

# Étudier les cycles de l'attention en ligne aspects méthodologiques et conséquences culturelles

Tommaso Venturini  
CNRS Centre Internet et Société  
Université de Genève  
[tommasoventurini.it](http://tommasoventurini.it)

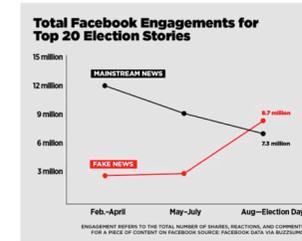
1

[https://www.buzzfeed.com/craigsilverman/viral-fake-election-news-outperformed-real-news-on-facebook?utm\\_term=.qnG0mJyJb#.ximDd5y5B](https://www.buzzfeed.com/craigsilverman/viral-fake-election-news-outperformed-real-news-on-facebook?utm_term=.qnG0mJyJb#.ximDd5y5B)

BuzzFeed NEWS / BuzzFeed Videos Outlets Tasty More

## This Analysis Shows How Viral Fake Election News Stories Outperformed Real News On Facebook

A BuzzFeed News analysis found that top fake election news stories generated more total engagement on Facebook than top election stories from 19 major news outlets combined.



The "Fake News crisis"

2

[publicdatalab.org](http://publicdatalab.org)



The Public Data Lab seeks to facilitate research, democratic engagement and public debate around the future of the data society.  
We want to develop and disseminate innovative research, teaching, design and participation formats for the creation and use of public data.  
We work in collaboration with an interdisciplinary network of researchers, practitioners, journalists, civil society groups, designers, developers and public institutions across the world.  
Our approach characterized by an interest in:  
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Public Data Lab and the "Fake News crisis"

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According to the literature, the notion of fake news is

1. Vague
2. Undistinguishable from past forms of misinformation
3. Charged with a simplistic idea of journalistic truth
4. Politically dangerous

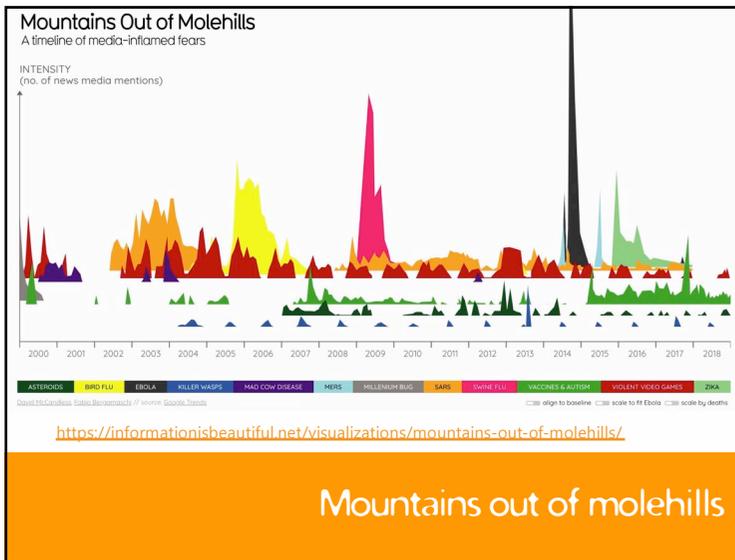
4 reasons to stay clear of "fake news"

4

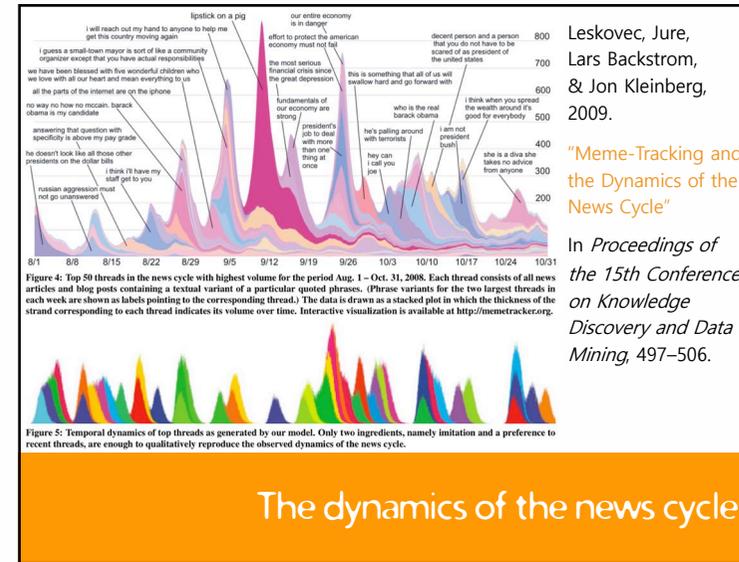


What is "fake news" about if it is not about fakeness?

