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Mapping the abortion debate on the Romanian Web: Top Google Rankings as measure of popularity or marginality?

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1. Introduction

“We look at Google results and see society instead of Google” (Richard Rogers, “Studying the Web with the Web?”)

Analyzing Google results as snapshots of national web dynamics can provide insights into the status of an issue in national information cultures. This paper examines how the issue of abortion is represented in the Romanian Web sphere in two steps. First it examines the issue in the Romanian web sphere as demarcated by the local Google domain Google.ro, as way to make claims about both the natively digital device and simultaneously about cultural change and societal conditions as seen with the Web. It analyzes the local, global or “glocal” nature of Google results as way to reflect on the effects of Google on the local information culture in relation to the claim that Google is a globalizing machine.¹

In Romania Google has 95% of the Web search market according to Google scholar Siva Vaidhyanathan.² By conceptualizing Google as a gatekeeper and applying a mass-media critique to it, this paper investigates the representation of the issue of abortion in this engine demarcated source set in terms of the types of voices that are recommended in the top fifty results. The overwhelming dominance of pro-life sources in the top fifty results for the query abortion, as well as the fact that an additional “pro-choice” query resulted in more pro-life results determined the measurement of source distance for a list of selected pro-choice or pro-abortion actors in top one hundred Google results. How can the almost exclusive framing of the abortion issue on the Romanian web by pro-life sources in the Google

¹ Weltevrede, Esther. “The Globalisation Machine. Reinterpreting engine results.” *Society of the Query Blog*. 16 Nov. 2009. <http://networkcultures.org/wpmu/query/2009/11/16/esther-weltevrede-the-globalisation-machine-reinterpreting-engine-results/>. Accessed 17 Jan. 2011

² Vaidhyanathan, Siva. “Another Chapter: the many voices of Google.” *The Googlization of Everything*. http://www.googlizationofeverything.com/2009/06/another_chapter_the_many_voice.php#more. Accessed 17 Jan. 2011

demarcated source set be interpreted in relation to the demarcating device? Is Google a gatekeeper prone to bias? Or is it a mediator of network relations which exploits the web's authority mechanism, the hyperlink structure and thus susceptible of manipulation? Has the "pro-choice" query in Google been hijacked by pro-life sources?

The striking result of the first part of this study, namely the dominance of top fifty Google results by pro-life religious sources and the scarce presence of pro-choice or pro-abortion actors, raises questions not only about the online information culture but about culture, politics and society at large as seen with the Web. A deeper investigation of the issue of abortion in the Romanian web with the Issue Crawler, a network mapping software which enables one to locate issue networks on the web, was conducted in order to gain further insights into how the dominance of pro-life religious sources in Google.ro links to the state of the issue in relation to its public and the Romanian society and politics at large. Is the dominance of pro-life sources in the top fifty Google results for the queries "abortion" and "pro-choice" an indication of the prominence and popularity of this position or just the lack of articulation of the issue in pro-choice terms on the web/ the absence of pro-choice sources on the Web?

The study specifically addresses the following questions:

- What are the dominant information sources on the issue of abortion in the Romanian Web space? Are they local, global or "glocal"? How are they ordered? Consequently, is Google globalizing the Romanian information culture on the issue of abortion and what claims about societal conditions can be made?
- What types of voices are recommended in the top fifty results and what is the source distance of "pro-choice" sources or how far from the top results are "pro-choice" sources in the national Web space as demarcated by the local Google domain?
- What insights does the abortion issue network as located with the Issue Crawler in the Romanian web bring into the dominance of pro-life sources in the Romanian web as demarcated by Google? Is the prominence of pro-life sources in Google results an indication of their popularity among their public as one would expect?

1.1. The Abortion Debate and the Status of Abortion in Romania

Abortion was first legalized in Romania in 1957 to protect women's health and was performed by practitioners of the health care system. In 1966, due to the low rate of population growth, president Nicolae Ceausescu introduced the pronatalist policy and banned abortion and contraception. Although intended to increase the birth rate, it shortly led to a fall in birth rate accompanied by an increase in maternal

mortality due to unsafe abortion practices.³ Another consequence was the increase in the number of children placed under institutional care. After the December 1989 revolution, the law banning abortion and contraception was abrogated as emergency health measure to decrease maternal mortality. According to law No. 140 of 5 November 1996, “an abortion can be freely performed during the first 14 weeks of pregnancy so long as it is carried out with the pregnant woman’s consent in a medical institution or surgery approved for that purpose by a physician.”⁴ Whereas this legislative measure led to a fall in maternal mortality and a decrease in the number of children placed under institutional care, it also led to an increase in abortion rate. Romania now has the highest rate of abortion in Europe according to the United Nations. A family planning and sexual education programme has also been implemented by the Romanian Ministry of Health and of the Family.

Abortion as an issue of public debate is a phenomenon specific to the twentieth century. There are two main positions manifested globally on the abortion debate, most popularly known under a terminology that originates in the abortion debate in the United States, namely pro-life and pro-choice. The two positions do not only find themselves into an arguments’ debate but are also subject to a language controversy,⁵ as the terms pro-life and pro-choice are politically charged. The pro-life side maintains that the pro-choice term is unfair and that the fair designation would be pro-abortion, while the pro-choice side maintains that the term pro-life is partisan, as the pro-choice side is pro-life of the mother. Communication professor Mary S. Alexander describes the issue of definitions in the abortion debate in terms of tyranny: “As the pro-choice faction screams accusations of backward thinking, religious fanaticism, and male domination; the Pro-life group counters with cries of baby killers, satan-worshippers, and inhumanity.”⁶ In spite of the language controversy related to the terminology and definitions of abortion, I chose to use the terms pro-life to designate the position that supports the legal prohibition of abortion and pro-choice to designate the position that holds that a woman should have the choice to continue or terminate a pregnancy,⁷ as they align with popular use and understanding.

