# PolitiFact Clean Up

#### Version 9 - Removal of PolitiFact anomalous claims

At this stage in the process, we had narrowed out data down to four publisher datasets from which we had sorted out all claims that did not fit our criteria of claims by U.S politician. We had also selected to eliminate Independent and Libertarian claims, as well as all claims by Donald Trump. Now within each publisher, we pivoted to focus on textualRating, which denotes the rating that the claim was assigned by the fact-checker. Some publishers have standardized scales with a ranking system, others do not. For each publisher we defined the existing rating scale, identified how many claims fit into that scale, and how many anomaly claims remained. First, we began working with PolitiFact.

PolitiFact has an established six tier rating scale called the Truth-O-Meter used to categorize claims.

As stated on PolitiFact's website:

"The goal of the Truth-O-Meter is to reflect the relative accuracy of a statement. The meter has six ratings, in decreasing level of truthfulness:

**TRUE** – The statement is accurate and there's nothing significant missing.

**MOSTLY TRUE** – The statement is accurate but needs clarification or additional information.

**HALF TRUE** – The statement is partially accurate but leaves out important details or takes things out of context.

**MOSTLY FALSE** – The statement contains an element of truth but ignores critical facts that would give a different impression.

**FALSE** – The statement is not accurate.

PANTS ON FIRE – The statement is not accurate and makes a ridiculous claim.

The burden of proof is on the speaker, and they rate statements based on the information known at the time the statement is made."

Below is a breakdown of all the ratings in the PolitiFact dataset's textualRating column.

There are: 2,527 standardized claims (those rated with one of the six standardized ratings) and 354 anomalous claims (those with a non-standardized text based rating).

Below the breakdown of the 20 most numerous ratings. It is not a complete list, but we place it below to show some examples.

Table 1: V8, Sorted by Textual Rating

textualRating	n
Half True	555
Mostly True	534
Mostly False	499
FALSE	477
TRUE	329
Pants on Fire	133
Needs context	19

textualRating	n
Full Flop	18
Accurate	14
Misleading	9
Half Flip	8
Largely correct	5
This is accurate	4
Correct	3
Lacks context	3
Largely accurate	3
Needs more context	3
Not the full story	3
Close to accurate	2
Exaggerated	2

When we reviewed the list of anomaly claims, we noticed that they all came from PolitiFact articles, not fact checks. PolitiFact only uses Truth-O-Meter ratings when they feel they can convey some level of certainty in the rating given. Truth-O-Meter ratings require a high threshold of proof. When that is lacking or there is not sufficient evidence to do a full scale fact-check, the existing facts are published in an article. Fact-checks of debates and speeches are frequently written up in articles. Since these claims represented instances where PolitiFact did not feel comfortable enough to deliver a standard Truth-O-Meter rating, we were unwilling to attribute a different level of certainty to the rating. Thus all claims that were not given one the 6 standard ratings in textualRating were removed from the dataset. This resulted in a remaining dataset of 2,527 claims.

Table 2: V9, Truth-O-Meter Rating Distribution

textualRating	n
Pants on Fire	133
False	477
Mostly False	499
Half True	555
Mostly True	534
True	329

# Version 10 - Condensing claimant names

After this removal we began looking closely at the remaining claimant names. Version 9 had 724 unique claimant names, below are the first 20.

Table 3: V9, Claimant Names by Occurences

claimant	n
Joe Biden	113
Hillary Clinton	104
Bernie Sanders	58
Mike Pence	56
Newt Gingrich	45
Ted Cruz	42
Marco Rubio	39

claimant	n
Ron Johnson	32
Barack Obama	31
Andrew Cuomo	30
Scott Walker	29
Elizabeth Warren	26
Kamala Harris	25
Chris Christie	24
Paul Ryan	24
Rick Scott	24
Tammy Baldwin	24
Nancy Pelosi	23
Tim Kaine	23
Tony Evers	23

We noticed that some claimants were listed under several separate names despite referring to the same person, like Speaker Nancy Pelosi, Nancy Pelosi, Speaker Pelosi. We wanted to eliminate this redundancy so that we could see the true number of claims made by each claimant. To do so, we moved our data into a program called OpenRefine. Here, we clustered claimant names to identify where multiple names were used to refer to the same person. We used this to identify all duplicate forms of claimant names and then manually recoded the data accordingly in RStudio.

