## Computational Literacy final project

Themes in the Working Class History

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#### Introduction

The rebellion and solidarity in social movements, the struggles against colonization and racism, the waves of feminism, the students movements, etc. have always been inspiring me to think about challenges we are facing in our society today and what we can possibly do as individuals and communities.

The *Working Class History - Everyday Acts of Resistance & Rebellion* (WCH) project is a collaborative archive of people's history, where events and people are collected to commemorate grassroots movements, struggles of the working class, hidden stories of marginalized communities, and so on. Founded in 2014, the WCH team is an international collective of worker-activists who launched a social media project and podcast to uncover our collective history of fighting for a better world (Working Class History, 2020).

The events documented reflect how the WCH team define working class history and imply what are considered as important lessons and learnings for us today. In terms of what the "working class" entails, their perspective is quite open: "we take an expansive, intersectional, and internationalist view of class, and we present snapshots of all kinds of battles against exploitation and oppression." (Working Class History, 2020). From these events we can see actions taken by women, young people, people of color, workers, migrants, indigenous people, LGBT+ people, disabled people, the unemployed, and every other part of the working class.

While the people and stories selected in the project are empowering in different ways, I wonder if we combine the close reading with a view from the distance, what will the events reveal collectively that might be invisible otherwise.

As Chomsky says in his foreword for this book, "In these tumultuous time, Working Class History is important, because a functioning democracy requires active citizens participation in setting social policy". Inspired by the project's mission and Chomsky's comment, I aim at delving into ordinary people's participation in social movements and their resistance against oppression. My research questions are:

- 1. What are the common themes in the Working Class History project?
- 2. Through the main topics reflected in the Working Class History project, what can we learn about ordinary people's resistance and participation in social movements?

This analysis is based on the events curated by the WCH team, which don't fully mirror the entire history and may involve biases inevitably. Nonetheless, it's still a powerful archive reflecting historical facts and

collaborative memories, encouraging us to learn from the past, contemplate on current social issues and advocate for our communities today.

#### **Dataset**

The dataset is the textual content of the historical events documented in the "Working Class History - Everyday Acts of Resistance & Rebellion" book.

The events are organized by date, and a date usually associates with events from multiple years. For instance, December 12 has two entries: December 12, 1948 and December 12, 1969. Each event contains an article describing the process, the result, a person or community, relevant places, etc. The event description is unstructured text.

Originally, these records were posted by the WCH team on social media on anniversaries of the events, allowing the public to learn about the historical movements in a more relatable way. The book was published in 2020, but events are still being updated daily. Due to copyright, the raw data from the book used in this assignment won't be shared publicly. But readers can visit the official website of Working Class History - Everyday Acts of Resistance & Rebellion (https://workingclasshistory.com/) and their social media platforms for stories, podcasts and more.

#### **Process**

For this analysis, I focused on the event texts and excluded content before and after the events section, such as introduction, foreword, and references. Each event was put in one paragraph, showing up in the .txt file as one line starting with the date. The data is saved in wch data.txt.

Next, each event was stored in a dictionary or a distinct document for the purpose of topic modeling. The event dictionary has the date as key, event text as value. After some initial topic modeling trials, I realized that "women", "students", "miners" and "soldiers" are salient terms and potential concepts that I would like to focus on, and the singular forms should be treated as the same concept, so I replaced these words with their plural forms. The documents are stored in the wch\_events.json file, and the code for converting txt to json file is text\_to\_json.py.

Putting the text into Voyant tools to get a general idea, I realized words like "workers / work / working" are so important that they appear too frequently and might overshadow other key concepts. So I added these words in the list of stop words, along with other words that are either too frequent or less meaningful based on our context.

The next preprocessing steps include lowercasing, removing numbers and punctuations, and tokenizing.

Then the LDA model in Gensim was used to conduct the topic modeling. Part of the preprocessing and topic modeling process was based on the code from Nan Jiang's project "An analysis of Finnish milk propaganda"

(DOI: 10.5281/zenodo.10419360) with some modifications or adjustments. I put these steps in a function named topics(dataset: str, start\_year: int, end\_year: int, topic\_no: int, output\_vis: str), which takes the data file name, year range, number of topics and the visualization file name as its arguments, and returns the lda\_model. The year range allows us to focus on specific time frame such as 20th century, or compare different time ranges, such as 1930-1950 vs. 1960-1980.

