UNIVERSITY OF TRENTO

Department of Sociology and Social Research

Master's Degree in Data Science



Un bel titolo che parla di topic, reti, cop e polarizzazionee

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Declaration

I hereby declare that the work described in this dissertation is, except where otherwise stated, entirely my own work and has not been submitted as an exercise for a degree at this or any other University.

DIT Student¹ and ³¹²

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Acknowledgements

And I would like to acknowledge ...

Abstract

This is where you write your abstract ...

Table of contents

List of figures

List of tables

Introduction

1.1 Background

1.2 Research Questions

- 1. Which are the most polarizing topics discussed on twitter during cop 26?
- 2. Is the single user polarization different across different topics? (quelli a destra stanno a destra in tutti i topic?)
- 3. Are the users present in more topics polarized in different ways that the 'experts' that are present only in one or few topics?
- 4. how did topics evolved between cop21 and cop26?

5.

Related Work

- 2.1 Topics
- 2.2 Networks
- 2.3 Polarizations

Latent ideology

Correspondence analysis

Hartigan diptest

Data Description

- 3.1 Where the data comes from
- 3.2 Some statistics

Methodology

- 4.1 Topic modeling evaluation
- 4.2 Create the multilayer network
- 4.3 Polarization

Results

Conclusion

Appendix A

How to install LATEX

Windows OS

TeXLive package - full version

- 1. Download the TeXLive ISO (2.2GB) from https://www.tug.org/texlive/
- 2. Download WinCDEmu (if you don't have a virtual drive) from http://wincdemu.sysprogs.org/download/
- 3. To install Windows CD Emulator follow the instructions at http://wincdemu.sysprogs.org/tutorials/install/
- 4. Right click the iso and mount it using the WinCDEmu as shown in http://wincdemu.sysprogs.org/tutorials/mount/
- 5. Open your virtual drive and run setup.pl

or

Basic MikTeX - TEX distribution

- Download Basic-MiKTEX(32bit or 64bit) from http://miktex.org/download
- 2. Run the installer
- 3. To add a new package go to Start » All Programs » MikTex » Maintenance (Admin) and choose Package Manager

4. Select or search for packages to install

TexStudio - TeX editor

- Download TexStudio from http://texstudio.sourceforge.net/#downloads
- 2. Run the installer

Mac OS X

MacTeX - TEX distribution

- Download the file from https://www.tug.org/mactex/
- 2. Extract and double click to run the installer. It does the entire configuration, sit back and relax.

TexStudio - TEX editor

- Download TexStudio from http://texstudio.sourceforge.net/#downloads
- 2. Extract and Start

Unix/Linux

TeXLive - T_EX distribution

Getting the distribution:

- 1. TexLive can be downloaded from http://www.tug.org/texlive/acquire-netinstall.html.
- 2. TexLive is provided by most operating system you can use (rpm,apt-get or yum) to get TexLive distributions

Installation

1. Mount the ISO file in the mnt directory

```
mount -t iso9660 -o ro, loop, noauto /your/texlive###.iso /mnt
```

- 2. Install wget on your OS (use rpm, apt-get or yum install)
- 3. Run the installer script install-tl.

```
cd /your/download/directory
./install-tl
```

- 4. Enter command 'i' for installation
- 5. Post-Installation configuration: http://www.tug.org/texlive/doc/texlive-en/texlive-en.html#x1-320003.4.1
- 6. Set the path for the directory of TexLive binaries in your .bashrc file

For 32bit OS

For Bourne-compatible shells such as bash, and using Intel x86 GNU/Linux and a default directory setup as an example, the file to edit might be

```
edit $~/.bashrc file and add following lines
PATH=/usr/local/texlive/2011/bin/i386-linux:$PATH;
export PATH
MANPATH=/usr/local/texlive/2011/texmf/doc/man:$MANPATH;
export MANPATH
INFOPATH=/usr/local/texlive/2011/texmf/doc/info:$INFOPATH;
export INFOPATH
```

For 64bit OS

```
edit $~/.bashrc file and add following lines
PATH=/usr/local/texlive/2011/bin/x86_64-linux:$PATH;
export PATH
MANPATH=/usr/local/texlive/2011/texmf/doc/man:$MANPATH;
export MANPATH
```

INFOPATH=/usr/local/texlive/2011/texmf/doc/info:\$INFOPATH;
export INFOPATH

Fedora/RedHat/CentOS:

```
sudo yum install texlive
sudo yum install psutils
```

SUSE:

sudo zypper install texlive

Debian/Ubuntu:

```
sudo apt-get install texlive texlive-latex-extra
sudo apt-get install psutils
```

Appendix B

Installing the CUED class file

LATEX.cls files can be accessed system-wide when they are placed in the <texmf>/tex/latex directory, where <texmf> is the root directory of the user's TeXinstallation. On systems that have a local texmf tree (<texmflocal>), which may be named "texmf-local" or "localtexmf", it may be advisable to install packages in <texmflocal>, rather than <texmf> as the contents of the former, unlike that of the latter, are preserved after the LATeXsystem is reinstalled and/or upgraded.

It is recommended that the user create a subdirectory <texmf>/tex/latex/CUED for all CUED related LATeXclass and package files. On some LATeXsystems, the directory look-up tables will need to be refreshed after making additions or deletions to the system files. For TeXLive systems this is accomplished via executing "texhash" as root. MIKTeXusers can run "initexmf -u" to accomplish the same thing.

Users not willing or able to install the files system-wide can install them in their personal directories, but will then have to provide the path (full or relative) in addition to the filename when referring to them in LATEX.