This processed combined several names making the list 27 names shorter. 697 unique claimants resulted. The 20 most numerous claimants are listed below.

Table 4: V10, Claimant Names without Duplicates

claimant	n
Joe Biden	113
Hillary Clinton	104
Bernie Sanders	58
Mike Pence	56
Newt Gingrich	45
Ted Cruz	42
Marco Rubio	39
Ron Johnson	32
Andrew Cuomo	31
Barack Obama	31
Scott Walker	29
Rick Scott	28
Elizabeth Warren	26
Kamala Harris	25
Chris Christie	24
Nancy Pelosi	24
Paul Ryan	24
Tammy Baldwin	24
Beto O'Rourke	23
Tim Kaine	23

#### Version 11 - Final Claimant Cleaning

During this process we also noticed that some claimants in the data who did not fit our defintion of politician, yet had not been identified as such by our code. To ensure that the claimants fit the specified definition of politician, we ran the list of claimant names through a stricter version of the politician filter. 58 names were marked as potentially not being politicial figures. Each name was manually reviewed and we identified 6 names that did not belong in the dataset: Tucker Carlson, Laura Ingraham, Jacob Wohl, State representatives, Reagan was Right, and Marco Rubio's heckler.

21 claims were removed as a result.

Later on during tagging we identified three more claimants that were not political figures (Pat Robertson, Juan Williams, and Evan Smith) and 1 claim that was mislabeled (our data said it was spoken by Maxine Waters but the PolitiFact article listed the claimant as "bloggers").

For ease we have addressed them at this stage, thus 6 additional claims were removed.

Below are the counts for the final dataset used for tagging.

Table 5:	V11,	Ratings	by	Party

textualRating	Democratic	Republican
Pants on Fire	31	93
False	160	310
Mostly False	218	273
Half True	316	237
Mostly True	362	171
True	218	111

#### **Tagging Claims**

Now that we had a workable dataset, we wanted to learn more about what politicians were lying about. We subject tagged each claim in the data set with relevant and comprehensive tags to categorize the topics of lies and identify patterns in lying.

We decided to only tag False(ish) claims (Mostly False, False, and Pants on Fire) because our aim was to study what politicians are lying about, not what they are telling the truth about. We acknowledge that this choice limits our inquiry, but since claims were going to be tagged manually we decided to focus on our primary research question. This left 1,085 False(ish) claims to be subject tagged.

Table 6: False(ish) Claims to be Tagged

textualRating	Democratic	Republican
Pants on Fire	31	93
False	160	310
Mostly False	218	273

We then had to construct a method for tagging claims. To not start from scratch, we decided to ground our project in an established tagging framework drawing from Frank Baumagrtner's well established subject tags used for the Comparative Agendas Project.

However, since these were designed to tag policy platforms and not political speech, there were some categories missing from Baumagrtner's tags that were common among the claims we analyzed. To address this,

our research team conducted a series of practice tagging sessions in which 100 randomly selected claims were subject tagged. Through this process we discovered which categories we felt were relevant but missing, allowing us to establish categories that best encompassed the types of claims found in the dataset. The tagging system and tags themselves were built based on the data we were tagging.

We defined tags by supplying a list of topics that fell underneath that subject area. We identified these with buzzwords that could be seen in a claim, or general concepts that could help a tagger tag the claims correctly. Despite every effort to be comprehensive, we recognize there may be some remaining gaps in our definitions.

Words in parentheses signify modifications/clarifications to the definition after tagging had begun.

People may disagree with our category grouping. We acknowledge the subjective nature of these categories.

Micro tags were traditional subject tags that describe the substance of the claim and the political issues or policy issues discussed in it.