The initial topic modeling trials yielded fairly similar topics from looking at the terms, although the Intertopic Distance Map does show some distinction. The alpha parameter of the LdaModel was defaulted to 'symmetric'. After consulting the professor, I learned that terms such as "strike" appeared constantly and that may hurt the model's ability to divide the rest of the material. Following his advice, I set the parameter to alpha='auto' so that the model learns an asymmetric prior from the corpus. I used the CoherenceModel in Gensim to calculate the topic coherence. After alpha was set to 'auto', it resulted in better coherence score.

To determine the number of topics, I tried setting it to 5, 10 and 15, comparing the results based on the terms in each topic, the Intertopic Distance visualization, and coherence scores. When the number was lower, although the coherence score was higher, they were less unique from each other, making it harder to come up with meaningful interpretations. Since the dataset is not very diverse due to the nature of the theme and the editorial choices, I tried to reveal more distinct terms. Eventually I settled on 15 topics, when the thematic structure of WCH was summarized relatively better. The evaluation of the topic model could be based on perplexity, coherence, visualization and human interpretability. My decision was based on the tradeoffs between these factors and was inevitably biased by my subjective interpretations and limited knowledge.

In addition to topic modeling, I'd like to see how certain keywords' frequencies change over time and visualize them in line charts. I wrote a function named keyword\_frequency(keyword: str), which takes the keyword as its argument. For each event, I counted the keyword's frequency and put them in a dictionary, using the year as key, frequency as the value. When multiple events happened in the same year, the keyword frequencies would be added up. Next, to simply the line charts, I aggregated the frequencies by decades. After a few trials I currently set the year range to 1850-2000, where we can see a change between the two centuries and some fluctuations in different decades of the 20th century. But we can choose different time ranges based on our purposes. Then the frequencies were summed up by decades and put in a list named line\_kw. Next, we can plot the frequencies over time as a line chart using the Matplotlib library, with the x-axis showing the decades, y-axis showing the keywords counts.

I plotted multiple keywords in one chart to see if they might reveal any interesting patterns, such as women, miners, students, black, which could be considered as communities or minorities who have made specific contributions to the working class history; or strike, protest, movement, union which could be related to resistance and rebellion. But at this point we shouldn't assume the statistics of these concepts have any specific relationships with each other.

## **Analysis**

## **Topic modeling**

In order to obtain an understanding on the main themes in the Working Class History project, the top 30 salient terms for each the 15 topics were examined based on the original text and the historical context.

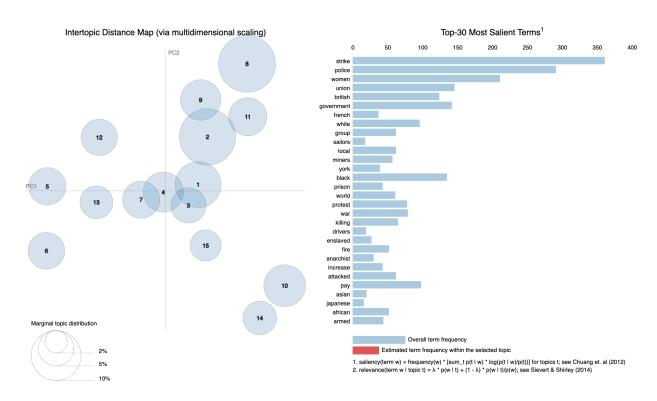


Figure 1: Topic modeling visualization

I tried to come up with their categories (listed in Table 1), however, due to the limitation of my subjective interpretation, the overlaps between topics and the mixed topics, some of the categories might be vague, broad or biased at this point. In this section, I mainly discuss the prominent topics and the topics that reveal unexpected or interesting perspectives.

