Framing Network Neutrality

Author: John Haltiwanger
Student Number: 6100473
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Supervisor: Richard Rogers
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Email: john.haltiwanger@gmail.com

Introduction

Recently debate has heated up in the United States around a concept called *net neutrality.* Complicating this debate is the fact that net (or network) neutrality has no single definition. While Tim Berners-Lee has defined as "If I pay to connect to the Net with a certain quality of service, and you pay to connect with that or greater quality of service, then we can communicate at that level," (Berners-Lee 2006) the United States' Federal Communications Commission recently defined net neutrality in terms of rules for internet service providers (ISP), which:

1) would not be allowed to prevent any of its users from sending or receiving the lawful content of the user's choice over the Internet;
2) would not be allowed to prevent any of its users from running the lawful applications or using the lawful services of the user's choice;
3) would not be allowed to prevent any of its users from connecting to and using on its network the user's choice of lawful devices that do not harm the network;
4) would not be allowed to deprive any of its users of the user's entitlement to competition among network providers, application providers, service providers, and content providers;
5) would be required to treat lawful content, applications, and services in a nondiscriminatory manner; and
6) would be required to disclose such information concerning network management and other

> practices as is reasonably required for users and content, application, and services providers to enjoy the protections specified in this rulemaking. (FCC 2009)

This list was enumerated in a Notice for Proposed Rulemaking (NPRM) on 22 October 2009. While the full NPRM has been criticized by prominent professors who promote net neutrality for its often vague language (Gross 2009), the rules from the FCC have also been adopted in the language of a bill currently in the US Congress titled the "Internet Freedom Preservation Act of 2009." Because this language provides a proposed legal definition of net neutrality, it can be considered to be the definition around which debate about net neutrality currently revolves.

In addition to the debate going on within the community of net neutrality supporters exemplified by the critical professors, there is also a larger debate occurring between net neutrality's proponents and its detractors. The proponents are largely represented by the Save The Internet campaign and the detractors are represented by the Internet Freedom Coalition, each presenting opposing frames. While it is not established if proponents and opponents fall into liberal and conservative camps, respectively, the opposing frames do fall along traditional narratives for both sides. For instance, the opponents of net neutrality are likely to use such conservative catch phrases as "big government" while the proponents concern themselves with mainstay liberal concerns like "discrimination." This project attempts to interrogate these frames through a cross-spherical analysis of the online news, web, and blog spheres[1]. This cross-spherical analysis is rooted in media-specific analysis in which different media are understood to undertake framing in different ways that, when analyzed in combination, allow frames to be critically engaged. (Entman 1991) As Hayles and Manovich have demonstrated, electronic texts have important medium-specific properties and data surrounding their aggregation carries cultural significance. (Hayles 2004, Manovich 2008)

This issue of net neutrality is crucial due to the implications that net neutrality has on the very substrate of the Internet. As Alexander Galloway argues, the protocol of the net is not the "outcome", but rather the "antecedent […] of distributed behavior." (Galloway 2006) Thus, policies that affect the available outcomes of distributed behavior will necessarily affect the very "second order object" (protocol) that "governs the architecture of the architecture of objects." (Galloway 2006) Galloway's list of the attributes of protocol could very well become shorter or change completely if the *post-hoc* protocol shifts due to drastic rewrites of the underlying mechanisms of the network. Protocological features such as "anti-hierarchy and anti-authority" are directly threatened by the anti-neutrality

1 On the lack of the term "blogosphere" : it is a stylistic choice and the author prefers "blog sphere"/"news sphere" parity than using "news sphere" and "blogosphere", or even worse, "newsosphere" / "webosphere".

movement, which would necessarily impose hierarchy through the privileging and punishing of certain protocols, services, and even web pages by ISPs.

Methods

Defining Frame Terms

"The essence of framing is sizing—magnifying or shrinking elements of the depicted reality to make them more or less salient." (Entman 1991) With this understanding it is important to analyze the frames as they are used. The proponents of net neutrality emphasize the ability of telecommunications companies (in many markets representing duopoly dynamics at best) to discriminate and censor web traffic. The opponent frame, however, sees net neutrality as an excuse for the government to have the power to do the same thing. In this way the debate centers around issues of discrimination and censorship. Each side magnifies the agency attributed to either "big telecom" or "big government," either by emphasizing the tiered Internet that telecom companies have stated as a goal (proponent) or the 'legal content' provisions of net neutrality legislation (opponent). Both sides minimize the agency of their respective agents: net neutrality proponents are generally not linking the 'legal content' provision of their legislation to the looming Anti-Counterfeiting Trade Act and the real potential for government (and ISP) surveillance it reportedly affords. Likewise, net neutrality opponents minimize the agency of telecoms to the point of dishonesty, for instance in the counter on the Internet Freedom Coalition site that asserts there has never been a problem with net neutrality. Given the documented discrimination against BitTorrent traffic by Comcast, this assertion is clearly false.

