LGBTQ+ Law Text Analysis

By Mack Campbell

Political and Social Background

- After substantial gains in rights for LGBTQ+ people there has been an uptick in anti-LGBTQ+ legislation and an increase in violence targeting these individuals.
 - The recent "Don't Say Gay" bill in Florida and the shooting at the gay bar in Colorado Springs exemplify this.
- The DHS recently warned that Jewish, LGBTQ+, and immigrant people are likely to be targets of violence from extremist domestic terrorists.

Research Questions

- What is the connection between the language that state legislator's use in legislation and the state's rank of equality for its queer population?
- How does language use differ based on the stance of the legislation?

State Ranking: Equaldex

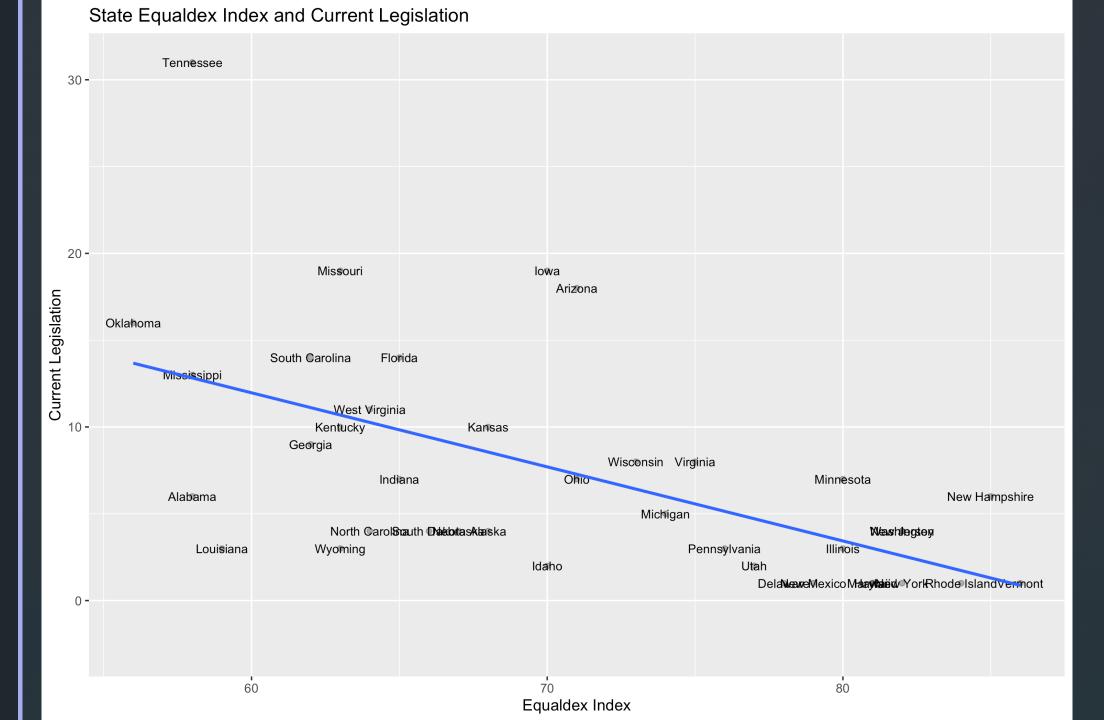
 "Measures the current status of LGBT rights, laws, and freedoms as well as public attitudes towards LGBT people."

STATE AND TERRITORY	EQUALITY INDEX	LEGAL INDEX	PUBLIC OPINION INDEX
1. Vermont	86 / 100	98 / 100	74 / 100
2. Massachusetts	86	98	74
3. Connecticut	85	98	71
4. New Hampshire	85	98	71
5. Rhode Island	84	98	70
6. Washington, D.C.	83	98	68
7. New York	82	98	67
8. <u>California</u>	82	98	66
9. <u>New Jersey</u>	82	98	66
10. Washington	82	98	66
11. Maine	82	98	65
12. Maryland	81	98	64

State Ranking: MAP*

• MAP "tracks over 50 different LGBTQ-related laws and policies. A state's policy tally scores the laws and policies within each state that shape LGBTQ people's lives, experiences, and equality."

