

# COULD PRO-LIFE LEGISLATION POSSIBLY LEAD TO CAPITAL PUNISHMENT?



## Introduction

Recently, abortion has been criminalized in several US States, most recently in Oklahoma in April 2022. The Texas 2021 “Heartbeat Bill” makes abortions illegal as soon as you can detect the heartbeat of the fetus (around the 6th week of pregnancy), and in the same year, a Texan GOP lawmaker, Bryan Slaton, has filed a bill to charge women or physicians who perform abortion with assault or homicide, which can lead to capital punishment.

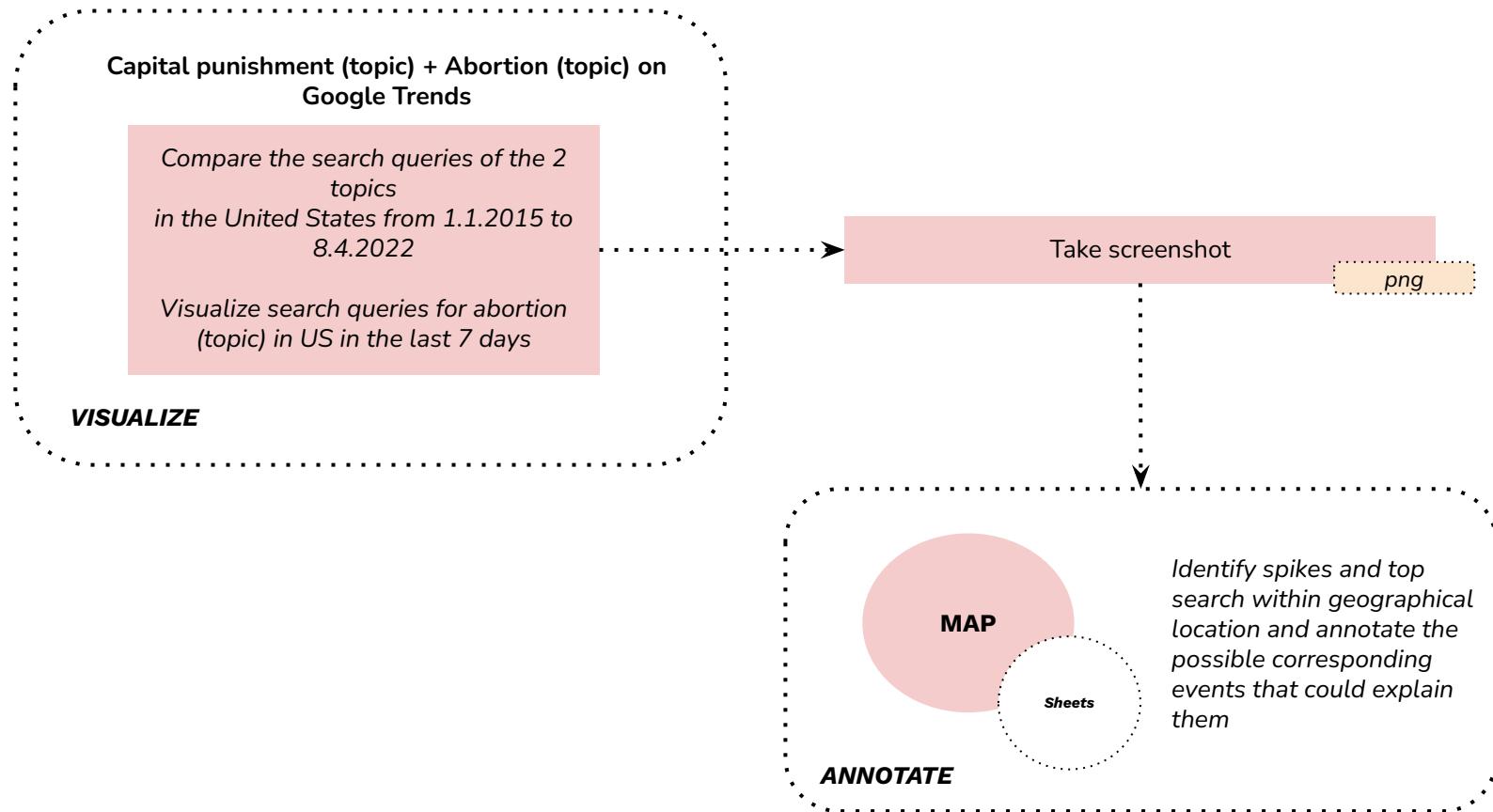
It is not the first time a similar bill has been filed, most recently similar legislation was proposed in 2017 and 2019, also in Texas. Both led to “security concerns” around the filing lawmakers, and were not passed.

This atlas attempts to map the relationship between abortion and capital punishment on wikipedia.



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# Protocol: Google Trends Timeline



# 1. GOOGLE TRENDS TIMELINE - ABORTION AND CAPITAL PUNISHMENT

● Abortion  
Topic

● Capital punishment  
Topic

United States ▾ 01/01/2015 - 08/04/2022 ▾ All categories ▾ Web Search ▾

Interest over time ⓘ

October 2016 - strike in Poland against proposed abortion ban 100

January 2017 - Donald Trump signed a ban on federal money used by NGOs that either perform or give information on abortion

January 2019 - The state of New York enacted The Reproductive Health Act

May 2019 - The state of Alabama enacted the Alabama abortion ban

October 2020 - women striked in Poland as a reaction to a tightening of abortion laws

September 2021 - The Texas law S.B 8 was enacted. It prohibits abortion after 6 weeks and also gives any private person the right to sue anyone who helps a person with abortion.