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What we are considering here, however, are the psychic and social consequences of the designs or patterns as they amplify or accelerate existing processes. For the "message" of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs.



The railway did not introduce movement or transportation or wheel or road into human society, but it accelerated and enlarged the scale of previous human functions, creating totally new kinds of cities and new kinds of work and leisure.

McLuhan, Marshall. 1964. *Understanding Media: The Extensions of Man*. New York: McGraw-Hill.

"It isn't that I don't like current events. There have just been so many of them lately."

McLuhan, Marshall, and Quentin Fiore. 1967. *The Medium Is the Message*. Gingko Press.

Media acceleration & amplification

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McLuhan, Marshall. 1964.  
*Understanding Media: The Extensions of Man*

The psychic and social consequences of the designs or patterns as they **amplify or accelerate existing processes.**

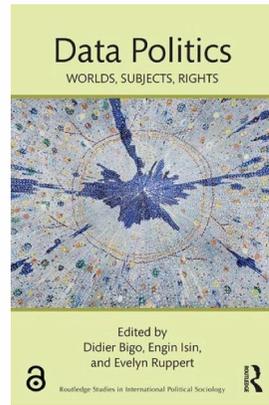
The **psychic and social consequences** of the designs or patterns as they amplify or accelerate existing processes.

trendiness hype & junk news bubble bubbles

media ephemerality & secondary orality

**Media acceleration–amplification and its consequence**

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**FROM FAKE TO JUNK NEWS**

The data politics of online virality

Tommaso Venturini

“Fake news” is a key subject of data politics, but also a tricky one. As this chapter aims to show, the various phenomena signified by this misleading label have little in common, except being opposite to the kind of algorithmic intelligence that most other chapters present as the main concern of data politics. This does not mean that “fake news” is not related to computational analytics or political intentions, but it does mean that this relation is not straightforward.

To discuss this relation, I will go through a three-stage argument. First, I will criticise the notion of “fake news”, dismissing the idea that this type of misinformation can be defined by its relationship to truth. Second, I will propose a different definition of this phenomenon based on its circulation rather than of its contents. Third, I will reintroduce the connection to data politics, by describing the economic, communicational, technological, cultural and political dimensions of junk news.

**Junk news is not about algorithmic persuasion**

**“From Fake to Junk News.”**  
 In D. Bigo, E. Isin, and E. Ruppert (eds.)  
*Data Politics: Worlds, Subjects, Rights*

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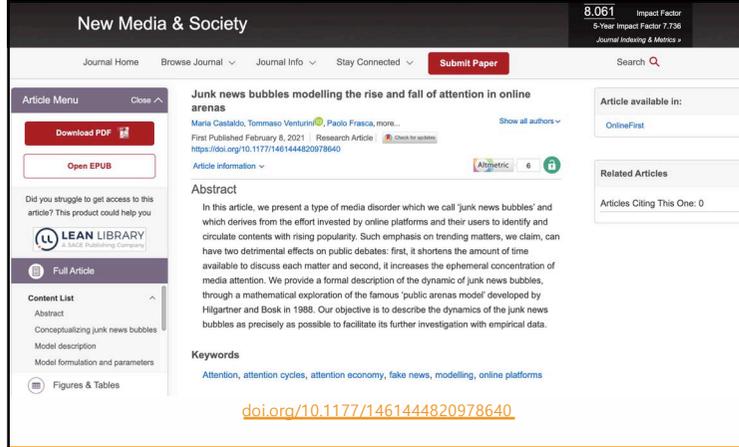
Venturini, Tommaso. 2019.  
 “From Fake to Junk News, the Data Politics of Online Virality.”  
 In *Data Politics: Worlds, Subjects, Rights*.