The ambiguity of some of the frame terms, such as "open," reflects the relatively generic level of framing that the proponent side has engaged in. In other words, the (liberal) proponent frame, despite its success, is framed in words that can be co-opted by the opposing frame (both sides used the term 'Freedom' in the titles of proposed legislation, for instance). This is a characteristic of most liberal frames in the United States.

The frame term lists were generated through reading the Save the Internet FAQ (for the proponents' frame) and the Internet Freedom Coalition's website (for the opponents' frame; their FAQ was "coming soon"). The following list represents the final scrape terms:

Opponent Frame:

- "big government"

- "new regulation"
- nationalization
- socialism
- "quality of service"
- "fairness doctrine"

Proponent Frame:

- "big telecom"
- discrimination
- tiered
- open
- censorship

Because of recent concerns that Google may be personalizing web results (having a definite affect on search results), the web, news, and blog sphere search results were generated through Scroogle. (Sullivan 2009) IssueCrawler tools were utilized in this process, specifically the Google Scraper, Google Blog Scraper, and Google News Scraper. As users have been found to rarely go past the third page of search results, and Scroogle only has options of 20, 50, or 100, all result limits were set to fifty. (Hindeman 2008)

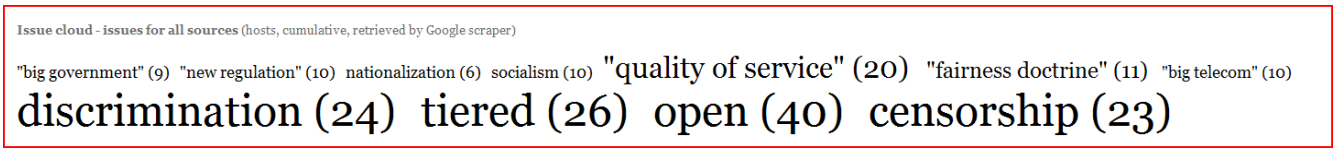
1. The initial search term was inputted into Scroogle. The source was viewed for the page and then copied into the Link Harvester.
2. The resulting URLs and the frame terms were inputted into the Google Scraper. Searches were used limited to the original URLs, as the frame terms included some that would be common in other debates not related to net neutrality.
3. This same process was used again, only with Google News Scraper and Google Blog Search.

Initially, concerns about the fact that the term "net neutrality" is itself an element of the proponents' frame led to adopting "Internet Freedom Preservation Act of 2009" as the initial search query. However, after exploring the search and scrape results, it became obvious that this query would not provide a large enough sample. Google Blog search, for instance, returned only one blog that matched the phrase. For this reason, "net neutrality" was adopted as the initial query instead. This search term is not seen as biasing towards the proponent frame because significant discussion is not found using other search terms. Also, "Internet Freedom Preservation Act of 2009" itself leans towards

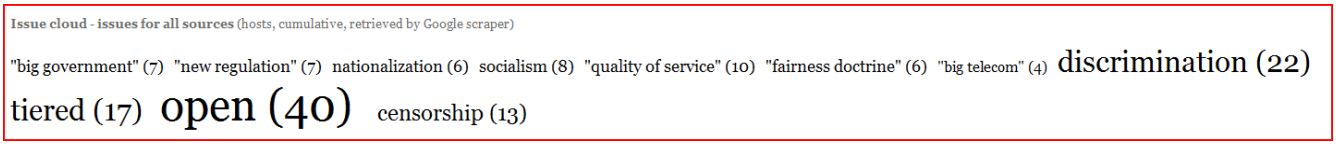
the proponent frame, being their bill. It has been noted by a conservative voice within the blog sphere that the public discussion of net neutrality is happening largely in terms of the proponent frame. (Erickson 2009)