December 2021 - Demonstrations, as the Supreme court of the United States was hearing arguments for why Mississippi should be allowed to uphold its ban on abortion after 15 weeks of pregnancy.



## STORY OF MAP 1: PEAKS IN GOOGLE TRENDS SHOWING THE CONNECTION BETWEEN ONLINE AND OFFLINE EVENTS

The first map takes a broad look into the two topics of abortion and capital punishment. We wanted to find out how these topics seemed to be of interest on Google, using Google Trends. Since our interest for this controversy started in Texas, we chose to focus on the United States.

In the timeline, we see a continuous activity around especially the topic of abortion over the last seven years. Furthermore, the visualisation shows peaks in searches, allowing a connection between “offline” events and google trends. We find that peaks often coincide with bans or harsher punishments for abortion, and cover both anti- and pro-abortion arguments. Curiously, the US peaks also cover non-US protests and legislation; and the timeline paints a picture of legislations and protests as part of a wider debate.

The visualization shows that capital punishment has not had as dramatic spikes over the last seven years. However, since the discussion about abortion in these spikes often deals with punishment for the act of abortion, we want to see whether other connections can be seen between the two topics; in the following visualization regarding hyperlinks on Wikipedia.

# Protocol: Wikipedia Pages Hyperlink Network

Capital punishment category + abortion category on Wikipedia

List of URLs for 4200 pages

## HARVEST

Get hyperlinks from pages level 3

CSV

Wikipedia articles to hyperlinks network (sushi notebook)

MAP

Identify and annotate main topics (from cluster layout)