“spread, rather than fakeness, is the birthmark of these contents that should be called “viral news” or possibly “junk news” for, **just as junk food, they are consumed because they are addictive, not because they are appreciated**”

**Junk news**

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**New Media & Society**

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**Junk news bubbles modelling the rise and fall of attention in online arenas**

Maria Castaldo, Tommaso Venturini, Paolo Frasca, more... Show all authors

First Published February 8, 2021 Research Article  
<https://doi.org/10.1177/1461444820978640> Check for updates

Article information

**Abstract**

In this article, we present a type of media disorder which we call ‘junk news bubbles’ and which derives from the effort invested by online platforms and their users to identify and circulate contents with rising popularity. Such emphasis on trending matters, we claim, can have two detrimental effects on public debates: first, it shortens the amount of time available to discuss each matter and second, it increases the ephemeral concentration of media attention. We provide a formal description of the dynamics of junk news bubbles, through a mathematical exploration of the famous ‘public arenas model’ developed by Hilgartner and Bosk in 1988. Our objective is to describe the dynamics of the junk news bubbles as precisely as possible to facilitate its further investigation with empirical data.

**Keywords**

Attention, attention cycles, attention economy, fake news, modelling, online platforms

[doi.org/10.1177/1461444820978640](https://doi.org/10.1177/1461444820978640)

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**Castaldo, M., Venturini, T., Frasca, P., & Gargiulo, F. (2021). Junk News Bubbles: Modelling the Rise and Fall of Attention in Online Arenas. *New Media & Society***

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# Junk News Bubbles

an attention regime in which

- few items attracts large shares of collective attention
- but are incapable of sustaining it for a long time

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## The Rise and Fall of Social Problems: A Public Arenas Model<sup>1</sup>

Stephen Hilgartner  
Columbia University

Charles L. Bosk  
University of Pennsylvania

This paper develops a model of the process through which social problems rise and fall. Treating public attention as a scarce resource, the model emphasizes competition and selection in the media and other arenas of public discourse. Linkages among public arenas produce feedback that drives the growth of social problems. Growth is constrained by the finite "carrying capacities" of public arenas, by competition, and by the need for sustained drama. The tension between the constraints and forces for growth produces successive waves of problem definitions, as problems and those who promote them compete to enter and to remain on the public agenda. Suggestions for empirical tests of the model are specified.

In its most schematic form, our model has six main elements:

1. a dynamic process of competition among the members of a very large "population" of social problem claims;<sup>2</sup>
2. the institutional arenas that serve as "environments" where social problems compete for attention and grow;
3. the "carrying capacities" of these arenas, which limit the number of problems that can gain widespread attention at one time;
4. the "principles of selection," or institutional, political, and cultural factors that influence the probability of survival of competing problem formulations;
5. patterns of interaction among the different arenas, such as feedback and synergy, through which activities in each arena spread throughout the others; and
6. the networks of operatives who promote and attempt to control particular problems and whose channels of communication crisscross the different arenas.

Hilgartner, S. & Bosk, C. 1988  
The Rise and Fall of Social Problems: A Public Arenas Model  
*American Journal of Sociology* 94 (1)

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$$\hat{\pi}_{t+1}^i = \max(\pi_t^i + \alpha(\pi_t^i - \pi_{t-1}^i) + x, 0)$$

$$\pi_t^i = \frac{\hat{\pi}_t^i}{\sum_j \hat{\pi}_t^j}$$

A junk news bubble toy-model

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The popularity ( $\pi$ )  
of each content ( $i$ ) is defined  
at each time ( $t$ ) by

$$\hat{\pi}_{t+1}^i = \max(\pi_t^i + \alpha(\pi_t^i - \pi_{t-1}^i) + x, 0)$$

$$\pi_t^i = \frac{\hat{\pi}_t^i}{\sum_j \hat{\pi}_t^j}$$

A junk news bubble toy-model

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The popularity ( $\pi$ ) of each content ( $i$ ) is defined at each time ( $t+1$ ) by