³ Stephenson, Patricia, Marsden Wagner, Mihaela Badea, and Florina Serbanescu. “Commentary: The Public Health Consequences of Restricted Induced Abortion- Lessons from Romania.” *Public Health Policy Forum*. 82.1 (October 1992). p. 1329

⁴ “Romania - Welcome to the United Nations: It's Your World.” *United Nations*. www.un.org/esa/population/publications/abortion/doc/romania.doc. Accessed 17 Jan. 2011

⁵ Youngblood Herring, Mark. *The pro-life/choice debate*. Greenwood Publishing Group, 2003. p. xvi

⁶ Alexander, Mary S. *Defining the Abortion Debate. ETC.: A Review of General Semantics* 50 (1993). p. 272

⁷ “Abortion Debate.” Wikipedia. http://en.wikipedia.org/wiki/Abortion_debate. Accessed 13 Jan. 2011

2. Literature review

2.1. Digital Methods: Diagnosing Culture, Society and Politics with the Web

This study is in line with a third phase of Internet research, called digital methods, proposed by Richard Rogers in his inaugural lecture as chair of the New Media & Digital Culture at the University of Amsterdam, whereby Web-based tools which exploit the specificity of natively digital objects and devices are used to analyze accounts of reality in its various cultural, societal and political forms, with the Web. There are two shifts in this research program compared to the previous two phases of Internet research that Rogers identifies, namely the Internet as cyberspace, as a realm apart, and the virtual methods program of the UK based *Virtual Society?*, concerned with debunking the myth of cyberspace as a realm apart from the “real” and measuring the impact of the Internet on society and users.⁸ The first shift is methodological. In contrast with the digitized methods used by the *Virtual Society?* program, which were imported from the social sciences and the humanities to conduct empirical studies of Internet users, Rogers proposes a set of digital methods that follow the medium and appropriate its natively digital objects such as the link or the website, and its devices such as recommender systems and search engines. The second shift concerns the status given to the Web in this research program. Whereas in previous phases the Internet was an object for the study of online culture, in the digital methods program online dynamics become a dataset studied to make claims not only about online culture but about culture and society at large,⁹ thus moving beyond the divide between the real and the virtual that was the focus of the second phase of Internet research. Whereas virtual methods studies relied on non-web data to support web studies, with digital methods the relation between the online and the ground is reversed, the online becoming the baseline against which societal conditions can be assessed, for which Richard Rogers proposes the term “online groundedness.”¹⁰ One must be aware of at least one limitation which impacts on the claims that can be grounded by following the medium as demarcated by its devices and the tools built on top of them, namely that digital methods simultaneously exploit natively digital devices such as search engines are subordinate to their protocols.

⁸ Rogers, Richard. *The End of the Virtual: Digital Methods*. Amsterdam: Amsterdam University Press, 2009. p. 6

⁹ Ibid. p. 8

¹⁰ Ibid. p. 9

2.2. Google as Gatekeeper of the National Web: The Effects of Google on Local Information Cultures

Demarcating the national web with Google

Whereas before the 2000s the Internet was thought of as a placeless space, a global space, since 2000, year identified as marking the symbolic end of cyberspace as a lawsuit against Yahoo resolved in requesting the company to use software to block access to Yahoo's Nazi memorabilia pages to Web users located in France, a series of studies have shifted the conceptualization of the Internet as a global, universal medium to the pluralisation of the Web by means of national manifestations of it. In "Internet, Globalization and the Politics of Language," Geert Lovink theorizes the "national turn"¹¹ as the crystallization of national Web spaces around a shared language.¹² Interactive communications professor Alex Halavais theorizes the national turn in terms of national borders being inscribed in communication flows as shown by the geographic distribution of hyperlinks.¹³

Search engines such as Google demarcate and order information spaces nationally and serve content according to the location of the user by means of technical indicators of location such as IP-addresses, top-level domains, Whois information, and Geo-to-IP technologies. This study takes a medium specific approach to the national turn and builds on Google's demarcation of national webs by means of the local Google domains. In line with the Digital Methods Initiative research on the issue,¹⁴ by following the medium and leaving its ruling device, Google, as primary access point to the web, to define the national web sphere, it conceptualizes the national Web as an engine demarcated source set.¹⁵

In an article by Google's inventors Larry Page and Sergey Brin, "The PageRank Citation Ranking: Bringing Order to the Web," the PageRank algorithm is specified as the global ranking system for all webpages: "PageRank is a global ranking of all web pages, regardless of their content, based solely on their location in the web's graph structure."¹⁶ One can derive from this statement that Google is a globalization machine of information culture.¹⁷ Does this claim stand in the face of

¹¹ Weltevrede, Esther. *Thinking Nationally with the Web: A Medium-specific Approach to the National Turn in Web Archiving*. Unpublished ms.

http://wiki.digitalmethods.net/pub/Dmi/DmiSummer09/weltevrede_national_webs.pdf.

Accessed 14 Jan. 2011

¹² Lovink, Geert. "Internet, Globalization and the Politics of Language." 2009. Pre-publication.