Sheets

## ANNOTATE

Network of 4200 Wikipedia pages  
Pages as nodes, hyperlinks as edges

GEXF

Network viz

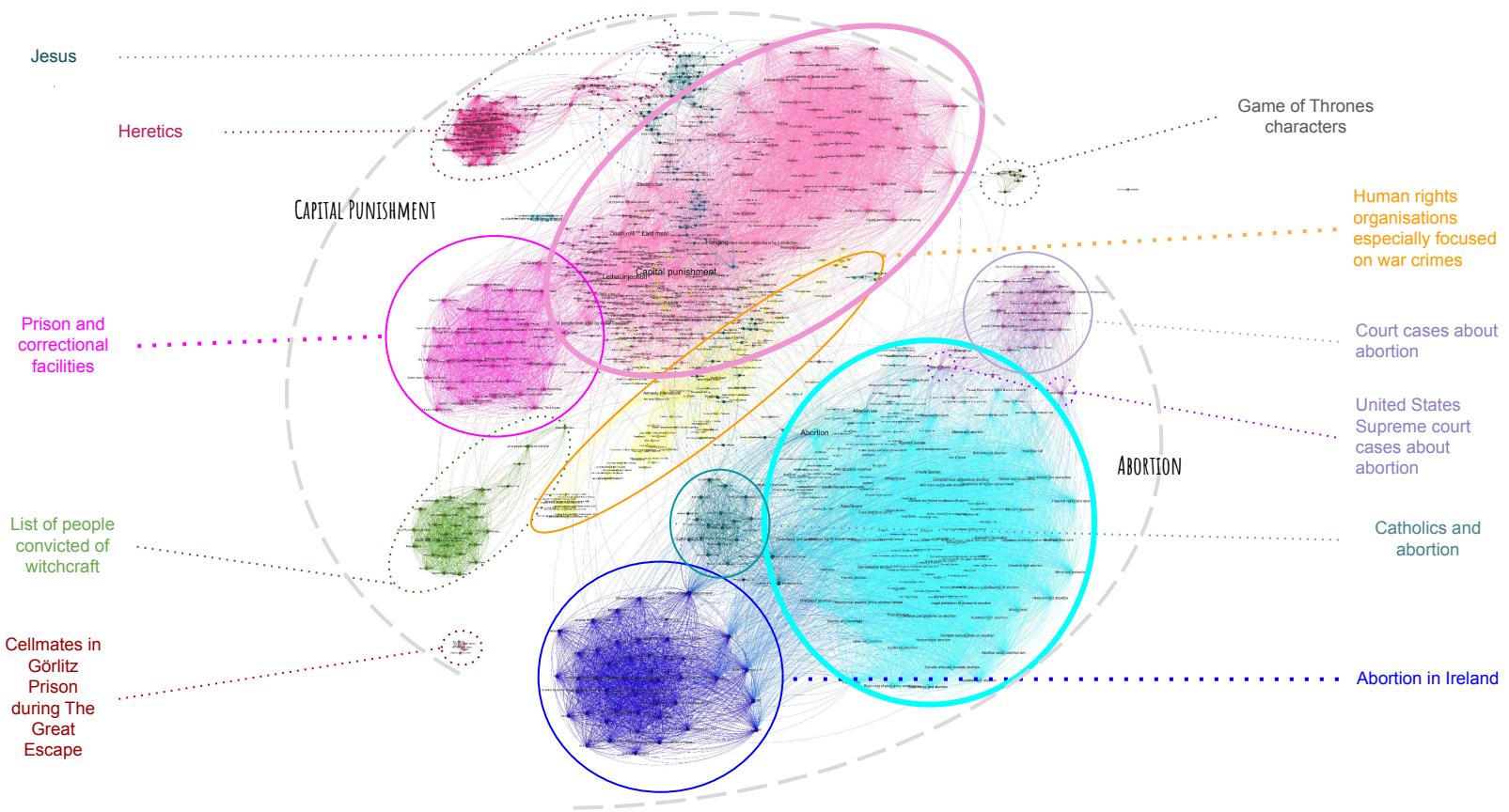
.png

## VISUALIZE

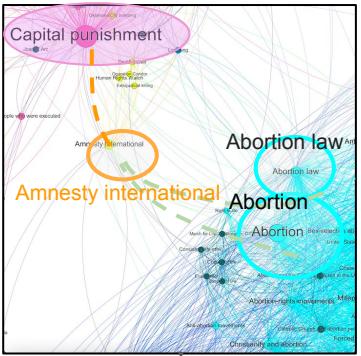
Apply:  
ForceAtlas2  
Stronger gravity, gravity 0.2  
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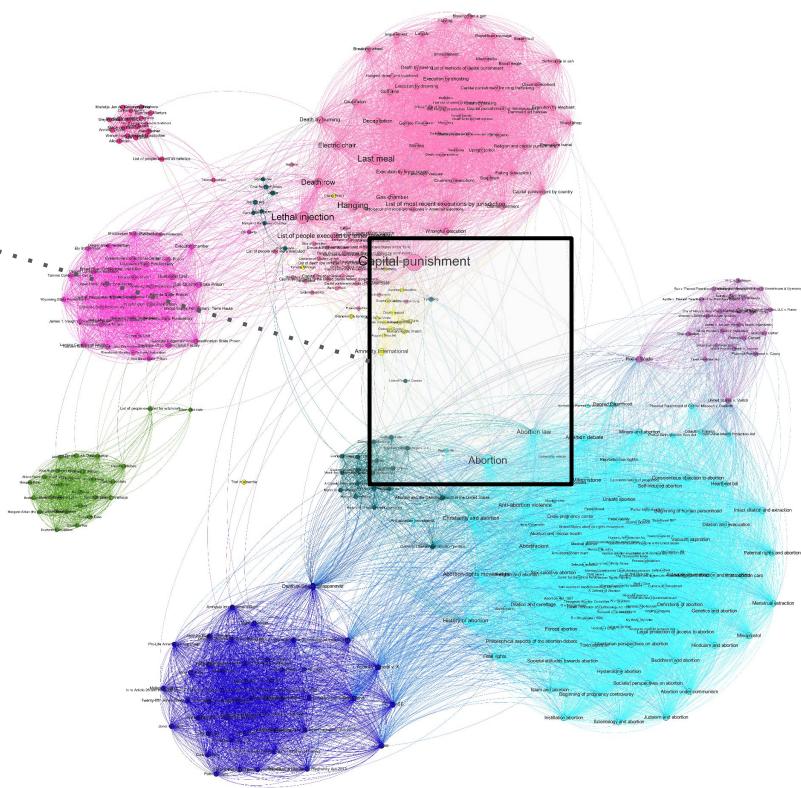
## 2. LANDSCAPE OF HYPERLINKS BETWEEN THE WIKIPEDIA CATEGORIES "CAPITAL PUNISHMENT" AND "ABORTION"



## 2.1 THE ARTICLE "AMNESTY INTERNATIONAL" CONNECTS "CAPITAL PUNISHMENT" AND "ABORTION"



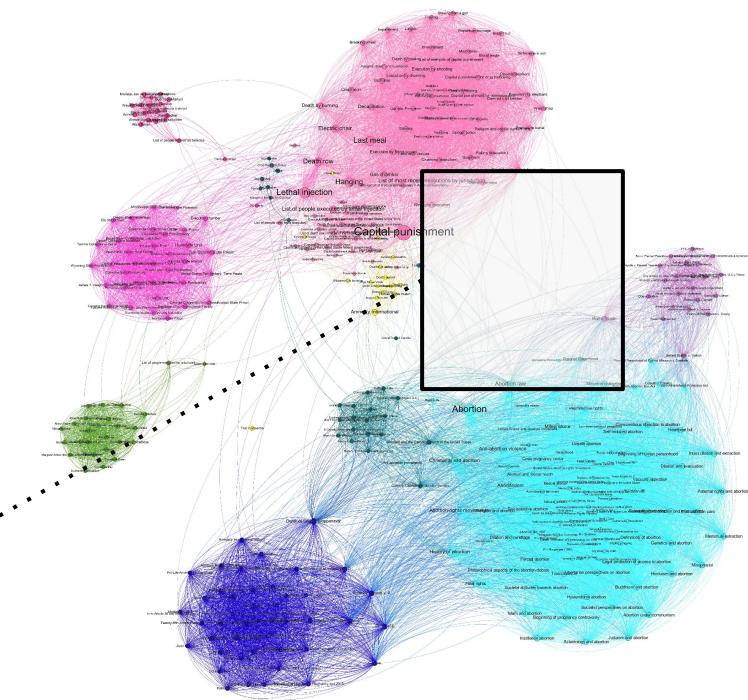
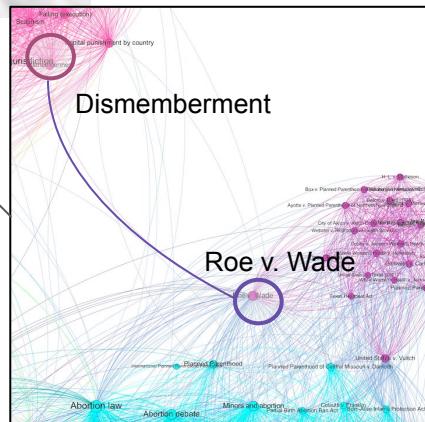
Amnesty International is an “international non-governmental organization focused on human rights”. It seeks to “..mobilize public opinion to generate pressure on governments where abuse takes place”, and has “specific aims such as abolish death penalty and decriminalize abortion.”