	STATE		RELATIONSHIP AND PARENTAL RECOGNITION	NON- DISCRIMINATION	RELIGIOUS EXEMPTION LAWS	LGBT YOUTH	HEALTHCARE	CRIMINAL JUSTICE	IDENTITY DOCUMENTS	SEXUAL ORIENTATION POLICY TALLY	GENDER IDENTITY POLICY TALLY	OVERALL TALLY
1	Alahama	so	1/6	0/4.5	-2.5/-3.5	-1/5	0.5/2	0/3		-2.00	-6.50	-8.50
_	Alabama	GI	0/1	0/4.5	-2.5/-2.5	-3/5	-1/4.5	0/3	0/4	-2.00	-6.50	-6.50
2	Alaska	so	3/6	3.5/4.5	0/-3.5	2/5	0.5/2	0.75/3		9.75	9.50	19.25
2	Alaska	GI	1/1	3.5/4.5	0/-2.5	2/5	1.5/4.5	-0.25/3	1.75/4	9.75	7.50 17.25	19.25
3	American Samoa	so	1/6	0/4.5	0/-3.5	0/5	0/2	0/3		1.00	-1.00 0.00	
3		GI	0/1	0/4.5	0/-2.5	0/5	0/4.5	0/3	-1/4			
4		so	2.5/6	1.75/4.5	-1.5/-3.5	0/5	1/2	2/3		5.75	-3.50	2.25
4	AHZOHA	GI	0/1	1.75/4.5	-1.5/-2.5	-1/5	-2/4.5	0/3	-0.75/4	3.73	-3.30	2.23
5	Arkansas	so	2/6	-1/4.5	-1.5/-3.5	0/5	1/2	-1/3		0.50	-5.00	-5.50
3		GI	0/1	-1/4.5	-1.5/-2.5	-1/5	-2/4.5	-1/3	1.5/4		-3.00	3.30
	California	so	5.75/6	4.5/4.5	0/-3.5	5/5	2/2	2.75/3		20.00	21.75	41.75
6		GI	1/1	4.5/4.5	0/-2.5	5/5	4.5/4.5	2.75/3	4/4	20.00	21.75 41.75	41./5



State Legislation: Freedom For All Americans

- Legislation tracker for pro- and anti-LGBT bills
- Provides high-level view of bills per state
- Widgets are powered by BillTrack50

State Legislation: BillTrack50

- Tracks bill information across all US states, on all topics
- Links directly to PDF text

What's in the Data?

- 39 different states
 - Only 15 of these also have pro-LGBTQ+ legislation
- 285 bills
 - 261 anti-LGBTQ+ legislation
 - 24 pro-LGBTQ+ legislation
- 217 bill texts are included in current analysis
 - Total bill texts is 417
- Word tokens: 230,701

Unigram Raw Frequency

Pro Legislation

Bill1gram <chr></chr>	Token_Count <int></int>
person	673
gender	622
status	575
sex	543
commission	507
identity	501
sexual	497
national	491
employment	482
origin	480

Anti Legislation*

Bill1gram <chr></chr>	Token_Count <int></int>
school	4648
district	2709
sex	2094
education	1654
public	1367
board	1247
department	1246
act	1197
gender	881
person	866

^{*} Anti legislation has more texts than pro legislation

Unigram Mean Frequency

Pro Legislation

Bill1gram <chr></chr>	Token_mean <dbl></dbl>
division	60.000000
person	39.588235
gender	36.588235
status	33.823529
jacketed	33.000000
unofficial	33.000000
sex	31.941176
commission	29.823529
identity	29.470588
sexual	29.235294