Macro tags take a more big picture approach describing the directive of the claim (Opponent/Self/Legislation) and the use of Fear within a claim.

Table 7: Micro Tag Definitions

Table 7: Micr	ro Tag Definitions
Subject	Or having to do with/associated with
National and State Macroeconomic Issues	Interest Rates, Inflation, Monetary Policy, Gov. Debt, Economic Regulations, GDP
Economic Well-Being and Domestic Commerce	Banking, Finance, Personal Wealth, Income, Economic Well-Being of
	Citizens, Poverty, Small Businesses, Stock Market
Labor and Employment	Unions, Labor Force, Unemployment, Jobs, Regulations in this
Foreign Trade	Sphere, Workers Rights, Minimum Wage, Wages, Worker's Benefits Trade Deficits, Tariffs, Imports/Exports, GDP, Trade Deals,
roleigh Trade	Exchange Rates, International Finance
Taxes	Anything to do with Taxes– Tax code, Raising/Lowering Taxes, New
Government Operations	Taxes Gov. Bureaucracy, Legislative Bodies, Gov. Spending, Employees,
	Appointments, Contracts, Census, Domestic Inter/Intra
	Governmental Relations, Judiciary, (Impeachment, Executive
Defense/Military	Orders) Military, Military Spending, Armed Forces, Defense Contracts,
Doronsof Ministry	Weapons, Military Bases, Intelligence, Combat/Wars, Veterans,
	Military Honors, Eligibility for Service, Cyber Security, National
International Affairs and Foreign Aid	Security Foreign Relations, Alliances, Diplomacy, Human Rights,
international Analis and Foreign Aid	Development, Embassies Anything International that is not economic
Voting/Elections	Voting Rights, Voter Suppression, Voting policy, Voting Patterns,
	Elections, Election Fraud, Election Policy, Gerrymandering, (Not
Civil Rights Minority Issues and Civil Liberties	Campaigns and Campaign Finance)  Issues of Civil Rights and Liberties— can include issues of Race, Sex,
Orvir reignes withority resuces and Orvir Liberties	Gender, Religion, Freedom of Speech, Disability, Privacy, Age,
	Protest
Immigration and Refugee Issues	Illegal/Legal Immigration, Border Policies/Issues, Immigration
	Policy, Rights of Illegal Immigrants, Visas, Citizenship, Refugees, Child Migrants, Border Patrol
LGBTQ	Sexual Orientation, Gender Presentation, Trans Rights, and Related
	Policy, Statistics, and Discrimination
Race	Racial Issues, Racial/Ethnic Discrimination, Racial Inequality, Bias, Representation
Religion	Religion, Personal Faith, Religious Freedom, Discrimination based
	on Religion, Religion in Policy
Women	Women's Rights, Women's Issues, Gender Inequality, Women's
Health (non-care)	Health, Sexism  Health outside of Health Insurance, Anything related to human
	health and well-being, COVID-19, Mortality Rates, Drug Use/Abuse,
0 - 1 11 16	Mental and Physical Illness, Health Policy
Social Welfare	Social Security, Medicare, Medicaid, Food Stamps. Unemployment Assistance, Disability Assistance, Gov. Programs serving groups in
	need, Childcare Services, Charities + Volunteer Organizations
Education	Education Policy, Funding, Private/Public School, Early Education,
	Curriculum, Higher Education, Student Loans, Admissions,
Abortion	Educational Access Pro-Life, Pro-Choice, Fetus Facts, Planned Parenthood, Roe v.
	Wade, Abortion Clinics, Abortion Policy
Healthcare	Health Insurance, Medicare, Medicaid, Obamacare, Uninsured,
	Premiums, Cost of Healthcare, Pharmaceuticals, Cost of Medicine, Universal Public Health Care, Cost of Treatment, Wait Times,
	Death Panels, FDA
Agriculture	Agricultural Subsidies, Animals, Farming, Crops, Agricultural Costs,
Environment	Food Safety, Regulation, USDA/FDA (food), (Wildlife)
Environment	Environmental Policy, Climate Change, Environmental Disasters, Drinking Water, Waste, Pollution, Recycling, Conservation, EPA,
	Weather
Energy	Electricity, Coal, Natural Gas, Oil, Nuclear Energy, Renewable
Transportation	Energy, Related Policy Air Travel, Trains, Highways, Infrastructure, Bridges, Public
	Transport
Community Development and Housing	Community and Urban Development, Housing, Homeless, City
Technology Science Space	Planning, (Population Change) Technology, Tech Policy, Space, Science, Research, Innovation
Media and Communications	Social Media, News Media, Entertainment, Broadcast,
	Telecommunications, Media Policy, Related Policy
Law and Crime and Policing	Crime, Criminal Justice System, Courts, Police, Violence, Police
	Brutality, Illegal Drugs, Jails and Prisons, Criminal Justice Reform, Policing Reform, Rights of Felons, Rights of Victims, Mass
	Incarceration, Crime Rates, (January 6th)
Terrorism	Domestic or International Terrorism, Mass Shootings, Interrogation
	Techniques, Hijacking, Piracy, Policy to Combat Terrorism,
Guns	Conspiracy
Guns	
Guns History	Conspiracy Gun Rights, Gun Control, Gun Violence, Mass Shootings, 2nd Amendment, Gun Laws Claiming to be "Historic", Citing Historical Events, 20 years ago or
	Conspiracy Gun Rights, Gun Control, Gun Violence, Mass Shootings, 2nd Amendment, Gun Laws Claiming to be "Historic", Citing Historical Events, 20 years ago or older, Precedented/Unprecedented. Generally claims about what has
History	Conspiracy Gun Rights, Gun Control, Gun Violence, Mass Shootings, 2nd Amendment, Gun Laws Claiming to be "Historic", Citing Historical Events, 20 years ago or older, Precedented/Unprecedented. Generally claims about what has happened in the past.
	Conspiracy Gun Rights, Gun Control, Gun Violence, Mass Shootings, 2nd Amendment, Gun Laws Claiming to be "Historic", Citing Historical Events, 20 years ago or older, Precedented/Unprecedented. Generally claims about what has