its value at  $t$       its increment of  $t-1$  multiplied by  $\alpha$

$$\hat{\pi}_{t+1}^i = \max(\pi_t^i + \alpha(\pi_t^i - \pi_{t-1}^i) + x, 0)$$

1. Boost of trending topics

$$\pi_t^i = \frac{\hat{\pi}_t^i}{\sum_j \hat{\pi}_t^j}$$

A junk news bubble toy-model

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$x \sim \mathcal{N}(0, 1/2n)$   
plus a random factor ( $x$ )

$$\hat{\pi}_{t+1}^i = \max(\pi_t^i + \alpha(\pi_t^i - \pi_{t-1}^i) + x, 0)$$

1. Boost of trending topics

$$\pi_t^i = \frac{\hat{\pi}_t^i}{\sum_j \hat{\pi}_t^j}$$

A junk news bubble toy-model

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1. Boost of trending topics

$$\hat{\pi}_{t+1}^i = \max(\pi_t^i + \alpha(\pi_t^i - \pi_{t-1}^i) + x, 0)$$

If negative, the new popularity is set to zero

2. No negative attention

$$\pi_t^i = \frac{\hat{\pi}_t^i}{\sum_j \hat{\pi}_t^j}$$

A junk news bubble toy-model

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1. Boost of trending topics

$$\hat{\pi}_{t+1}^i = \max(\pi_t^i + \alpha(\pi_t^i - \pi_{t-1}^i) + x, 0)$$

2. No negative attention

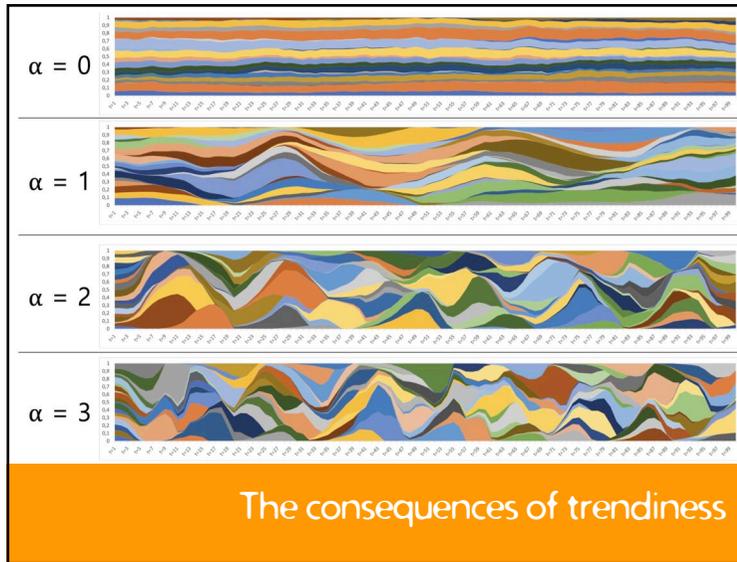
3. Inelasticity of total attention

After increment, the popularity ( $\pi$ ) of each item ( $i$ ) is divided by the sum of all popularities so that they sum is always 1

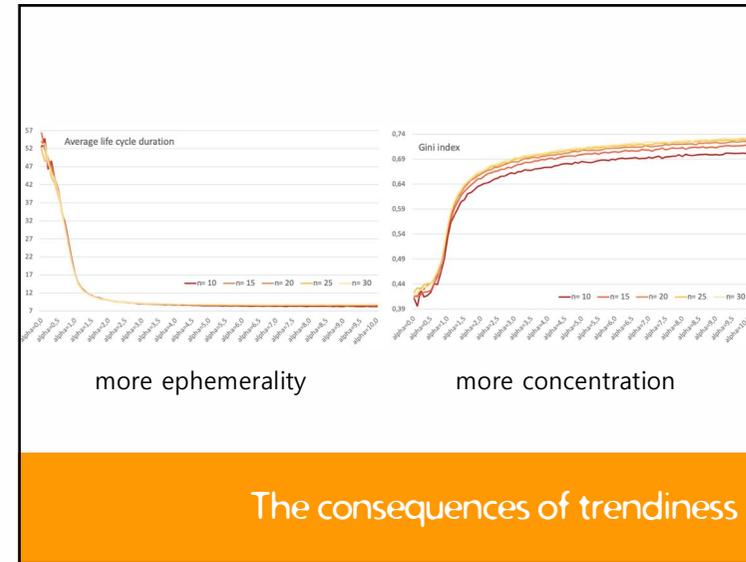
$$\pi_t^i = \frac{\hat{\pi}_t^i}{\sum_j \hat{\pi}_t^j}$$