¹³ Halavais, A. M. C. "National Borders on the World Wide Web." *New Media & Society*. 2.7 (2000): pp. 7-28

¹⁴ Weltevrede. *Thinking Nationally with the Web*. p. 31

¹⁵ "The Nationality of Issues. Repurposing Google for Internet Research." 13-17 July 2009. *Digital Methods Initiative*.

[http://wiki.digitalmethods.net/Dmi/DmiSummer09?sortcol=table;table=up#The Nationality of Issues](http://wiki.digitalmethods.net/Dmi/DmiSummer09?sortcol=table;table=up#The_Nationality_of_Issues_Repurp)

[Repurp](#). Accessed 13 Jan. 2011

¹⁶ Page, Lawrence, Sergey Brin, Rajeev Motwani and Winograd, Terry. *The PageRank Citation Ranking: Bringing Order to the Web*. Technical Report. Stanford InfoLab, 1999. p. 15

¹⁷ Weltevrede. "The Globalisation Machine. Reinterpreting engine results."

the national turn in organizing the Web's information by means of local Google domains? The empirical study called "The Nationality of Issues. Rights Types," conducted by the Digital Methods Initiative, shows that local information cultures are to various degrees globalized, localized or "glocalized": "The shared as well as the culturally specific may be read in Google results."¹⁸ The project "Local and Global Information Sources," further shows that when organizing information spaces around issues, Google underprivileges the underlinked sources even when they were local, thus having globalizing effects.¹⁹

What criteria would one use to define the status of a source as local, global or glocal? Whereas the previously mentioned project defines the status of a source in terms of where the page is based geographically by using the address of the website's registrar to indicate where its owner is based, I define globality, glocality or locality of a webpage based on cultural specificity rather than location. A global source could be a source whose content is related to issues of global significance and remains unchanged regardless of the Google domain. A local source could be defined in terms of the top-level domain ".ro," in terms of language or in terms of its cultural specificity. The first two criteria are shared with glocal sources as well. Barry Wellman defines glocalization as a "neologism meaning the combination of intense local and extensive global interaction."²⁰ A glocal sources thus could be a global source configured or served locally, an internalized or acculturated global source by means of translation in local language and/or adaptation of content to cultural specificity. The different language versions of Wikipedia are a typical example of glocal Web sources.

Ordering local information spaces and mass-media critique of Google

The power law dynamics of the hyperlink structure of the Web are an authority mechanism which is exploited by Google. Google organizes information based on the principle of algorithmic authority, which "refers to the methods enshrined in ordering devices that use the networked mechanisms of authority on the web, such as the hyperlink structure."²¹ From this point of view, according to PhD candidate Esther Weltevrede, Google can be conceptualized as gatekeeper or mediator of network relations."²² The kind of claims that can be made about dynamics of cultural and social issues when they are being studied with the web sphere as demarcated by its ordering devices such as Google, depend on how it is being conceptualized. As gatekeeper, Google is being compared with mass-media in terms of its compliance or lack thereof with mass-media principles of organizing information in a

¹⁸ Weltevrede. *Repurposing Google for national web research*. Unpublished ms. p. 15

¹⁹ *Ibid.* p. 22

²⁰ Wellman, Barry. "Little boxes, glocalization, and networked individualism." *Digital Cities II: Computational and Sociological Approaches*. M. Tanabe, Peter van den Besselaar, & T. Ishida (eds.) (pp. 10–25). Berlin: Springer, 2002. p. 13

²¹ Weltevrede. *Repurposing Google for national web research*. pp. 4-5

²² *Ibid.* p. 5

liberal theory fashion: editorial principles, covering all sides of a story, source plurality and diversity.²³ In this info-political critique fashion, engine results are being analyzed in terms of what they include or exclude, as well as the kind of story they tell about an issue.

By applying traditional media critique to Google, Rogers treats search engines as authoring devices and reveals that search engine results do not cover a diversity of viewpoints and voices but that search engines return familiar and established results.²⁴ The move from directories as expressions of the egalitarian nature of the web to engines as ordering devices, implies in the tradition of mass-media critique the measuring not only of the presence or absence of a source but also its distance from the top of the web, given that most of the users do not go past the first page of results. In the project "Climate change Sceptics," the Digital Methods Initiative analyzed the presence and ranking of climate change sceptics in Google results as way to identify if the web's information ordering devices follow mass-media conventions of presenting both sides of a story or are distinct from it. The project showed that sceptics are on top of the news in traditional media, but that there is a distance between the sceptics and the top of the search engine returns.²⁵

Moreover, the types of sources recommended for a query can be seen as representative of the status of maturity of an issue, thus turning Google into a "status-authoring device."²⁶ This type of research in which algorithmic authority as the mechanism to organize information around the principle of popularity is compared with traditional media editorial principles is part of a larger critique of Google known as "googlization." The term "googlization" was introduced in 2003 to describe "the growing "creep" of the media company's search technologies and aesthetics into more and more Web applications and contexts, not to mention tradition-rich institutions such as the library."²⁷ This study builds on an understanding of googlization as "analysis of Google as mass-media."²⁸

2.3. Issue networks: Studying Dynamics of Cultural and Social Issues with the National Web

The second position in the authority debate on the web organized around search engines which Weltevrede identifies, is the conceptualization of the Google algorithm as a reflection of network processes. The power law dynamics of the hyperlink structure of the web are being reinforced and deepened by Google, thus