Table 8: Macro Tag Definitions

Subject	Or having to do with/associated with
Fear	Claims intended by speaker to elicit fear. Including fear of both
rear	v .
	immediate or delayed bodily harm, financial/economic harm, harm
	to property, harm to security, harm to rights, harm to health, harm
	to democracy. Fear of cultural encroachment. Intended to scare.
	(Must include inflammatory language, the use of extremes or
	exaggerations, or current/impending threats of harm to the listener.)
Self/ Personal Record	Claims where the speaker is making a statement about his/herself
	including beliefs, record of behavior, political record. Any statement
	about the claimant themselves.
Opponent/ Opponents Record	Claims where the speaker is making a statement about a political
	opponent. Can be about what the other person has said, done, not
	done, beliefs, or character. Opponent is not limited to direct
	political opponent but all politicians of the opposing party, or the
	opposing party itself, or those in contradiction with claimant's
	political position.
Legislation	About a Proposed or Passed Policy, Impact of Policy/Legislation,
	Nature of Policy, Motivations for Policy. Legislation includes any
	bills including spending bills and tax bills. Applies when a claim
	refers to a specific piece of legislation. Not general spending or tax
	issues.
IMPORTANT NOTES	Claims that are tagged with Self or Opponent are typically also
	tagged candidate biography, unless the Self/Opponent in question is
	not an individual but a whole party. Similarly there may be some
	tagged candidate biography that are not Self/Opponent because they
	are discussing the record of someone within their own party because
	it is neither their opponent or themselves. Discussion of Taxes and
	Funding are not always legislation, only is a specific bill/policy is
	mentioned. Raising Or Lowering taxes is not unless it is about a tax
	bill. Also historic legislation typically does not apply. (Claims about
	lobbying groups will be tagged according to the issue the group is
	lobbying for. NRA=Guns etc. If it is about the candidates
	willingness to respond to lobbyist it is also candidate biography.)