Table 1 - Topic modeling results

| Topic | Terms 1-10  | Terms 11-30   | Weight | Potential<br>Categories |
|-------|---|---|--------|-------------------------|
| 1     | union, women, <b>black</b> , strike, police, <b>white</b> , sailors, arrested, british, local | american, first, pay, war, group, members, government, despite, african, iww, troops, navy, end, eventually, support, world, killed, attacked, without, city                              | 8.5%   | anti-racist             |
| 2     | strike, women, police, union, black, government, british, pay, killed, <b>support</b>         | white, movement, south, authorities, <b>children</b> , arrested, first, national, company, city, protest, war, attempted, group, increase, <b>members</b> , african, strikers, end, class | 12.8%  | solidarity              |

| 3  | strike, women, union, british, police, government, first, prison, world, party   | fire, drivers, children, <b>communist</b> , killing, organized, killed, massacre, even, <b>anarchist</b> , troops, mexican, strikers, arrested, subsequently, protest, army, war, black, soldiers        | 5%    | ideology            |
|----|--|--|-------|---------------------|
| 4  | strike, police, government,<br>british, <b>city</b> , murdered,<br>attacked, union, london, class  | french, death, pay, resistance, war, world, troops, movement, <b>factory</b> , women, <b>civil</b> , members, known, protest, mass, strikers, protests, camp, army, <b>independence</b>                  | 6.5%  | movements in cities |
| 5  | police, black, killed, british, white, killing, government, movement, death, shot  | land, strike, <b>prison</b> , factory, public, uprising, protest, <b>arrested</b> , time, demanding, officer, ramón, women, <b>massacre</b> , military, students, american, rebellion, trial, occupation | 5.6%  | violence            |
| 6  | <b>british</b> , women, government, police, <b>french</b> , strike, troops, military, refused, black   | island, soldiers, white, colonial, union, murdered, twenty, anarchist, killed, local, army, member, class, states, pay, american, area, forces, shot, arrested   | 5.4%  | colonization        |
| 7  | police, white, women, <b>rights</b> , black, war, american, government, shot, union  | york, city, <b>revolution</b> , world, strike, british, <b>civil</b> , fascists, attacked, class, <b>freedom</b> , known, african, young, fought, national, killed, lincoln, first, organization         | 5.5%  | civil rights        |
| 8  | strike, police, <b>women</b> , government, <b>black</b> , <b>students</b> , killed, <b>miners</b> , pay, union killing, british, company, forces, attacked, class, military, striking, national, protests, broke, protest, white, despite, fire, massacre, members, african, shot, demanding |  | 13.1% | minorities          |
| 9  | strike, women, police,<br>government, <b>pay</b> , black,<br>arrested, union, first, african   | ack, class, <b>demanding</b> , protest, refused, forced,   |       | pay increases       |
| 10 | strike, police, women, union, city, arrested, pay, killed, protest, french   | strikers, british, government, black, war, troops, prison, movement, york, action, world, state, death, rights, known, agreed, eventually, soldiers, anarchists, free                                    | 7%    |                     |
| 11 | strike, black, police, white, women, <b>local</b> , hours, union, killed, military   | strikers, miners, first, african, coal, government, return, laws, pay, time, students, rights, protest, death, americans, war, civil, rebellion, jailed, murdered  | 5.8%  |                     |
| 12 | strike, police, miners, killing, group, fire, troops, women, black, <b>organized</b>   | enslaved, students, national, fascist,<br>movement, joined, british, local, government,<br>state, rebellion, armed, executed, fascists, pay,<br>war, support, class, union, previous                     | 5.3%  |                     |
| 13 | police, protest, strike,<br>government, armed, war,<br>students, movement, women,<br>black   | city, south, law, uprising, crowd, national, enslaved, troops, killed, british, <b>authorities</b> , local, officers, protesters, forced, high, military, <b>control</b> , end, panthers                 | 4.4%  |                     |
| 14 | women, strike, union, war, police, world, movement, protest, rebellion, arrested   | <b>japanese</b> , <b>riots</b> , first, black, government, <b>asian</b> , streets, food, <b>struggle</b> , york, england, fbi, prison, country, killed, fire, arrest, class, spread, led                 | 4.6%  | Asians' rebellion   |
| 15 | strike, police, government,<br>union, group, <b>pay</b> , <b>increase</b> ,<br>members, killed, black  | attacked, york, authorities, movement, fire, strikers, protest, guillotine, <b>repression</b> , world, continued, public, local, city, students, war, strikes, supporters, party, country                | 3.9%  |                     |

**Topic 8** is the most prominent topic followed by Topic 2 and Topic 1. The top 30 relevant terms for Topic 8 take up 13.1% of tokens, and "women", "Black", "miners", "students" appear within the top 10. The main theme of Topic 8 could be associated with minorities.

"Women" stands out persistently in almost all the topics, reflecting the WCH project's emphasis on women's agency and contributions in the movements or presence in the events at the very least.