²³ Rogers, Richard. "The Googlization Question, and the Inculpable Engine," *Deep Search: The Politics of Search Engines beyond Google*. K. Becker and F. Stalder (eds.). Edison, NJ: Transaction, 2009. pp. 176-171

²⁴ Rogers. "The Googlization Question, and the Inculpable Engine." p. 176

²⁵ "The Engine." *Digital Methods Initiative*.
http://www.digitalmethods.net/Digitalmethods/TheOrderingDevice#Source_distance. Accessed 14 Jan. 2011

²⁶ Rogers. "The Googlization Question, and the Inculpable Engine." p. 177

²⁷ Salkever (2003), Batelle (2003). Quoted in Rogers. "The Googlization question, and the Inculpable Engine." p. 173

²⁸ Rogers. "The Googlization Question, and the Inculpable Engine." p. 173

configuring network relations away from the principles of equality, inclusiveness and consensus-drive of the web imagined as a public sphere, inspired by its end-to-end design principle, towards a “representative democratic promise based on the principle of the majority rule.”²⁹ Political scientist Matthew Scott Hindman argues that the number of links pointing to a site is determinant of the site’s visibility and popularity as he considers “link density to be an effective proxy for online audience share.”³⁰

Another medium-specific approach which considers the hyperlink structure of the web and the linking patterns of actors on the web as indicators of relations and networks around issues, to enable making claims about societal, cultural and political dynamics, is locating an issue network. An issue network is defined by a tool which follows the medium’s hyperlink structure, the Issue Crawler. The tool will be described in the Method section.

As result of a series of empirical studies of online communication on the web, Marres and Rogers found that online communication does not take the shape of public debate but of issue networks. The authors define an issue-network on the web as “a heterogeneous set of entities (organisations, individuals, documents, slogans, imagery) that have configured into a hyperlink network around a common-problematic, summed up in a key-word.”³¹ Going from the micropolitics of online information flows and networks to the macropolitics of society and governance, supported by the discovered origins of the term “issue-network” in the 1970s critique of non-governmental organizations for the way issue-activists and issue-experts were increasingly influential in defining political affairs though failing to represent and be accountable to the public,³² the authors argue that public involvement in terms of legitimacy and accountability be supplemented with publics being involved in politics by means of issue networks.³³ Marres and Rogers remark that hyperlink analysis is a good method for reflecting how publics may or may not be organized by issue networks, as web networks are indicative of the stage of making an issue public.

How is the public organized by issue networks conceptualized? John Dewey in *The Public and its Problems*, defines the public as “a set of actors jointly affected by a problem, for which no existing institution or community is currently providing a settlement.”³⁴ In their empirical studies of issue networks on the web, Rogers and Marres identify often a difference between actors that are part of the network (“carriers of the issue”) and actors affected by the issue (“the issue’s subjects”), with

²⁹ Weltevrede. *Repurposing Google for national web research*. p. 8

³⁰ Hindman Matthew. *The Myth of Digital Democracy*, Princeton: Princeton University Press, 2008. p. 35

³¹ Marres, Noortje and Richard Rogers. "Recipe for Tracing the Fate of Issues and their Publics on the Web." *Making Things Public: Atmospheres of Democracy*. B. Latour and P. Weibel (eds.). Cambridge, MA: MIT Press, 2005. p. 7

³² Ibid. p.4

³³ Ibid. p. 5

³⁴ Dewey, John. *The Public and Its Problems*. (1927) Athens: Swallow Press, Ohio University Press, 1991. Marres, Noortje and Richard Rogers. "Recipe for Tracing the Fate of Issues and their Publics on the Web." p. 10

the latter not always being part of the issue network. Even in this case, the public is still considered to be involved in the issue network if the interests or concerns of the issue's subjects or affected actors are captured by the way the issue network articulates the issue. Thus, the definition or framing of an issue is essential to attracting public involvement in issue networks.

Inspired Rogers and Marres' findings about the web in their empirical studies, as not being configured around consensus or rational debate and notions of actors and public, but around issue-fiction, contestation, and conflict over the meaning and configuration of issues, Jodi Dean proposes to change the way we think about how the internet organizes or reflects dynamics of issues of public interest from the idea of the Internet as a public sphere, a "space within which people deliberate over matters of common concern, matters that are contested and about which it seems necessary to reach a consensus,"³⁵ to conceptualizing the Internet as a "site of conflict over the meaning, practice, and shape of the global,"³⁶ and, I would add, the local. In her PhD dissertation, Marres argues that "the failure to effectively contain issues in current institutional frames is a condition for public involvement in politics."³⁷ In this sense, an issue that public institutions are failing to address can be shifted to the web as space of contestation. Does the successful shift of issues to the web as space of contestation of their articulation by public institutions, and their prominence in engine results as ordering devices of those spaces, imply public involvement in an issue or can an articulation of an issue be dominating the top of engine rankings due to lack of concern for contesting this dominant articulation according to the web due to the marginality of the issue for society and politics?