## 2.2 THE ARTICLES “DISMEMBERMENT” AND “ROE V. WADE” DIRECTLY CONNECTS THE CLUSTERS “CAPITAL PUNISHMENT” AND “ABORTION”



The supreme court landmark decision “Roe v. Wade” (1973) changed many U.S. federal and state abortion laws and is to this day a highly debated decision in the abortion debate in the United States. The strange link to dismemberment derives from a hyperlink to another court case where abortion had been done by dismembering the fetus.



## STORY OF MAP 2: LANDSCAPE OF HYPERLINKS BETWEEN THE WIKIPEDIA CATEGORIES "CAPITAL PUNISHMENT" AND "ABORTION"

We wanted to investigate the relations between the two topics, and chose to look at hyperlinks from the two category pages on Wikipedia, to explore how they relate to each other, as well as to other topics. The visualization shows some clear clusters, where capital punishment and abortion make up the two biggest ones, with related smaller clusters. Many edges can be found between the two main clusters and the connecting clusters surrounding them, giving us an overview of what other topics relate to our main topics.

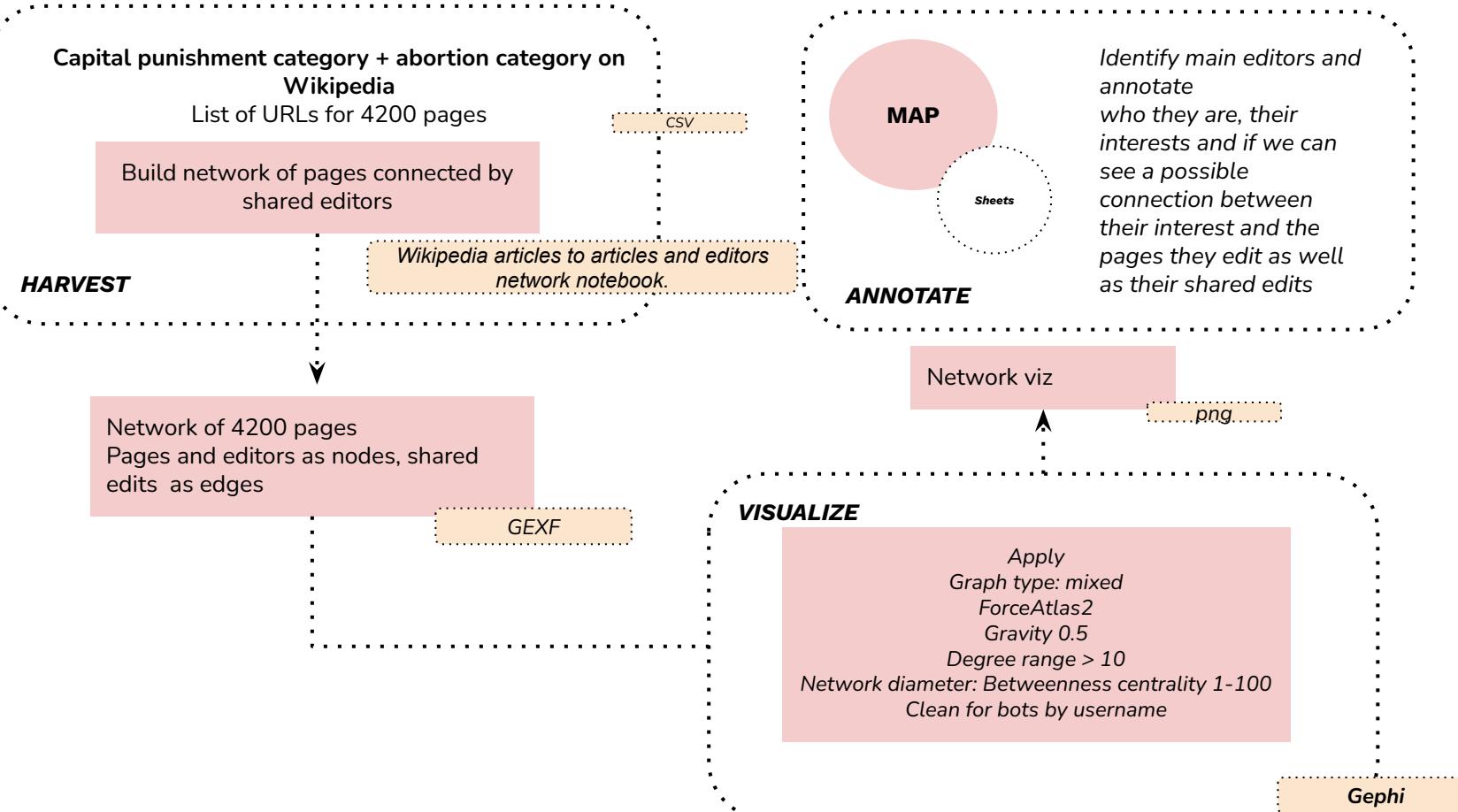
Many subclusters can be found within the bigger clusters. Two are identified in the 'Capital Punishment' cluster; one consisting of a large group of single cases of people convicted with capital punishment in the bottom of the cluster. The second one consists of a subcluster of methods to perform the capital punishment. In the 'Abortion' cluster we find different subclusters of legal proceedings in relation to abortion in the middle, and in the bottom right a subcluster of abortion in relation to religion.