Besides Topic 8, "Black", "students", "miners" are frequently seen in many topics, which could reflect how minorities or communities that had been subordinate and oppressed responded to the social issues as active participants. To see the context of these terms and get an idea about their roles in these events, I used the collocation analysis function in Voyant and referred to the original text. The table below shows the top 10 collocations for "women", "black", "students", and "miners":

Table 2 - Collocations

| women*    |    | student*   |    | black*    |    | miner*   |    |
|-----------|----|------------|----|-----------|----|----------|----|
| workers   | 42 | workers    | 12 | workers   | 25 | strike   | 14 |
| men       | 22 | strikes    | 12 | people    | 23 | wives    | 7  |
| strike    | 17 | university | 5  | white     | 15 | workers  | 6  |
| children  | 17 | black      | 5  | panther   | 11 | striking | 5  |
| working   | 12 | police     | 4  | police    | 9  | walked   | 4  |
| rights    | 10 | killed     | 4  | students  | 8  | women    | 3  |
| organized | 10 | government | 4  | strike    | 8  | support  | 3  |
| girls     | 10 | protest    | 3  | power     | 8  | family   | 3  |
| police    | 9  | peacefully | 3  | residents | 7  | strikes  | 3  |
| including | 9  | movement   | 3  | women     | 6  | children | 2  |

The word "including" in collocation with "women" may indicate that women had to be explicitly included because they had been underrepresented or ignored earlier. For example, "January 27,1918 Revolution broke out in Finland as workers took over Helsinki, with many of the country's other large towns following in the next few days. The 'People's Republic of Finland' instituted numerous far-reaching reforms, **including** women's suffrage, workers' control of production, a maximum eight-hour workday, the abolition of the old mode of land distribution, and the emancipation of domestic servants and farmhands."

In the collocates of "students", "peacefully" indicates that students tried to protest peacefully, but were prevented and hurt by the authorities. "White" ranks high in the collocates list of "black", showing the major conflicts and the anti-racist discourse. And for "miners", terms related to the miners' family stand out, such as wives, women, and children; "walked" refers to "walked out" on strikes in context.

Terms associated with **Topic 2** are mixed and similar to other topics, but "support" appears within the top 10 terms. If we look at its context in Voyant, we could see many events involve people under oppression helping each other, which could imply solidarity.

| Franklin D. Roosevelt, the practice continued until 1936, with the         | support | of labor unions.52 February 27, 1943 The Rosenstrasse protests            |
|--|---------|---|
| casualties, some fatal. Though eventually broken, the occupation galvanize | support | for the American Indian Movement, famously including Marlon Brando, who   |
| Rifle Association, supposedly a gun rights advocacy group, did not         | support | the Panthers and elsewhere supported Republican legal moves to take       |
| involvement in the dispute garnering it national publicity and the         | support | of Abraham Lincoln, the men failed to support the women                   |
| and the support of Abraham Lincoln, the men failed to                      | support | the women pay demands. They feared that the employers might               |
| Batista to invoke the name of the United States in                         | support | of his reign of terror. Administration spokesmen publicly praised Batista |
| is well-known but repression under Perón, who had the                      | support | of most unions, much less so.40 March 21, 1937                            |
| Black power movements and to whom the workers looked for                   | support | , fired them all, with the support of civil rights leaders                |
| the workers looked for support, fired them all, with the                   | support | of civil rights leaders, including Martin Luther King Sr. (not            |
| London, most of them Black, went out on strike in                          | support | of three Black youths who had been jailed after police                    |
| coalition emerged to suppress it. Ceylon government forces were given      | support | , troops and weaponry by the UK, the former colonial power                |
| 12, 1920 Workers in Ireland launched a general strike in                   | support | of pro-independence prisoners who were on hunger strike in                |
| When students faced police repression, many workers took action to         | support | them. In Beijing, after the declaration of martial law, workers           |
| streets, supported workers and anti-colonial struggles, and campaigned in  | support | of migrant families. April 18, 1888 The Imperial British East             |

Figure 2: "support" in context (generated in Voyant)

For **Topic 1**, terms such as "Black", "white", "African" and "American" may indicate anti-racist narratives.

**Topic 6** has "British" as the most frequent term, along with French, island, colonial, army. Checking the context of "British" and "French" in Voyant, we could see most events are associated with colonial power. Therefore, this topic can be viewed as mainly about Colonialism.