A junk news bubble toy-model

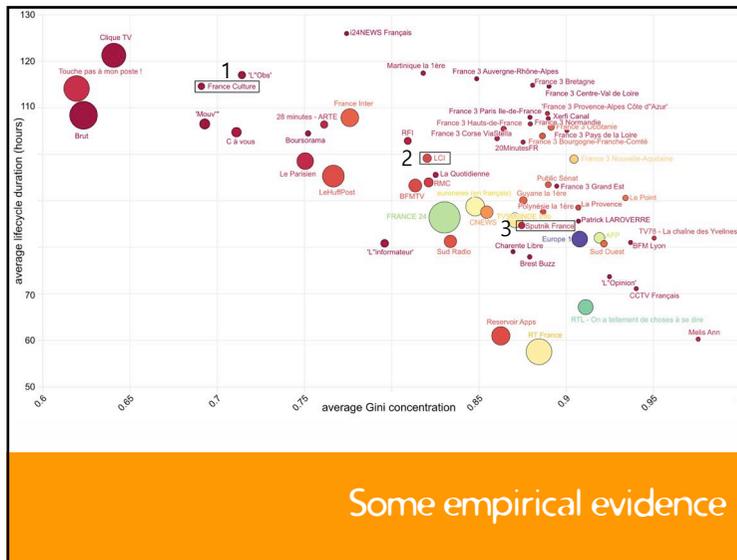
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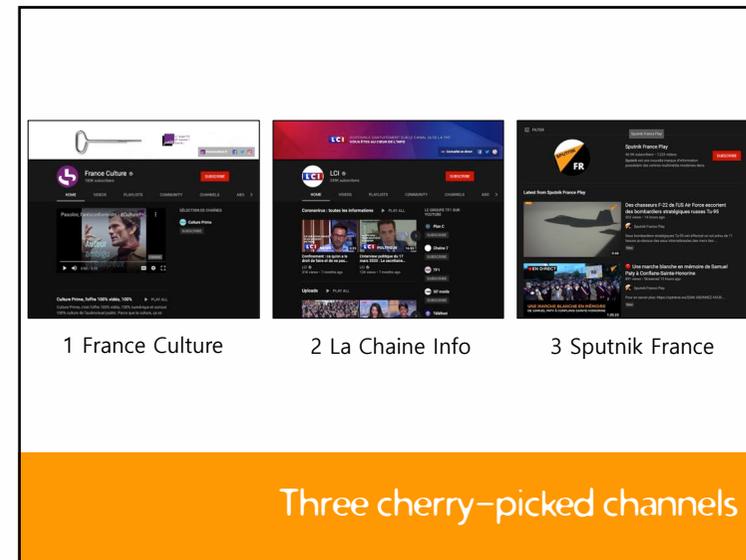
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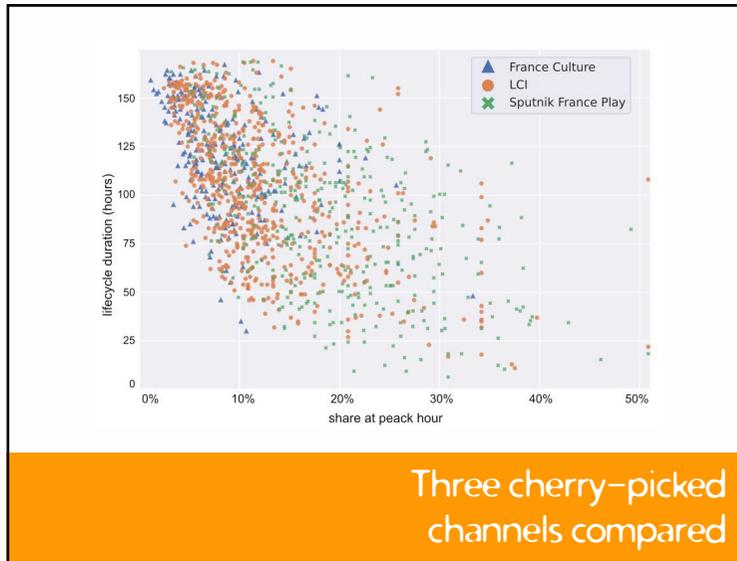
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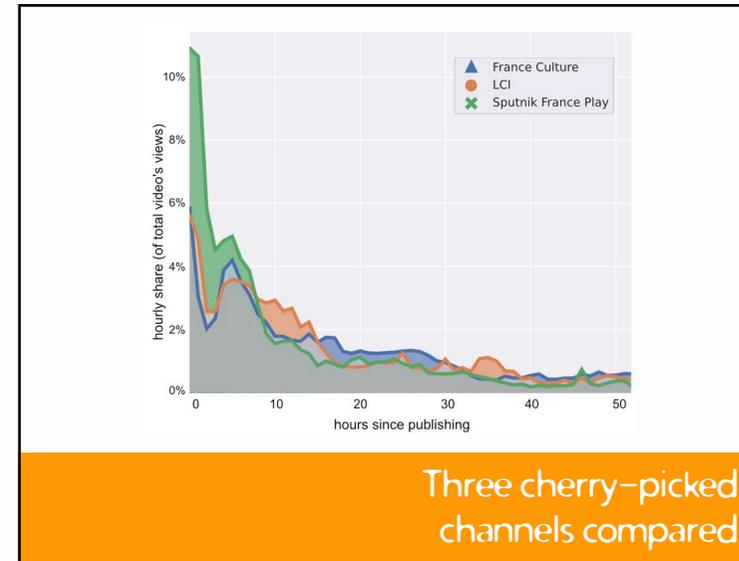


