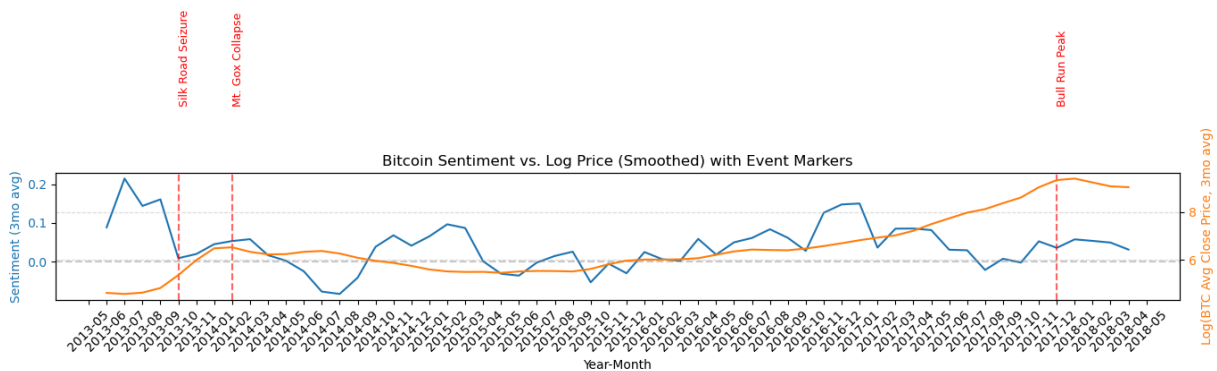


The heatmap (Figure 3) helps explain this rhetorical posture. “Speculation/Economy” becomes the dominant frame throughout 2017, while “Innovation” and “Legitimacy” plateau. The media didn’t deny Bitcoin’s growth—but it increasingly described it in terms of bubbles, hype, and

speculative frenzy. This framing may have served as a form of hedged enthusiasm: acknowledging Bitcoin’s popularity without endorsing it.

4. 2018: After the Hype

In early 2018, Bitcoin’s price plummeted. Sentiment followed suit, as shown by both yearly and monthly graphs (Figures 1 and 2). The media responded with a rhetorical “I told you so,” reactivating the “Bearish” and “Collapse” trope



s last seen in 2014.

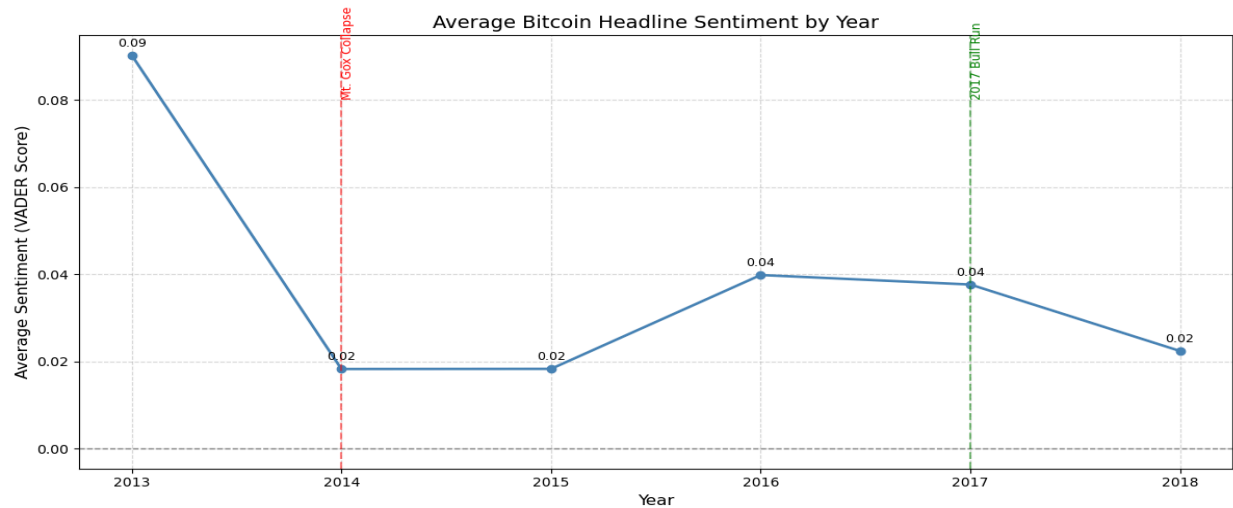
Interestingly, the “Illicit Use/Fear” and “Regulation/Control” frames remained subdued in Figure 3 during this period—suggesting that by 2018, Bitcoin’s narrative no longer centered on criminality, but on economic disappointment. In this way, the rhetorical landscape had matured. Bitcoin was no longer described as dangerous—just overhyped.

Summary

Across these years, we observe a clear rhetorical evolution:

- From “dark web currency” → to “unregulated experiment” → to “bubble asset” → to “disruptive innovation.”
- Media sentiment remained neutral or slightly positive, rarely echoing price euphoria.
- Rhetorical frames shifted from fear to speculation to technological promise, without fully embracing utopia.

These findings suggest that Bitcoin’s public legitimacy was not granted purely by market performance. Instead, it was narratively constructed—shaped by how the media chose to frame Bitcoin’s purpose, risk, and future.



VI. Conclusion

Bitcoin has always been more than just a financial asset; it is a narrative machine. From the moment Satoshi Nakamoto published the Bitcoin whitepaper in 2008, the project has been entangled in cultural symbolism, ideological rhetoric, and competing visions of technological future. This paper has shown that Bitcoin's public identity from 2013 to 2018 was constructed not solely by market forces, but by the media's rhetorical framing of events, risks, and promises.

Sentiment analysis revealed that news headlines often responded to scandals and price volatility with caution, rather than hype. Even during Bitcoin's most explosive bull run in 2017, media sentiment remained restrained, reflecting an unwillingness to fully embrace Bitcoin as legitimate. Meanwhile, rhetorical frame analysis showed a clear evolution: early headlines emphasized crime and collapse, but by 2016–2017, they increasingly invoked language around innovation and speculative growth. This suggests a maturing media narrative, even if skepticism lingered.

Ultimately, the study demonstrates how media coverage does not merely report on Bitcoin's price—it actively shapes Bitcoin's perceived meaning. Rhetoric, sentiment, and framing all contribute to a social construction of value. If Bitcoin is "digital gold," it is because the public was persuaded to believe in it through language first, and code second.

Future work could expand this analysis through machine learning based frame classification, larger datasets covering post 2020 headlines, or international media comparisons. But even within this limited window, the data makes one thing clear: Bitcoin's rise is not just a story of software and speculation—it is a story of storytelling itself.

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