The terms in **Topic 9** also lack coherence, but we can see terms like pay, company, and demanding. The term demanding felt interesting but vague, so I went back to the context again. When reading excerpts such as "... the strikers, mostly wool workers and rural laborers, were demanding better pay and conditions...", and "... protests and riots broke out across the country, demanding democratic rights and cultural rights for Amazigh people...", we could see the agency of people being exploited and their courage fighting against authorities.

| of predominantly Polish women cigar makers in Detroit sat down            | demanding | a 10 percent raise, kickstarting a militant wave of sit                    |
|---|-----------|--|
| A nationwide strike of sugar workers broke out in Guyana                  | demanding | that the Sugar Producers Association recognize for the Guyana Agricultural |
| the island of Grenada, then part of the British Empire,                   | demanding | pay increases and recognition for the Grenada Manual & Mental Workers      |
| being plundered, and with the former French colonial power by             | demanding | restitution for the ransom extorted from Haiti in the nineteenth           |
| thousand striking men, who had walked out two weeks earlier,              | demanding | pay increases, with the women joining a few days later                     |
| young people around the world took part in school strikes                 | demanding | government action to halt climate change. Children walked out of           |
| class fought back, going on strike and occupying their plants,            | demanding | that the detainees be released. The occupations lasted until March         |
| 27, 1942 Frances collaborationist Vichy government issued the barbershop  | demanding | that barbers collect cut hair and donate it to the                         |
| stormed their bosses offices and took four of them hostage,               | demanding | better severance packages for workers being laid off. More than            |
| the killing, protests and riots broke out across the country,             | demanding | democratic rights and cultural rights for Amazigh people (also known       |
| April 21, 1856 Stonemasons in Melbourne, Australia, went on strike        | demanding | a maximum eight-hour workday—down from ten hours per                       |
| the Old Quadrangle building at Melbourne University, brandishing a banner | demanding | 8 hours work, 8 hours recreation, 8 hours rest. The                        |
| that had begun two weeks earlier in Spithead, near Portsmouth,            | demanding | better pay and working conditions. They elected delegates and sent         |
| Fifty thousand factory workers in Rio de Janeiro walked out,              | demanding | a maximum eight-hour workday and a 20 percent pay                          |

Figure 3: "demanding" in context (generated in Voyant)

Overall, terms related to conflicts, violence, exploitation and oppression such as police, troops, arrested, killed, massacre, prison etc. are present in almost all topics. At the same time, from the frequent appearance of strike, protest, movement, union, support etc., we are also empowered by the participation, resistance and solidarity of the working class.

Next, besides looking at all the topics for the entire time period covered by the project, I wanted to find out if/how the topics are different in specific time frames. So I ran the topic modeling function for time periods of 1900s-1930s (roughly referring to the decades before and after WWI), 1930s-1960s (roughly before and after WWII), and 1960s-1980s, when many major social changes happened around the world. For the purpose of comparison, I set the number of topics to be 5.

From the results, the prominent topics for each of these time ranges appear to be different based on the historical context, reflecting how ordinary individuals of the working class have taken actions to social crisis in each historical period. The terms for the prominent topic during 1900s -1930s include miners, pay, industrial, conditions, etc., which are related to miners' strikes for better working conditions. For 1930s - 1960s, terms in the prominent topic contain nazi, jewish, fascists, which explicitly ties to the anti-fascism theme. The terms associated with the prominent topic for 1960s - 1980s include black, students, women, civil, rights, etc., connecting to minorities' struggles in the social movements during this period.

The piecharts below show the topic distributions for the three periods (the piecharts were generated in excel based on percentage of tokens for each topic; the salient terms can be found in appendix).

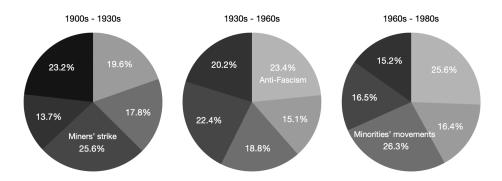


Figure 4: Topic distributions for different time ranges

#### **Keyword frequency over time**

While the topic modeling results provide a snapshot of the WCH corpus across topics, I'm curious to dive into certain key concepts and see how they have changed over time and what they reflect about the sociohistorical context.