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Three cherry-picked channels compared

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Three cherry-picked channels compared

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McLuhan, Marshall. 1964.  
*Understanding Media: The Extensions of Man*

<p>The psychic and social consequences of the designs or patterns as they amplify or accelerate existing processes.</p> <p>trendiness hype &amp; junk news bubble bubbles</p>	<p>The psychic and social consequences of the designs or patterns as they amplify or accelerate existing processes.</p> <p>media ephemerality &amp; secondary orality</p>
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Media acceleration–amplification and its consequence

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“This conception and organization [contemporary attention economy] has caused the processes of individuation that connect psychic and social life to be short-circuited, resulting in the destructive hegemony of the short term over the long term” (p. 12)

Terranova, Tiziana. 2012.  
*“Attention, Economy and the Brain.”*  
*Culture Machine* 13: 1–19.

attention economy and the curse of ephemerality

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Goody, Jack, and Ian Watt. 1963. "The Consequences of Literacy" *Comparative Studies in Society and History* 5(3): 304–345.

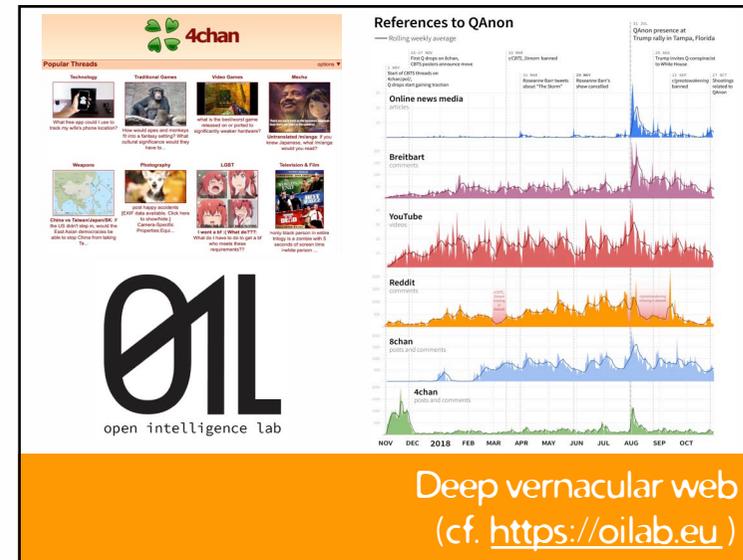
"as Oswald Spengler put it, 'writing... implies a complete change in the relations of man's waking-consciousness, in that it liberates **tyranny of the present** ... the activity of writing and reading is in abstract than that of speaking and hearing' " (p. 330)

Ong, Walter S. J. 1982.  
*Orality and Literacy - The Technologizing of the Word*. London: Methuen.