3. Method

3.1. Abortion Information Space as Demarcated and Ordered by Google

The default Romanian domain of Google, Google.ro, which allows return of both local and non-local sources, as opposed to the option "Pages from Romania," which limits results to Web pages located in Romania, was queried with the term "abortion" in the local language. When designing a query one must keep in mind that issue of abortion can be defined by a wide range of sub-issues: the two main positions of the debate on abortion: pro-life and pro-choice, but also abortion rights, unwanted pregnancy, family planning, abortion procedures, clinics and pills, each of them expected to result in different actors in the Google listing. By limiting my queries to the general "abortion", "pro-life", "pro-choice" and a series of other queries which could be related to the pro-choice position such as women rights, I am in fact

³⁵ Dean, Jodi. "Why the Net is not a Public Sphere." *Constellations* 10.1(2003). p. 95

³⁶ Ibid. p. 105

³⁷ Marres, Noortje. *No issue, no public: democratic deficits after the displacement of politics*. Dissertation. p. 137

mapping issue activism. While there are Hungarian and German language versions of Google.ro as well, the findings of this study are based on the Romanian language version of Google.ro. The results were set to 100 per page and stored as complete pages (Annex 1). An additional query motivated by the findings resulting from the first query was made to identify specifically the “pro-choice” sources in the Romanian domain of Google. Whereas in Google.com the query “pro-choice” returns results related to abortion, in Google.ro the query “pro-choice” in the local language returns only fourteen results related to abortion and the rest related to choices of products or political choices. To make the query more specific, the term “abortion” in the local languages was added to the query. “Pro-choice” can be translated in two ways in Romanian as “*pro-alegere*” and “*pentru alegere*.” The query “pro-alegere avort” returned more results than “pentru alegere avort” (36.600 results as opposed to 710 results), which determined the choice of the results of the first query option for analysis. In the case of both queries, results that belong to other spheres (news, blogs, images, videos) were excluded from the analysis. Results seven and eleven for the query “abortion” in Google.ro have been excluded from the analysis as they represented a blog and videos respectively. For comparison in terms of issue maturity, the query “abortion” was performed in Google.com as well. Personalization of search as well as the fact that the queries were done from an IP address located outside Romania can influence the dataset and thus the claims made based on it. Another significant limitation of this method is formulated by Weltevrede: “The question then becomes how to use the insight that Google’s PageRank method reflects social and cultural scientific methods when studying society? How to use this data when it is recognized that the methods organize data for social and cultural scientific research?”³⁸

3.2 Source Distance Research Method

To measure the presence or absence and the prominence of pro-choice sources in Google search engine results and their distance from the top of the web for the query “abortion,” a list of pro-choice actors was identified. Several queries related to the theme “pro-choice” were run in the Romanian version of Google (default settings) as well as in Google.com due to the difficulty to identify pro-choice sources in the Romanian web. These queries were designed in the format: “human rights”/ “women rights”/ “feminism”/ “family planning” + abortion (+ “Romania” when the query was done in Google.com). Additional queries used to identify pro-choice actors were: “abortion legislation” and “pro-abortion.”

Many of these queries returned among top results the by now well-known pro-life sources. The pro-choice actors were eventually identified from a list of national and international organizations which signed a letter addressed to the Romanian parliament in 2010 which pleaded against two proposals tabled by the Sub-Committee on the Criminal Code and the Criminal Procedure Code, aiming at

³⁸ Weltevrede. *Repurposing Google for national web research*. p. 8

criminalising therapeutic abortion conducted after the twenty-fourth week of pregnancy and the proposal to grant fetuses the status of personhood after the twenty-fourth week, on the grounds of the dangerous effects on women's health and rights that the adoption of such provisions could have, which would have made Romania the only Member State of the European Union that prohibited abortion in such situations in which the pregnant women's health and life were endangered.³⁹

The national actors that were identified, mainly non-governmental organizations were: *Societatea de Educatie Contraceptiva si Sexuala, Centrul Euroregional pentru Initiative Publice, Agentia de Dezvoltare Comunitara Impreuna, Alianta Civica a Romilor din Romania, Asociatia ACCEPT, Centrul Parteneriat pentru Egalitate, Centrul pentru Politici si Servicii de Sanatate, Centrul FILIA, Fundatia Proiectul de Educatie Civica si Dezvoltare Academica, Galati EU-RO Consult, Grupul Roman pentru Apararea Drepturilor Omului, Population Service International.* Another pro-choice actor, a member of the parliament identified in the previous queries was added to this list: Cristina Ancuta Pocora. The list was entered into the Google Scraper, a Digital Methods Initiative tool which batch queries Google for the resonance of a particular term, or a series of terms, in a set of websites.⁴⁰ The Google Scraper searched the top 100 results for the query "abortion" in the Romanian web (default settings) for each pro-choice actor.

3.3 Mapping the Abortion Issue Network with the Issue Crawler

The Issue Crawler⁴¹ is a network mapping software created by the Govcom.org Foundation, which identifies and visualizes the location of an issue-network by following hyperlinks from a list of starting points. To locate an issue network, the scenarios of use on the Issue Crawler website advise to create a list of URLs which provide a good overview of the topic, either by using top Google results returned for the issue or by using expert lists. The list of starting points was compiled on the principle of covering all sides of the issue activism. This was done by putting together the top results for the query "abortion" in the Romanian Google domain, that is the pro-life actors, and the list of pro-choice actors identified in the previous step, source distance research. This resulted in the list of 25 starting points below:

<http://accept-romania.ro>

<http://www.cpss.ro>

<http://initiativepublice.blogspot.com>

<http://www.cristinapocora.ro>

<http://www.acrr.ro>

<http://www.ecpi.ro>

³⁹ "Memoriu Comun Depus de ECPI la Parlament." ECPI. 5 May 2009.

<http://www.ecpi.ro/Advocacy.php>. Accessed 17 Jan. 2011

⁴⁰ Google Scraper. Digital Methods Initiative.

