What Balkanizes the Internet? Access Denied or Access Unwanted

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Research Program

We challenge the assumption that state imposed access blockage isolates its citizens on the World Wide Web. We argue that, instead, users prefer culturally proximate content and access blockage only enhances this existing predisposition.

Our preliminary study of shared audience traffic to the world’s top 1000 websites indicated the limited impact of China’s Great Firewall on Chinese user behavior. (See right).

In order to observe sustained effects of access blockage, our ongoing study supports the notion that global web usage from 2009 to 2013 with a focus on multiple countries with varying levels of Internet penetration and access blockage. The initial findings confirm the limited effects of access blockage on user behavior; furthermore, they reveal the rapid rise of the global South on the WWW in the recent years, which may have resulted from various government interventions in these developing states.

Goal: Our research aims to establish the need to link Internet governance research with empirical analyses of user behavior.

What Balkanizes the WWW?

Dominant view: Access denied – state sponsored online filtering

Our view: Access unwanted – user preference based on cultural proximity

Analysis of WWW as an “Audience Network”

Nodes: Media outlets (websites)

Ties: Audience overlap

(greater than expected audience traffic common to two sites)

E.g., a sample of 1000 websites results in a 1000 x 1000 matrix

Ongoing Study

Analysis of multiple time periods and multiple markets

• Incorporates the historical dimension to study sustained effects of access blockage

• Compares four countries chosen based on variations of blockage and culture

User Base Internet Adoption Access Blockage

China Big Expanding Pervasive

Japan Big Stable No evidence

India Small Expanding No evidence/Selective

South Korea Small Stable Substantial

Minimal Impact of Great Firewall

• WWW clusters on geo-linguistic lines

• China as isolated as Japan

• Korea, Poland and Turkey more isolated

• Regardless of being blocked, none of the culturally distant websites made it to the Chinese cluster

• Does cultural proximity drive Internet balkanization more than access blockage?

Inferences

• WWW usage manifests as regional clusters based on language and geography

• Regional clusters form across regions with varying levels of access blockage

• Increase in regional clusters due to inclusion of users from and websites focusing on the global South

Next Steps

• Objective 1: Uncover various assumptions and agendas underlying the creation of various cyber-censorship measures for cross-country comparison

• Objective 2: Explore associations between the evolution of online regional cultures manifested through user preferences, and the role of policies not limited to access blockage

• Objective 3: Design and create a dataset containing relevant contextual variables to facilitate more research endeavors to bridge Internet governance and web use behavior.


Does the Great Firewall Isolate China’s Internet Users?

Analysis of traffic between top 1000 websites globally (comScore, June 2012)