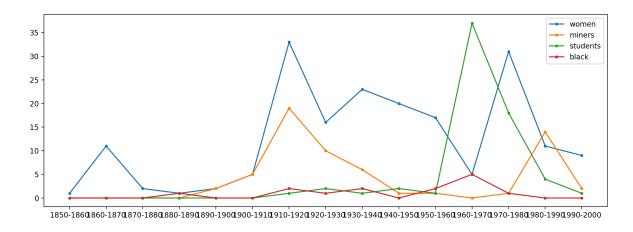


Figure 5: Frequencies of "women", "students", "miners" and "black" during 1850-2000

I plotted the frequencies of "women", "students", "miners" and "black" on the same graph, because they are groups who had been submerged previously and minorities who have made specific contributions to the history. Their fluctuations over time might be relevant to specific time periods and historical events, but we shouldn't assume any specific causal relationships or correlations between these lines.

The spike in "women" during 1960s - 1980s is a probable reflection of the second wave of Feminism. The spike in "students" in the 1960s could be related to the student movements. A close reading on the events from these period proved the relevancy.

An increase of frequency can also be observed for "miners" around 1900s - 1920s. After a search for events containing "miners" during this time frame, among the 16 results, 8 took place in the United States, and all of them were related to strikes. This is largely in line with the American history, "nowhere was the economic and social change which produced American radicalism in the late nineteenth century so rapid and so unsettling as in the mining West" (Dubofsky, 1966).

The "women" line also sees a spike during 1900s - 1920s. No statistical correlations between "miners" and "women" should be assumed only based on the graph but I wanted to see if there are potential connections there. In the events dictionary, I searched for events whose keys are within 1910-1920 and values contain "women" and "miners", and found that while miners' wives and children were victims, they also helped the striking miners, E.g. "...striking Indian mine workers in South Africa demonstrated against a new tax on former indentured laborers. Around two thousand miners marched, as did some women and children...", and "... The Rockefellers evicted the striking miners and their families from their homes, so they set up collective "tent cities" which miners' wives helped run. Company thugs harassed strikers and occasionally drove by camps riddling them with machine-gun fire, killing and injuring workers and their children..."

## **Problems and biases**

The dataset is based on the WCH team's selection and editorial choices of the events. As the authors explain in the book, "We do not claim to recount every movement or incident of importance to our collective history of struggle...we have attempted to present a diverse range of historical events, but due to our locations, primarily the UK and the US, the languages we speak and the nature and biases of sources available to us, there is, unfortunately but unavoidably, a bias in the events toward the European languages of English, Spanish, French, and Italian and toward countries with colonial relationships with those languages."

(Working Class History, 2020) So the topic modeling and analysis reflects the working class history from the team's perspectives, affected by the events included in the book as well as the inevitable biases related to locations and languages.

The goal of the WCH project is to uncover the collective history of fighting against exploitation, discrimination, colonization and oppression, promoting this people's history to educate and inspire a new generation of activists. This is of great value and inspiration, and explains the choices of the events; but the

persistent narrative did make it hard for the model to divide the material and form distinct and coherent topics; the keyword frequencies over time could also be affected by the events documented for each year.

This could also imply that topic modeling might not be the most suitable method for analyzing corpora with concentrated topics. Originally I was planning to base the dataset on the events documented on the WCH website and their social media that are continuously expanding. More diverse contributors and a larger quantity of text might lead to broader and more distinct topics.

Despite the nature of the dataset, interpretations of the topics are affected by my limited knowledge and biased perspectives. A lot of them are subjective and may appear to be a stretch based on a few distinct terms. Analysis of the topics for specific time frames is based on assumption that they might be related to the larger historical events, so the interpretation could be just trying to prove this.

There are also limitations in the preprocessing of the dataset. I added stop words to the list based on preliminary topic modeling during the process, but still omitted some less meaningful words. A few keywords were chosen to match the single and plural forms based on the initial trials and the purpose of analysis, but a full lemmatization should have been done.

## **Concluding remarks**

Overall, the topic modeling and keyword frequency of the Working Class History reflects ordinary people's struggles against oppression, reinforcing the roles of active participation of individuals and grassroots communities in making the world a better place.