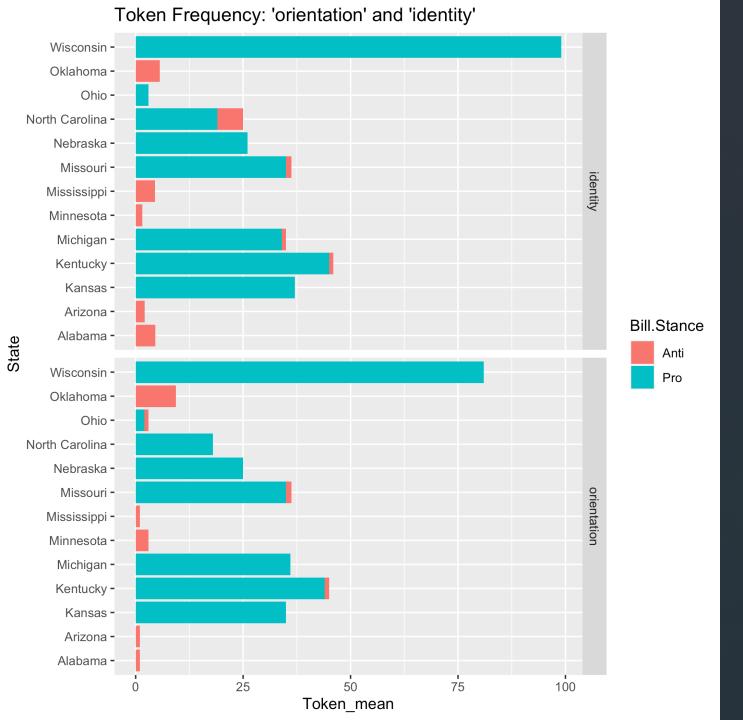
Anti Legislation

Bill1gram <chr></chr>	Token_mean <dbl></dbl>
intermediate	175.500000
allowance	125.000000
benchmark	74.000000
covenant	68.000000
allocated	62.000000
academy	50.666667
sub	48.166667
equated	44.000000
target	42.000000
levied	41.000000

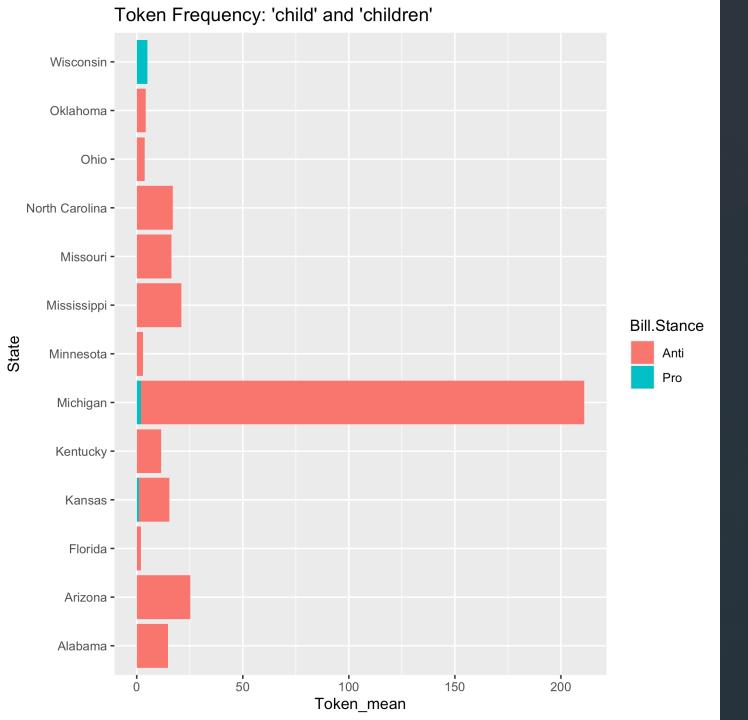
Token Frequency: 'gender' vs 'sex' Wisconsin -Oklahoma -Ohio -North Carolina -New Mexico -New Jersey -Nebraska -Missouri gender Mississippi -Minnesota -Michigan -Maryland -Kentucky -Kansas -Florida -Arizona -Alaska -Bill.Stance Alabama -Anti Wisconsin -Pro Oklahoma -Ohio -North Carolina -New Mexico -New Jersey -Nebraska -Missouri -Mississippi -Minnesota -Michigan -Maryland -Kentucky -Kansas -Florida -Arizona -Alaska -Alabama -100 50 150 200 Token mean