The visualization shows that connections between the two main clusters often go through the clusters of 'Human rights organizations, focused on war crimes' and 'Catholics and abortion', with few direct links between the two main clusters. One of the direct connections is the trial 'Roe V. Wade', which can be found in the cluster of 'Abortion' which connects to 'Dismemberment' in 'Capital Punishment'. Furthermore, we can see a strong connection between the node 'abortion' and some of the smaller nodes within 'capital punishment' such as; abortion to 'lynching' and another one between 'abortion' and 'Roy Jenkins'.

The map gives a better understanding of how the two main topics relate to each other, often through common nodes and topics. We see patterns between these connecting nodes being in a cluster about either human rights, religion, or court cases.

Lastly, comparing this visualisation with the one from Google Trends points at different usage of the two databases. Abortion is a larger topic in Google Trends, while Wikipedia has a lot more pages about capital punishment.

# Protocol: Wikipedia articles with shared editors - bipartite network



### 3. MAP OF THE MOST PROMINENT HUMAN EDITORS RELATED TO THE ARTICLES



#### Tom.Reding

His main interest is astronomy, but he enjoys (...) researching primary sources, adding missing information, fixing errors" to get "(...) consistency within articles, citations, and templates (...)"



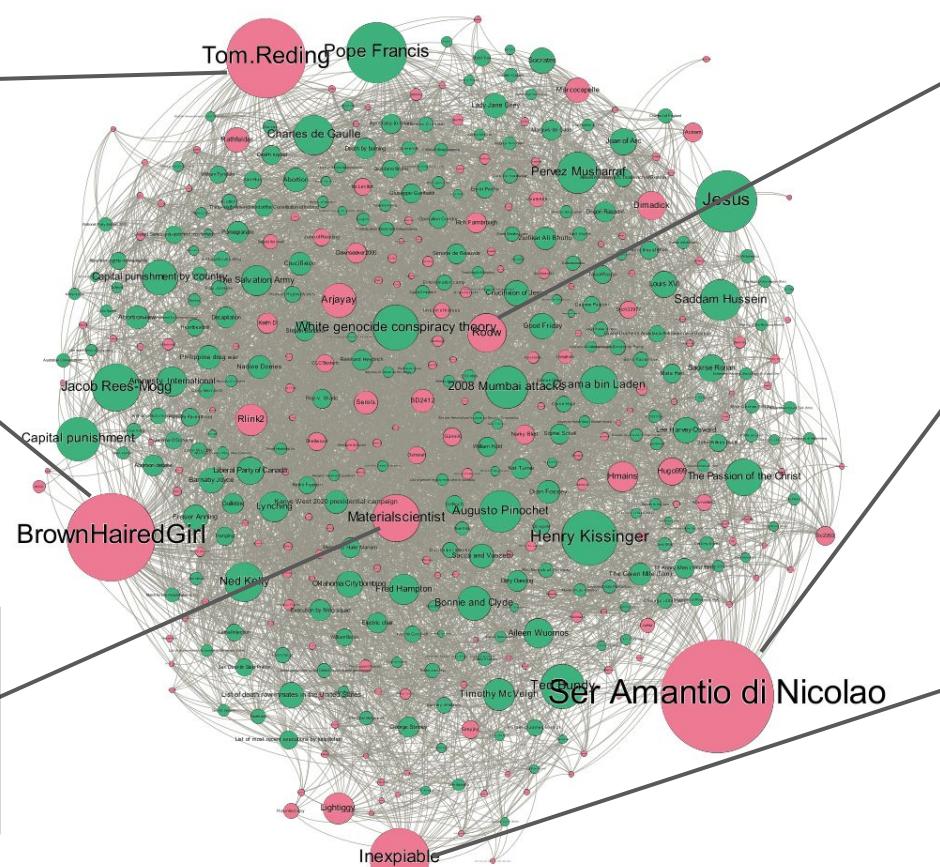
#### BrownHairedGirl

She does not want ot tell a lot about herself, but "(...)mostly work on Irish topics, especially politics"



#### MaterialScientist

Interested in material sciences, but "(...) most of my free time is taken by vandalism, though I still write short articles during calm hours"



#### RodW

"Most of my edits are to articles about South West England, and tend to be about geography, industrial or architectural history".