<http://tools.issuecrawler.net/beta/scrapeGoogle/>. Accessed 17 Jan. 2011

⁴¹ Issue Crawler. Govcom.org. <http://issuecrawler.net/>. Accessed 17 Jan. 2011

http://www.adevaruldespreavort.ro	http://www.grado.org.ro
http://www.agentiaimpreuna.ro	http://www.orthodoxphotos.com
http://www.avort-sarcina.ro	http://www.provita-craiova.com
http://www.avort.ebul.ro	http://www.psi.ro
http://www.avort.info	http://www.romania-moldova.org
http://www.avort.md	http://www.secs.ro
http://www.avort.net	http://www.sfatulmedicului.ro
http://www.avort.ro	http://www.sfaturiortodoxe.ro
http://www.centrulfilia.ro	http://www.vreusaafllu.ro
http://www.cpe.ro	

The crawler was set as follows: “privilege starting points (off); analysis ‘by page’; iterations of method: 2; crawl depth: 2.” With this settings, the tool captures the outlinks from all the web pages of the URLs listed as starting points, and keeps and analyzes the ones that have at least two of the starting points in common, repeating the process two times. A limitation of this method of defining an issue network is that hyperlink exchange gives a limited perspective on issue-networking, as link exchange is not the only way in which actors express relations or alliances on the web. Further analysis is required to identify the type of relations that hyperlinks express. To identify how the issue network defines its issue, the actor websites as well as the information sources linked to by the network were analyzed in terms of issue language and addressed subissues.

4. Findings

4.1. Pro-life Sources Dominate the National Web Space

The top ten results for the query “abortion” in Romanian except results five and six are pages of the Website [avort.ro](http://www.avort.ro) and [avort.net](http://www.avort.net), “pro-life” advocacy sources associated with a local branch of the non-governmental and non-profit organization “PRO-VITA - pentru născuți și nenăscuți” (in translation: “PRO-VITA – for the born and unborn”), founded by a priest and affiliated with the movement “Salvarea Vietii Sf. Brancoveanu” (in translation “The Saving of the life of Saint Brancoveanu”), which advocates against abortion in line with Christian-orthodox principles. Results five and six are a website dedicated to women and one about the educational

system in Romania respectively, which feature articles that provide medical recommendations in the case of pregnancy and abortion. The top fifty results are local, that is coming from local sources and dominated by “pro-life” representations of the issue in the light of the local Christian-orthodox culture, with the exception of a few medical information sources. The first non-local source is a glocal one, the ro.wikipedia.org entry for “abortion,” ranked twenty-fourth. The first institutionalized “pro-choice” source in Google.ro is surprisingly avort.md, the Website of a non-profit and non-governmental organization named “The Reproductive Health Training Center,” based in Moldova (result twenty-six). The first commercial results appear on page five: the website of a pharmacy which gives information about abortion pills and a medical centre that offers medical assistance in using abortion pills.

The disproportionate representation of voices on abortion on Google.ro motivated an additional query aimed to identify “pro-choice” actors besides the few commercial medical ones returned by the first query in the Romanian Google domain, which resulted in an intriguing finding. For the query “pro-choice” abortion” in Google.ro the top ten returned results are predominantly critical responses of “pro-life” actors to “pro-choice” arguments.

4.2 There is a distance between pro-choice sources and the top of the Google results

Few of the identified pro-choice sources are mentioned in the top engine results. The most often mentioned pro-choice sources in the top ten results are: *Societatea de Educatie Contraceptiva si Sexuala*, and *Agentia de Dezvoltare Comunitara Impreuna*. The most often mentioned pro-choice sources (setting: “URLs, cumulative”) in the top hundred Google results for the query “abortion” are: *Asociatia ACCEPT* (358), *Agentia de Dezvoltare Comunitara Impreuna* (107), *Centrul Parteneriat pentru Egalitate* (174), *Alianta Civica a Romilor din Romania* (114), *Cristina Ancuta Pocora* (105), *Societatea de Educatie Contraceptiva si Sexuala* (269). The mentions however generally do not refer to abortion but to other main issues that the non-governmental organizations are involved in. The sources that mention the pro-choice actors are most often information sites for women or students (eva.ro, desprecopii.com, calificativ.ro, etc.) forums (forum.softpedia.com), news sites (hotnews.ro, gandul.info, antena3.ro, 9am.ro, etc.), medical information sites (sfatulmedicului.ro, romedic.ro, etc.) news aggregators (ziare.com), information sites about prevention of sexually transmitted diseases (prezervativ.ro).

Pro-life sources much more often than not do not mention pro-choice actors and when they do these are mentioned very infrequently, one or two times. The only pro-life sources that mention pro-choice actors are: websites with writings about orthodox religion (sfaturitodoxe.ro, ortodoxmedia.com), pro-life documentation sites (adevaruldespreavort.ro), religiously motivated electronic publications (ro.altermedia.info), pro-life activist organizations (provita.ro, provitabucuresti.ro).

4.3 Pro-choice Actors are Absent from the Abortion Issue Network

Twenty-five starting points were introduced into the Issue Crawler. An additional twenty-five websites that deal with the issue have been discovered so it can be concluded that an issue-network has been located. The starting points privileged the local but the issue map shows that the local network has international ties with US non-profit religious (orthodox) pro-life activist, advocacy or educational organizations. The Romanian organizations link to international organizations but the latter do not link back. The network defines its issue in relation to some pro-life international news sources as well as local orthodox doctrine information websites.