Unigram Data

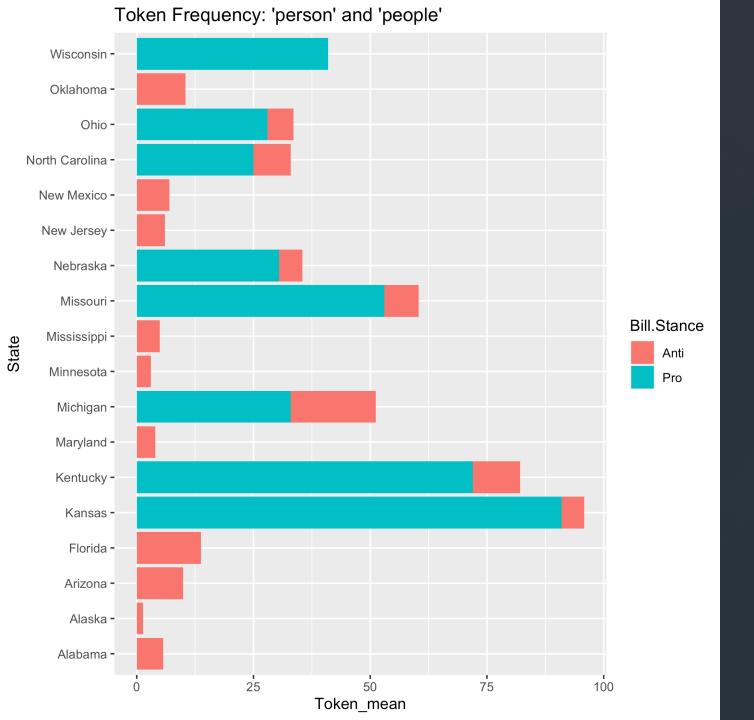
gender vs sex



identity and orientation



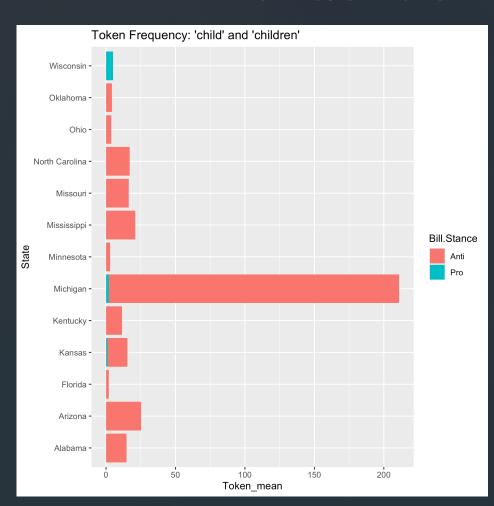
child/children

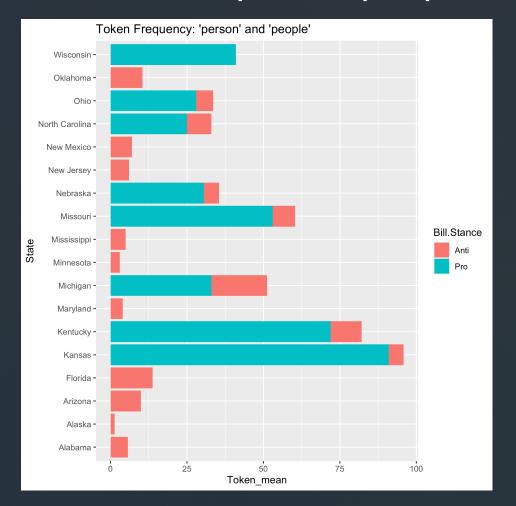


person/people

child/children

person/people





Next Steps

- Generate "stop words" from legalese
- Run statistical tests on text data and MAP/Equaldex scores
- Look at bigrams and trigrams
- Tidy the text up more
 - Removing stop words and nonsense words from bi- and trigrams

Future Research

- Convert into a corpus with metadata
- Run a classifier on the data to look at most influential features
- Look at other legislation from conservative/liberal division