"Sound exists only when it is going out of existence. **It is not simply perishable but essentially evanescent**, and it is sensed as evanescent. When I pronounce the word 'permanence', by the time I get to the '-pence', the 'perma-' is gone, and has to be gone." (pp. 31, 32).

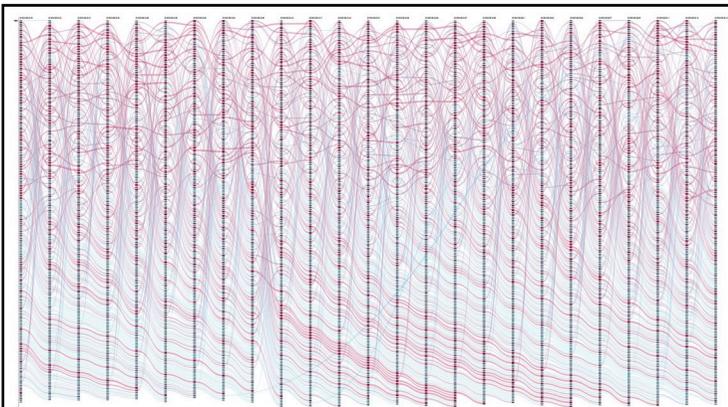
## Oral cultures and the curse of ephemerality

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## Deep vernacular web (cf. <https://oilab.eu>)

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<https://oilab.eu/rendering-legible-the-ephemerality-of-4chanpol>

## 4chan or the ephemerality by design

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Ong, Walter S. J. 1982.  
*Orality and Literacy - The Technologizing of the Word*. Methuen.

"Our understanding of the differences between orality and literacy developed only in the electronic age, not earlier. Contrasts between electronic media and print have sensitized us to the earlier contrast between writing and orality. **The electronic age is also an age of 'secondary orality'**, the orality of telephones, radio, and television, which depends on writing and print for its existence." (p. 2)

"Telephone, radio, television and various kinds of sound tape, electronic technology has brought us into the **striking age of 'secondary orality'**." (p. 133)

"Various kinds of residual orality as well as the 'literate orality' of the **secondary oral culture induced by radio and television await in-depth study.**" (p. 156)

## Secondary orality

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Ong, Walter S. J. 1982. *Orality and Literacy*.

This new orality has resemblances to the old in its [3] **participatory mystique, communal sense**, its concentration on the present moment, and even its [2] **use of formulas**. (p. 133)

- [1] **Redundant or 'copious'**
- [4] **Agonistically toned**
- Empathetic and not objectively distanced
- [5] **Aggregative rather than analytic**
- Additive rather than subordinate
- Close to the human lifeworld
- Situational rather than abstract
- Homeostatic
- Conservative or traditionalist

McLuhan, Marshall. 1964.

*Understanding Media: The Extensions of Man*.

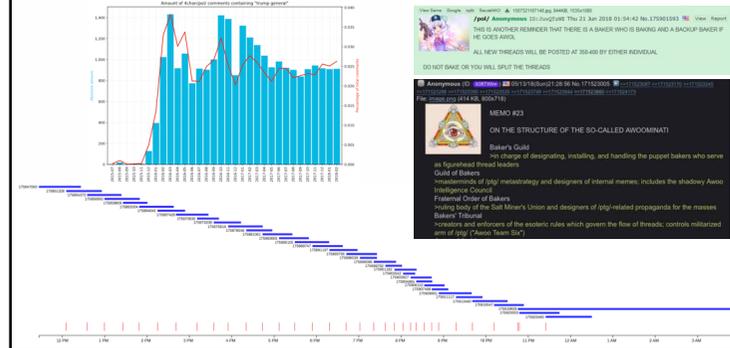
Radio provides a speed-up of information that also causes acceleration in other media. It certainly contracts the world to village size, and creates

[4] **insatiable village tastes for gossip, rumor, and personal malice** (p. 306)