Through tagging, we wanted to be able to describe as many relevant attributes of a claim as possible. First, we allowed a claim to be assigned multiple tags, and we had different types of tags—Macro and Micro.

Four coders were trained on how to tag claims based on the subject tag definitions. Taggers did practice rounds on randomly selected claims and we talked through instances where they disagreed and worked to standardize our definitions.

We were actively seeking consensus between our taggers. However, because each claim could receive multiple tags, one different tag would mean a mismatch and high inter-coder reliability would be hard to achieve.

As a Royal, a software engineer in the Duke Reporters Lab, created an online tagging interface for our coders to use. A coder was presented with only the text of a claim, and a link the fact-check if they needed more information. They were not shown the claimant's name or party affiliation unless they reviewed the URL. They would then select all the tags they felt applied to that claim. All claims were tagged by at least two coders. If the two coders agreed on the tags, that claim's tag were not reviewed. But, if there was disagreement between the two coders, as was the case for 776 of the claims, lead researcher Grace Abels manually reviewed each claim and the two different sets of tags that had been assigned. Grace Abels then determined the final tags for each claim.

In retrospect, we found two of our categories to be ineffective in practice: the Fear macro tag and the Record/Candidate Biography/Campaigns and Personal Behavior micro tag.

Understanding the confounding factors that come with our method of tagging, we feel confident in our system. The tagged data is available for review. After tagging, the dataset was joined with the larger version 11.

## Manual Removal of Duplicate Claims

As mentioned earlier, 31 more claims were identified as duplicates during tagging. These were claims with differing urls but identical texts. These were not captured earlier because we searched for duplicates with

identical urls. Most often these duplicates were fact-checks that had already been published and were included again in an article round-up of fact-checks.

Table 9: Remaining Duplicates Identified during Tagging

text	n
We put a lid on Iran's nuclear program without firing a single shot.'	4
Illegal immigration and the crime rate are as low as they've been in decades.'	3
It was Hillary Clinton who left Americans in harm's way in Benghazi and after four Americans fell said;	3
'What difference at this point does it make?' '	
	3
	3
	3
Says Hillary Clinton 'said all work-related emails were sent back to the State Department. The FBI director said; that's not true.'	3
Says; regarding the presence of classified information in her email; FBI Director James 'Comey said my	3
answers were truthful; and what I've said is consistent with what I have told the American people.'	
Trump ties are made 'in China; not Colorado. Trump suits in Mexico; not Michigan. Trump furniture in Turkey; not Ohio. Trump picture frames in India; not Wisconsin.'	3
• • • • • • • • • • • • • • • • • • • •	2
, ,	2
Says '(Clinton) called President Assad a 'reformer.' She called Assad a 'different kind of leader.' 'Says 'Hillary (Clinton) wants to increase the number (of Syrian refugees) by 500 percent.' Says as Indiana governor; he has made 'record investments in education.' Says Donald Trump 'cashed in' on Sept. 11; 'collecting \$150;000 in federal funds intended to help small	2 2 2 2
businesses recover — even though days after the attack Trump said his properties were not affected.' Says Hillary Clinton 'abided by the ethics agreement' between the Clinton Foundation and the Obama administration.	2
	2
	2
	2
The top one-tenth of 1 percent now owns almost as much wealth as the bottom 90 percent.'	2

We prioritized preserving the claims linked to the original and specific fact check over those republished as part of a larger article. To do so, we manually removed the 31 duplicates by their claim identifier number. This resulted in a remaining 2469 claims.

## Location of Lie

In addition to the Micro and Macro tags, we also tagged the entire dataset, not just False(ish) claims, by the location of the lie, meaning the medium and format of the statement containing the lie. This tracked attributes such as whether it was said on TV, in an interview, on social media, etc. We had several overarching categories called location tags, and then more specific subcategories tagged location.extra.

Finally, we exported the final dataset into a viewable and downloadable csv, called pf\_mega\_location.csv.

Further analysis of this data can be found in the Location of Lie Analysis, available in both accessible RMD and PDF form.