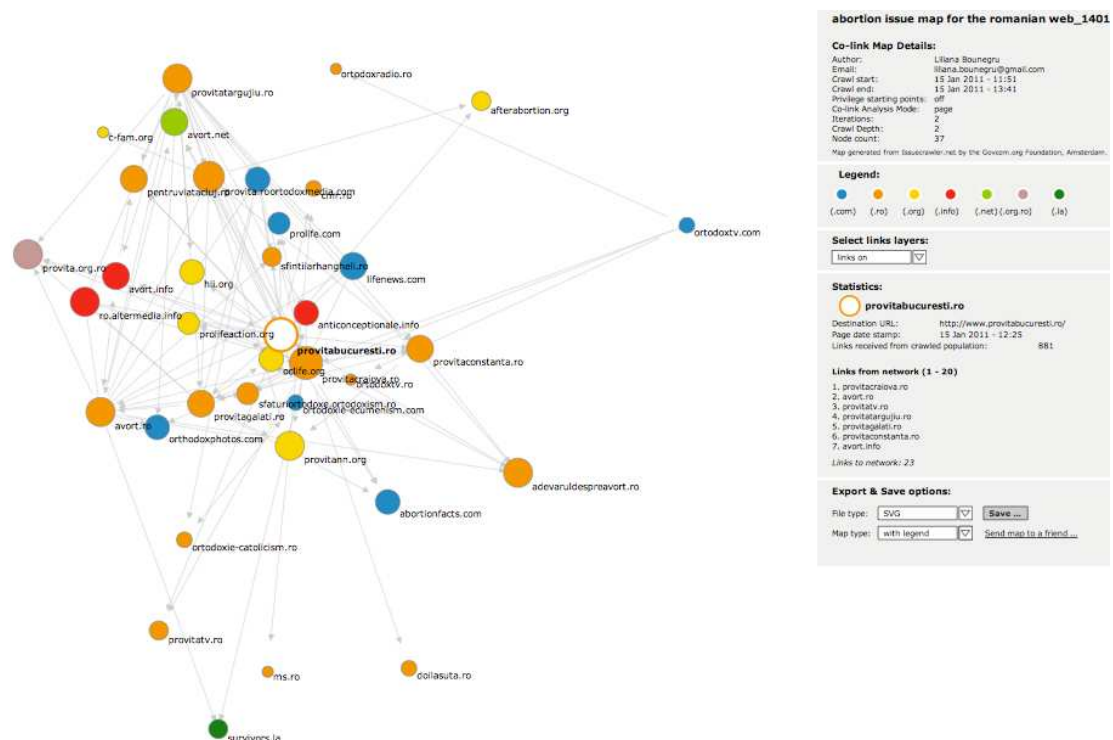


Figure 1: Abortion issue network map

In terms of composition of actors, the network is composed in majority of pro-life non-profit most often religiously motivated organizations, most of them part of the Pro-Vita association, but also centres for training and counselling associated with the Orthodox Church. The most central points in the network and the highest ranked are two regional organizations in the Pro-vita association. The only two pro-choice or pro-abortion actors on the issue map, namely Colegiul Medicilor din Romania (The Association of Romanian Physicians) and a government body, the Health Ministry are very far from the centre of the network and only link to each other. None of the pro-choice sources that have been listed as starting points (fourteen out of the twenty-five starting points), appears on the issue map, which means the websites do not acknowledge each other by way of hyperlinks and are also not linked by their opponents.

Below are the subissues identified by analyzing actor websites as well as the information sources linked to by the network in terms of issue language:

- defending born and unborn children;
- rights of medical personnel and pharmacists to refuse due to religious, ethical or moral considerations practising anti-life procedures;
- destroying effects of abortion on physiological, psychological and spiritual health;
- emotional, material, financial and educational support;
- abortion health risks;
- shocking aspects of abortion procedures;
- rights of the unborn child;
- arguments to refute pro-choice arguments;
- status of unborn child/foetus;
- the sin of abortion;
- women who abort are children killers;
- negative consequences of abortion at macro-social level;
- effective opposition to the culture of death around the world;
- empowering families;
- right to life;
- abortion as genocide;
- helping mothers.

5. Discussion and Conclusions

“Issue formation mostly occurs in the absence of a public” (Noortje Marres, No Issue, No Public, p. 93)

The top fifty results of the query “abortion” in Romanian in Google.ro showed that Google is not globalizing the issue in the Romanian Web. The information sources represent local actors, with the exception of the Romanian version of Wikipedia, which could be considered a global source. Unlike the journalistic convention to have both sides of a story represented, the abortion issue is disproportionately represented in Google results. The pro-life religiously motivated actors dominate the space of the Web for the issue abortion. Establishment voices in the form of governmental institutions, as well as commercial actors offering medical products and services, which would indicate a maturity of the issue, are very rare in the first five pages of results. Indicative of the maturity of the issue are the establishment voices returned by the query “abortion” in Google.com, the arguably globalized version of Google. Wikipedia is returned as the first result and the representation of voice on the first page is balanced. Moderate sources which present both sides of the debate along with pro-choice governmental sources and commercial medical sources which offer abortion solutions are returned on the first page of results. The only source on the first page of Google.com results where the

word “murder” appears in connection to abortion is the Ads box in the top right side of the screen. This is remarkably different from the results of the same query in Google.ro, where the dominant sources in the list of results present abortion in terms of murder. Given that abortion is legal in Romania until fourteen weeks of pregnancy, the Romanian Web space could be seen as favouring critical voices on the legalization of abortion and, in line with Jodi Dean, as a space of contestation of the legalization of abortion by radical religious motivated voices.