Five among the features of secondary orality

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OILAB, 2018. *The Baker's Guild: The Secret Order Countering 4chan's Affordances*  
<https://oilab.eu/the-bakers-guild-the-secret-order-countering-4chans-affordances/>



[1] Redundant or copious

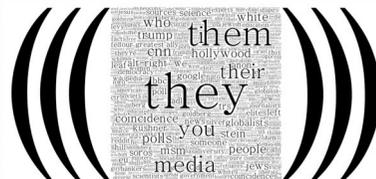
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Hagen, Sal, 2018. *4chan/pol/ Image Walls: Memes*



Tuters M., Hagen, S., 2018. *Who are (((they)))?: On Online Hate, Tasteless Transgression, and Memetic Versatility*

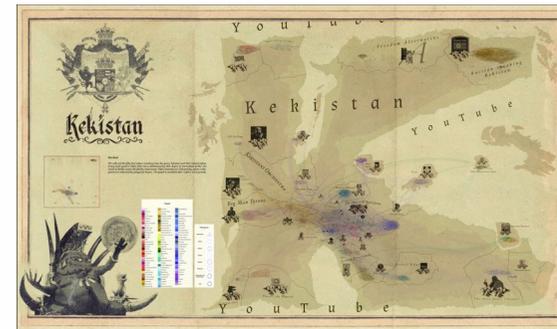
<https://oilab.eu/who-are-they-on-online-hate-tasteless-transgression-and-memetic-versatility/>



[2] Use of formulas

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De Keulenaar, Emillie V., 2018. *The Rise and Fall of Kekistan: A Story of Idiomatic Animus as Told Through Youtube's Related Videos*  
<https://oilab.eu/the-rise-and-fall-of-kekistan-a-story-of-idiomatic-animus-as-told-through-the-youtube-recommender-system>



[3] participatory mystique & communal sense

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Reddit comments mentioning redpill (i.e., red\_pill) per subreddit.

Hagen S., Tuters M. & Wilson, J., 2020. Reactionary Wokeness: How Redpilling Became a Thing on Reddit <https://oilib.eu/reactionary-wokeness-how-redpilling-became-a-thing-on-reddit/>

Stijn Peeters, 2020. Normification of extreme speech and the widening of the Overton window <https://oilib.eu/normification-of-extreme-speech-and-the-widening-of-the-overton-window/>

[4] Agonistic tone

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Muirhead, Russel & Nancy Rosenblum. 2019. *A Lot of People Are Saying*. Princeton: University Press.

The new conspiracism is something different. There is no punctilious demand for proofs, no exhaustive amassing of evidence, no dots revealed to form a pattern, no close examination of the operators plotting in the shadows...

This is conspiracy without the theory. What validates the new conspiracism is not evidence but repetition

[5] Aggregative rather than analytic

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"Breadcrumb" left by Q cited in 4chan posts

How to read it:

- Breadcrumb
- Single posts. When the same color, they belong to the same thread.
- Citation from a post to a breadcrumb. The color is the color of the moment in time the breadcrumb was posted.

Marc Tuters, 2020. The Birth of QAnon: On How 4chan Invents a Conspiracy Theory <https://oilib.eu/the-birth-of-qanon-on-how-4chan-invents-a-conspiracy-theory/>

[5] Aggregative rather than analytic

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Ong, Walter S. J. 1982. *Orality and Literacy*.

I style the orality of a culture totally untouched by any knowledge of writing or print, 'primary orality'. It is 'primary' by contrast with the 'secondary orality' of present-day high-technology culture, in which a new orality is sustained by telephone, radio, television, and other electronic devices that depend for their existence and functioning on writing and print.

HOW TO READ Q'S POSTS

STRINGERS / CODENAMES

DEFINITIONS	String	Alphabet	Signature
Alphabet	String of non-alphanumeric characters (e.g., symbols, punctuation)	Information gathered containing answers (think of Q's questions)	
Sequence	String of alphanumeric characters (e.g., numbers, letters)	None of material related to specific topics	
String	String of alphanumeric characters (e.g., numbers, letters) or symbols		
Code Name	String of alphanumeric characters (e.g., numbers, letters)		
Q	Q	Autoblog	
Q	Q	Q	

\*Secondary\* orality folklore & translation to written cultures

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