#### Ser Amantio di Nicolao

aka. Steven Pruitt.  
Fights bias on wikipedia to promote the inclusion of women via the Women in Red project. Also the editor with the highest number of edits made on the english wikipedia



#### Inexpiable

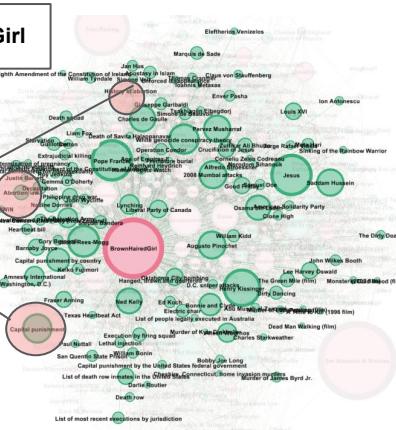
A "fan of true crime", who mainly "contributes to articles about American crime, focusing primarily on the topic of capital punishment in the United States".



### 3.1 VISUALIZATION OF EACH OF THE SIX EDITORS AND THE ARTICLES THEY HAVE EDITED

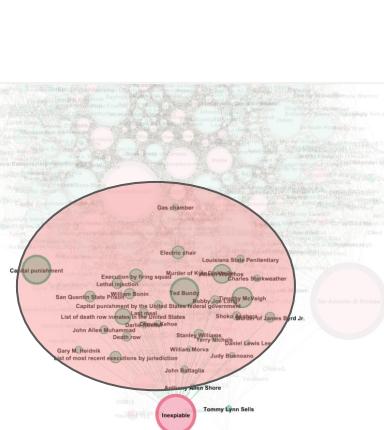
**BrownHairedGirl**

Direct edits on both "capital punishment" and "abortion law and history"



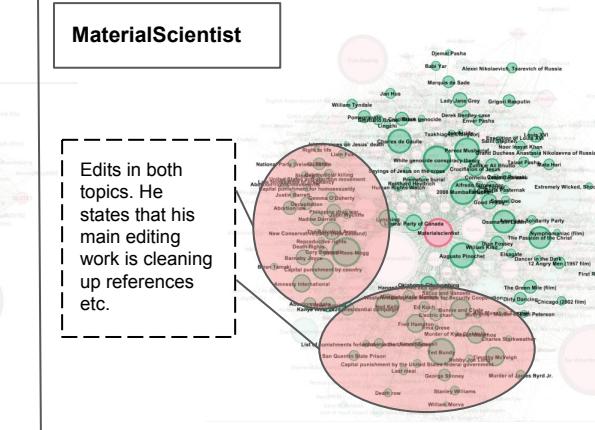
**Inexpiable**

Edits pages about "american true crime" and "capital punishment", e.g. pages such as "Ted Bundy" and "Timothy McVeigh"



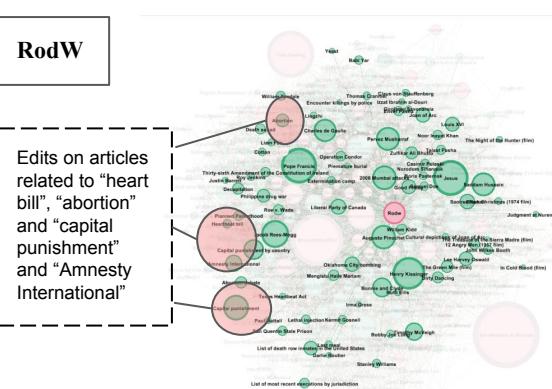
**MaterialScientist**

Edits in both topics. He states that his main editing work is cleaning up references etc.



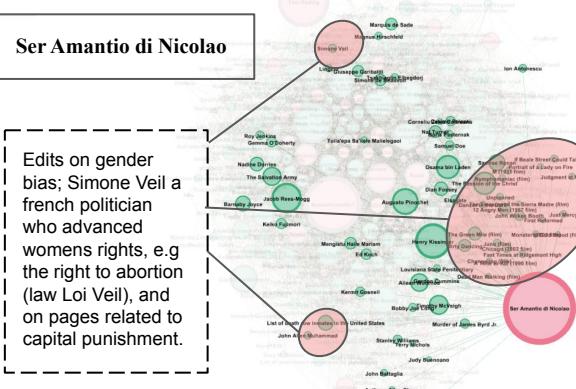
**RodW**

Edits on articles related to "heart bill", "abortion" and "capital punishment" and "Amnesty International"



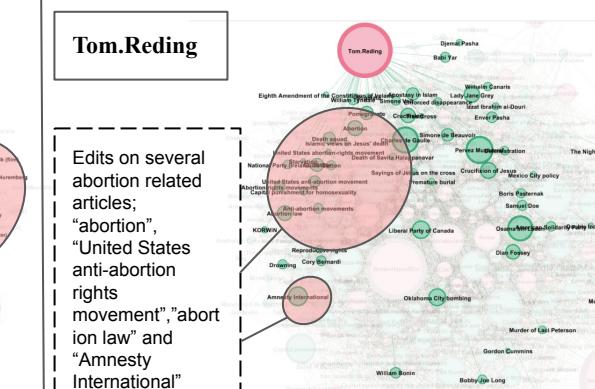
**Ser Amantio di Nicolao**

Edits on gender bias; Simone Veil a french politician who advanced women's rights, e.g. the right to abortion (law Loi Veil), and on pages related to capital punishment.