The contestation of the pro-choice position is so dominant that a search for pro-choice viewpoints particularly (by means of the “pro-choice” abortion” query), returns in the top ten results pro-life sources which refute pro-choice arguments. The results of the pro-choice query seem to be fought over with pro-life sources. Could this be considered a manipulation or hijacking of Google results by means of search engine optimization techniques perhaps? Or is this dominance of pro-life sources due to the absence of pro-choice actors on the Romanian web? The results of the source distance research, namely that few of the pro-choice sources are mentioned in the top engine results for abortion, and when they are mentioned they do not refer to abortion but to other issues that they advocate, confirms the latter. Incidentally, due to the fact that Google listed news sources in the websphere and results were cleaned only for the top fifty results, it is remarked that pro-choice sources are very often mentioned in online news media, however most often not in relation to the abortion issue. Comparing mass media coverage of the issue of abortion with web representation of it would have given more insight into the results of the source distance research. However no studies on the Romanian mass-media coverage of abortion were identified.

5.1 Abortion Issue Network on the Web is Pro-Life Advocacy Network

The issue network for abortion on the web is actually a pro-life advocacy network. The fact that none of the actors identified as pro-choice in the list of starting points appears on the map confirms the findings of the Google results rankings, namely that the abortion issue on the web is defined in pro-life terms. The issue network is an isolated activist network in which religiously motivated actors organize the web as a space of contestation of the practice of abortion and of marginal legislation aspects, with no links to institutional settings and opposition. The framing or definition of the issue shows that the network is not orientated towards influencing policy but towards changing the perception and actions of the affected actors on the issue. This is done by invoking the Christian-orthodox doctrine and marginally by addressing the factors that influence the decision to have an abortion.

The absence of pro-choice actors from the Issue Crawler map indicates that pro-choice actors do not organize themselves into a network on the web and are not active on the abortion issue (on the web). This could be explained in line with Marres by the fact that issues are organized outside state institutions only when the state fails to address them. The absence of a stable pro-choice network on the Romanian web could be explained by the fact that abortion is legal in Romania. The pro-choice

actors become a network only when the stability of the legal status of abortion is endangered, as was the case with of the letter addressed to the Romanian parliament in 2010 which pleaded against two proposals aiming at criminalising therapeutic abortion.

5.2 Dominance of Top Engine Results by One-Sided Representation of an Issue – Indicator of Popularity or Marginality of an Issue?

The findings of Google ranking and source distance research are in line with claims about the potential of the web to organize a space of contestation. In line with Hindman, their placement at the top of Google results would indicate their popularity and large audience share. Does popularity and large audience share as implied by Google ranking however indicate that the issue has a public? Whether the network has a public or organizes a public as defined by Dewey in terms of affected actors organizing into a public to ensure that their problem is addressed, can be assessed in several ways: by the presence of the affected parties in the network, their involvement in defining the issue, the reflection of their problems in the definition of the issues by the network.

Are the affected actors present in the issue network? To answer this question the affected actors must be identified. According to the *BBC's Ethics guide* on abortion three potential affected parties can be implied: the mother, the unborn child and the father.⁴² The definition of the abortion issue is an ethically and philosophically complicated one because it depends on the status that one gives to a foetus or unborn child, and the terminology used is itself indicative of the philosophical stand. When defined as foetus it might not even be considered an affected actor, whereas defining it as unborn child could turn it into one. From the composition of the network: pro-life activist organizations and training and counselling centres affiliated with the Orthodox Church, it can be concluded that none of the potential affected parties identified are present in the issue network. The presence of a women rights group for example would ensure the presence of the issue subjects in the network.

Does the network definition of the issue mediate the interests of the affected actors? The report "Women's perspectives on abortion in Romania,"⁴³ indicates as subissues that women articulate in relation to abortion the following: devastating effects of abortion restrictions, unsatisfying quality of reproduction and health services, lack of privacy of abortion procedure, need to respect women who abort by medical staff, issues that affect the decision about abortion: social, cultural, political, economic, moral/religious, temporal, and personal issues. By studying the BBC page dedicated to the rights of the father in relation to abortion, the following subissues can be identified as framing the topic of abortion: father's rights in the abortion

⁴² "Ethics guide: Abortion." *BBC*. <http://www.bbc.co.uk/ethics/abortion/>. Accessed 17 Jan. 2011

⁴³ Brooke R. Johnson, Mihai Horga, and Laurentia Andronache. "Women's perspectives on abortion in Romania." *Soc. Sci. Med.* 42.4 (1996). pp. 521-530

decision, harm to the father when being deprived of a wanted child by abortion, right to escape responsibility for his child and for paying to support that child. By comparing the articulation of the issue by the issue network as identified in the Findings section and its articulation by the affected parties as described above, it can be remarked that they fail to meet up, although some of the network actors mediate the need for psychological, material, financial and educational support that women articulate in relation to abortion. Due to the failure to mediate the affected actors' articulations of the issue in the network's definition of the issue, it could be argued that the network fails to organize a public in Romania, in the sense proposed by Dewey as organizing affected actors. How does this finding reflect on the claims made about sources at the top of engine results? Does domination of top search engine results by one-sided representation of an issue indicate that the voice has "won" its way to the top of the ranking? The findings of this case study appear to suggest that failing to organize a public as well as failing to organize opposition to the framing of an issue, is an indication of marginality and not popularity or dominance of an issue framing, as generally assumed about top ranked Google results. Further research by means of querying other issues in Google is required to validate this hypothesis.

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