Findings

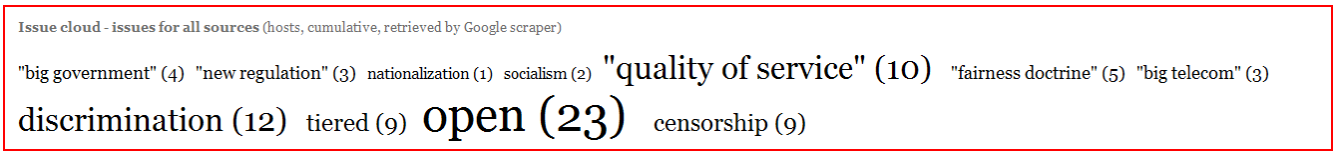
Scroogle Search Term: "net neutrality"



Scroogle Search Term: "news: net neutrality"



Scroogle Search Term: "blogs: net neutrality"



All results are from the "Issue cloud – issues for all sources (hosts, cumulative, retrieved by Google scraper)" in Google Scraper.

Discussion

The results show the debate on net neutrality is currently occurring around the proponent frame. This is significant because American politics generally revolve around conservative framings, so the success of a liberal frame to this degree is notable. There is still significant support for the opponent frame, with "big government" appearing more often than "big telecom" in all but the web sphere

results. Indeed, the opponent frame can not be summarily discounted: it never disappears and its strongest showing is in the Google web sphere. However, it is not uncommon for proponents to use the opponent frame terms when critiquing them, as in the Save the Internet FAQ. Since such critique may be heavily cited by proponents, the Save the Internet FAQ becomes higher in the Google web search results (in-linking) and the opponent frame terms may propagate out to other proponent sites which engage in critique. The same could easily be said of terms such as "open" and "discrimination," which are likely to be critiqued or used in other ways by opponents of net neutrality. This signals a potential problem with a purely statistical analysis of framings, as context is always intrinsically important to framing.[2] With this caveat in mind, an analysis of the results will still be attempted.

Cross-spherical Implications

The web sphere contains the highest degree of utilization of both frames, as all the terms occur at their highest frequency. The proponent frame, however, is clearly dominant. Here the most loaded term in their frame (in relation to its (un)likelihood of use outside the proponent frame), "big telecom," finds itself represented ten times, as opposed four and three in the news and blog spheres, respectively. It is likely that the large frequency of proponent organizations in the search results skews the results to their frame, as the pages at organization websites appear in the result list are often general explanations of net neutrality that utilize the proponent frame.

"Censorship" appears across 23 hosts in the web sphere results. In the news sphere, however, this number drops to 13. None of the opponent terms drop by such a large percentage in the shift between spheres. This reflects the general success and prevalence of conservative framing terms (shared here by net neutrality opponents) in the US news media. Concerns of censorship are either over-represented in the web sphere results, under-represented in the news sphere results, or to degrees of both. In fact, except for the (probably too-)ambiguous "open" and the also problematic "discrimination," the results show the proponent frame shrinking at much larger percentages across all terms than the opponent frame. Since censorship remains editorial in the news sphere[3], as opposed to algorithmic censorship in the web and blog spheres, the likelihood is high that editorial decisions have been made to limit the discussion of key proponent concerns such as "censorship" and corporatism (through the "big telecom" term). The news sphere is also constrained by time in that the search is

2 One option around this would be to make a distribution plot of scrape results across sites which have been codified according to their position on net neutrality (proponent, opponent, neutral). Though such codification would be undoubtedly complex and potentially open to questions of bias, the current visualizations do not allow for incorporation of more complex variable representations than simple frequency.

3 Though it potentially integrates with algorithmic censorship when it is indexed and investigated through Google.

performed only across sources that have appeared in the last 30 days.

The blog sphere is curiously quiet across the spectrum of terms. Proponent terms are again dominant, but all terms see a sharp decline. Since the blog sphere is algorithmically constrained by a blog's derived popularity (utilizing RSS subscription statistics, among other things), it can be reasoned that the most popular blogs (according to Google) support net neutrality. (Lang 2008) This mirrors the prevalence of proponent organizations in the web sphere results, and may imply that the majority of the internet supports net neutrality. They are where the ranking statistics come from, after all. However, a revision of methodology and data visualization practices is necessary before the data can be said to strongly indicate such a position.

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http://tools.issuecrawler.net/beta/scrapeGoogle/prevResultsTagCloud.php?prevResult=../results/google/scroogleNewsNetNeutral.txt