**Tom.Reding**

Edits on several abortion related articles; "abortion", "United States anti-abortion rights movement", "abortion law" and "Amnesty International"



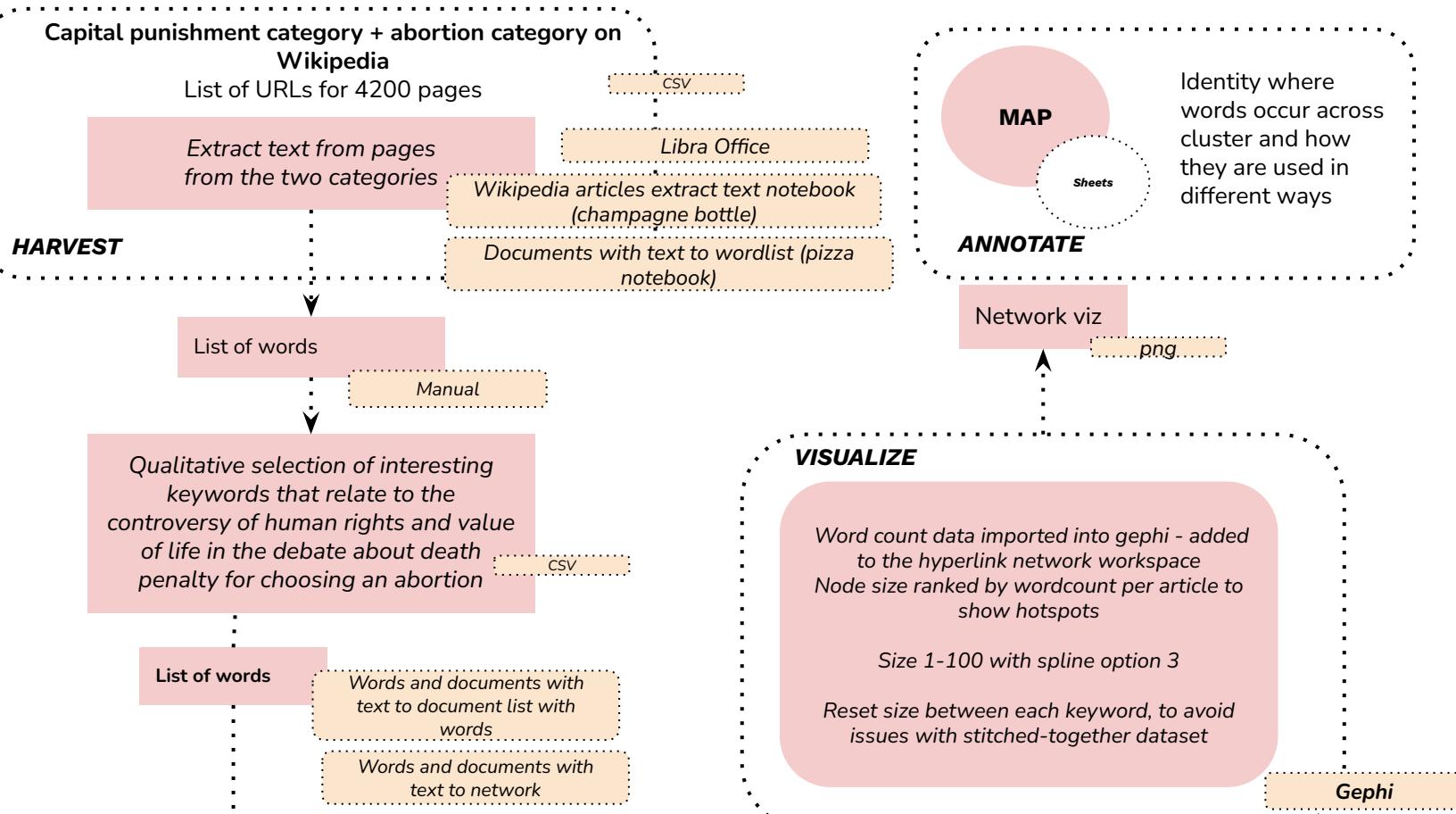
## STORY OF MAP 3: MAP OF THE MOST PROMINENT HUMAN EDITORS RELATED TO THE ARTICLES

This map is a bipartite network of editors and pages. The point is to investigate the biggest editors, and try to understand motivations and patterns in editing. The map highlights the six largest non-bot editors, and dives into their personal pages to explore their engagement with Wikipedia and the topics.

