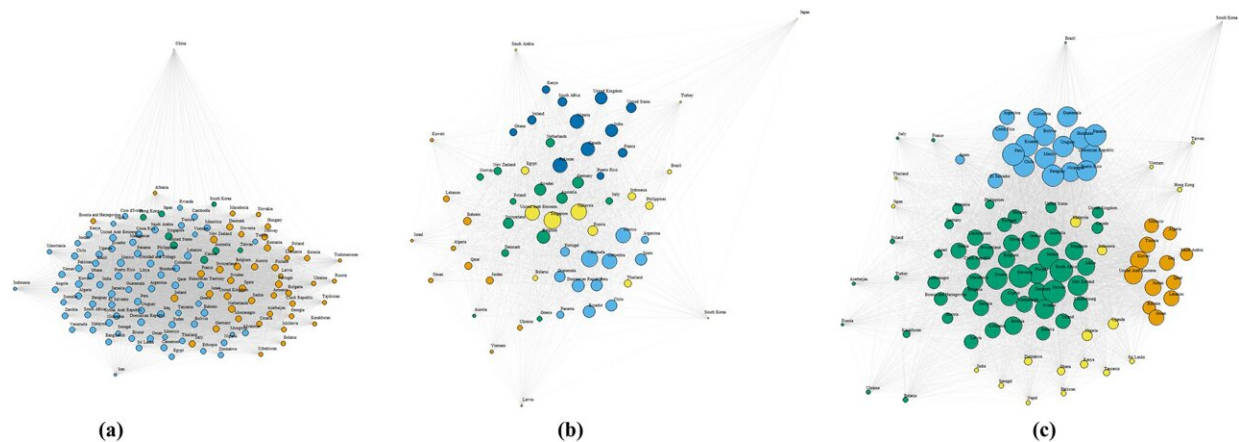


Geography, language dictate social media and popular website usage, study finds

February 9 2023, by Lois Yoksouliau



Visualizations of country similarity networks based on different modalities of online consumption. Credit: *PLOS ONE* (2023). DOI: [10.1371/journal.pone.0278594](https://doi.org/10.1371/journal.pone.0278594)

Since its inception, the internet has been viewed by technology experts and scholars as a way to access information at a global scale without having to overcome hurdles posed by language and geography. However, researchers at the University of Illinois Urbana-Champaign found that how people around the world use the same popular social media platforms and websites remains vastly different based on their language and geography.

A new study by advertising professor Harsh Taneja and journalism

professor Margaret Yee Man Ng builds upon previous research and examines internet consumption across 124 countries through their usage of popular websites, as well as Twitter and YouTube—two globally dominant [social media](#) platforms.

The results of the new study are published in the journal *PLOS ONE*.

"The goal of this work was to develop ways to assess which countries are most like each other in the usage of these popular websites and social [media](#) platforms and to identify factors that explain the similarities," the researchers said.

The team found that language and geography remain the most salient predictors of web usage, and their role on YouTube and Twitter is just as significant as on the wider web. "This is true of the websites they visit and also how they use social media," Taneja said. "Sure, YouTube is the most popular online outlet in most of the world, but people in Nepal on average do not watch the same videos as people in the United States."

The team collected and compared trending internet traffic data and the use of hashtags for the two most popular [social media platforms](#)—Twitter and YouTube—and the 500 most-visited sites using Alexa's Global Rank in the 124 nations studied.

"We chose to work with Twitter and YouTube because although they are both very popular, they attract different audiences, so they capture a very wide slice of internet use," the researchers said.

"Our analysis suggests that global web use is quite heterogeneous, whether it is [website](#) traffic or in how people use Twitter or YouTube, with social media usage being even less similar overall than the usage of websites," Ng said.

Previous studies have shown that the free exchange of information has been hampered by government regulations and protections in nations like Russia and China, for example.

"However, [government regulation](#) is not the only reason for the restrained flow of information," Taneja said. "Our study offers [empirical evidence](#) that people generally prefer content that focuses on their region and in their language."

While using data reflecting trending YouTube videos and Twitter topics via hashtags may not wholly capture internet consumption numbers, it works well as a proxy to gauge consumption on these platforms, the researchers said.

"An important caveat of this work is that we must acknowledge that trending topics are not purely based on consumption," Ng said. "There is some sort of a black box that determines the complete picture, but tracking hashtags is an effective proxy and less biased than methods involving geolocation, for example, because many users do not reveal their location while browsing."

Taneja and Ng said the study is beneficial to researchers studying the global flow of information—and, importantly, misinformation—and for web content producers interested in gaining a larger or more targeted global audience.

More information: Yee Man Margaret Ng et al, Web use remains highly regional even in the age of global platform monopolies, *PLOS ONE* (2023). [DOI: 10.1371/journal.pone.0278594](https://doi.org/10.1371/journal.pone.0278594)

Provided by University of Illinois at Urbana-Champaign

Citation: Geography, language dictate social media and popular website usage, study finds (2023, February 9) retrieved 9 April 2024 from <https://techxplore.com/news/2023-02-geography-language-dictate-social-media.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.