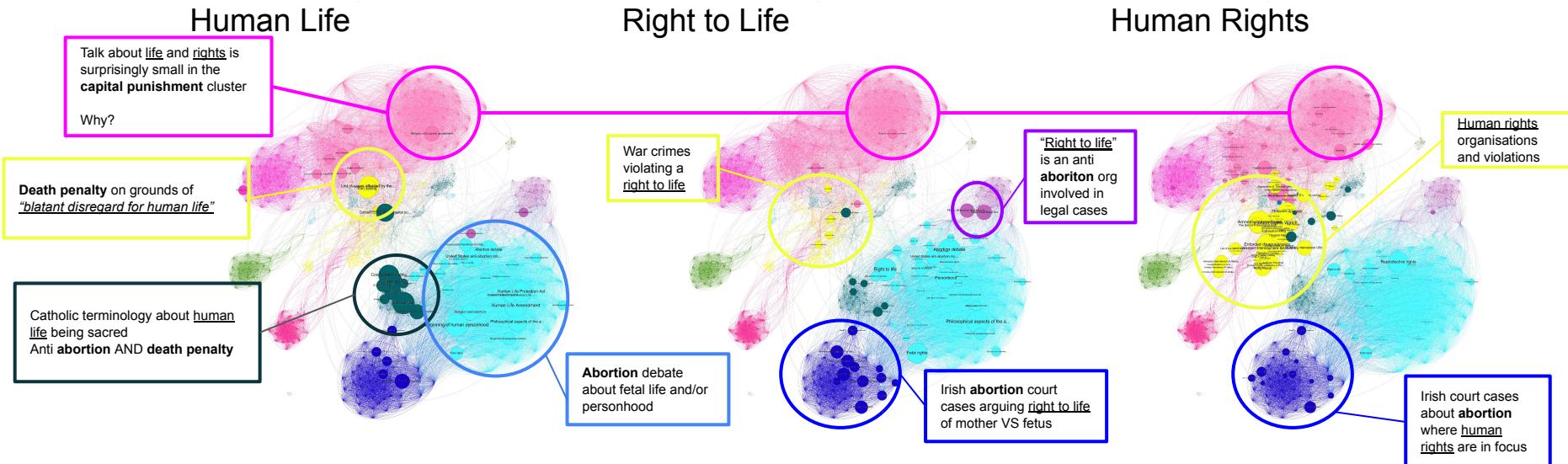
In map 3.1, we see BrownHairedGirl being active on many pages in both topics, despite self-describing as being mainly interested in Irish pages. We also see Ser Amantio di Nicolao who self-describes as interested in gender equality on Wikipedia, but curiously edits almost nothing in the abortion topic despite being the world's largest editor. RodW describes himself as mostly interested in architecture and geography, but frequents both topics.

These findings; while interesting; must be considered within the boundaries of the map. The data is only harvested from the two categories, and is blind to the editors' presence on Wikipedia as a whole. We also identify a media culture when diving into specific profiles in which people earn badges for editing large amounts of articles; this can also be part of the motivation which is not clear from this dataset.

# Protocol: Keywords from Wikipedia articles



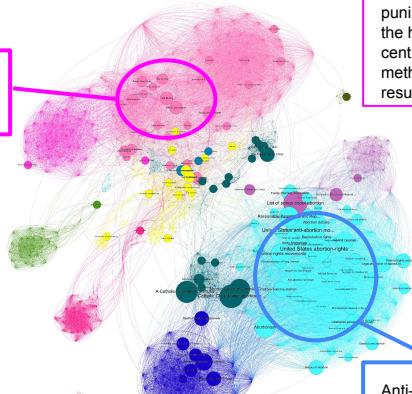
#### 4. MAP OF CONNECTED KEYWORDS



## 4.1 MAP OF CONNECTED KEYWORDS

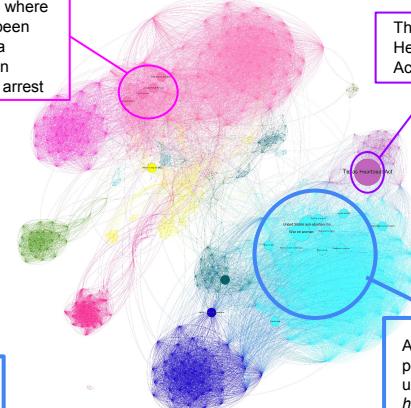
Choice

Choice of the criminal



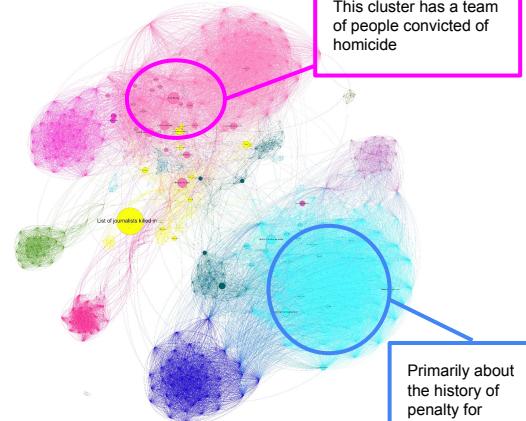
Heartbeat

Three Americans  
punished by death, where  
the heartbeat has been  
central, as well as a  
method of execution  
resulting in cardiac arrest



Homicide

This cluster has a team  
of people convicted of  
homicide



Anti-abortion vs.  
pro-abortion

The Texas  
Heartbeat  
Act

Anti-abortion vs.  
pro-abortion that  
uses the term  
heartbeat

Primarily about  
the history of  
penalty for  
abortion

## STORY OF MAP 4: SELECTED KEYWORDS VISUALIZED ON HEATMAPS

The last map dives into the text of the Wikipedia articles, by highlighting specific keywords in Map 2, with a purpose of understanding differences and similarities in the themes of the debates. The list of words was created by making a ranked list of the most used terms across all articles, and then sorting out the most “noisy” words such as numbers, dates, and conjunctions.

We visualise 6 keywords chosen by prevalence and peculiarity. Map 4 shows words relation to rights and human life; and highlights how these are expressed differently in different parts of the map. Especially interesting to us is that human rights and -life are discussed fairly rarely in the topic of capital punishment in relation to abortion. This shows a pattern of speaking about life in a different manner depending on whether you are speaking of it in relation to taking an existing life or in relation to creating a new one.

Map 4.1 shows heartbeat as being a common measure of life across topics - in abortion debates, it marks the beginning of life, while in capital punishment it marks the end. The debates surrounding heartbeats only seem to show up in abortion.