Looking at the working class history through distant reading has uncovered some aspects that may not be apparent only based on close reading of individual events. Across the collection of events, the agency and resilience of women and minorities are emphasized persistently. The solidarity between the suppressed communities are identified. The recurring terms may affect the topic modeling results and interpretability to some extent, but they also reinforce the commonality of these struggles and the crucial aspect of working class history that the WCH team wants to convey - victories and improvements have been won only by years of violent conflict and sacrifice of ordinary people.

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# Appendix

Topics for specific periods

|               | Topic | Terms 1-10   | Terms 11-30  | Weight |
|---------------|-------|--|--|--------|
| 1900-<br>1930 | 1     | strike, <b>union</b> , police, women, world, miners, industrial, pay, iww, support             | strikers, attempted, labor, movement, arrested, killed, first, murdered, timber, organizer, japanese, meeting, increase, anarchist, funeral, action, war, south, african, tried              | 19.6%  |
|               | 2     | strike, police, women, union,<br>strikers, class, world, army, city,<br>anarchist              | killed, pay, government, troops, repression, ramon, join, massacre, employers, black, twenty, war, revolution, shanghai, broke, known, end, lawrence, attacked, decided                      | 17.8%  |
|               | 3     | strike, women, police, union, iww, strikers, world, killed, <b>pay</b> , <b>miners</b>         | arrested, government, members, white, children, troops, military, joined, city, striking, <b>industrial</b> , massacre, state, local, armed, conditions, war, army, <b>better</b> , declared | 25.6%  |
|               | 4     | women, mexican, strike, fire,<br>world, death, arrested, union,<br>revolutionary, prison       | organized, war, soldiers, massacre, white, troops, anarchist, black, police, miners, strikers, revolution, party, sugako, turned, citizens, spread, eventually, outside, killed              | 13.7%  |
|               | 5     | strike, <b>union</b> , <b>women</b> , police, pay, iww, government, world, killing, anarchist  | fire, miners, strikers, city, protest, industrial, first, increase, arrested, revolution, killed, york, british, fascists, irish, national, organized, mexican, opened                       | 23.2%  |
| 1930-<br>1960 | 1     | strike, british, police, nazi, resistance, nazis, jewish, women, war, government               | arrested, killed, authorities, group, camp, union, protest, troops, <b>fascists</b> , attacked, demonstration, concentration, members, mass, city, first, fire, colonial, class              | 23.4%  |
|               | 2     | strike, police, women,<br>government, troops, british,<br>rights, black, movement, group       | declared, civil, arrested, authorities, white, case, war, refused, support, union, colonial, labor, protest, <b>segregation</b> , resistance, local, sit-in, spanish, killed, <b>german</b>  | 15.1%  |
|               | 3     | strike, women, union, british, police, war, french, pay, government, killing                   | demanding, company, authorities, increase, refused, spain, support, world, strikers, group, black, paid, injuring, arrested, resistance, fought, labor, members, colonial, mass              | 18.8%  |
|               | 4     | strike, police, british, women,<br>black, government, city, arrested,<br>killed, south         | troops, white, american, attacked, french, authorities, colonial, pay, company, uprising, mau mau, african, north, group, country, soreadm   | 22.4%  |
|               | 5     | women, police, union, strike,<br>british, arrested, black,<br>concentration, city, authorities | nazi, sent, troops, resistance, nazis, singh, government, executed, war, camps, attack, german, forces, injured, members, first, prison, class, civil, camp                                  | 20.2%  |
| 1960-<br>1980 | 1     | police, black, white, <b>students</b> , strike, rights, american, protest, members, young      | african, group, troops, city, killed, party, fbi, university, asian, panther, york, south, state, local, military, government, civil, national, demonstration, panthers                      | 25.6%  |

| 2 | police, government, women, students, strike, black, movement, union, <b>liberation</b> , british     | killed, military, south, rights, white, war, local, troops, forces, night, protest, mass, country, first, soldiers, dictatorship, <b>gay</b> , party, attacked, security         | 16.4% |
|---|--|--|-------|
| 3 | strike, police, <b>black</b> , <b>students</b> , government, women, military, white, union, arrested | land, first, rights, class, pay, eventually, war, civil, refused, united, return, national, movement, shot, city, plant, dictatorship, local, dispute, fbi                       | 26.3% |
| 4 | police, british, black, strike,<br>students, union, government,<br>women, killed, class              | white, officers, national, london, pay, crowd, attacked, group, prison, protest, meeting, war, movement, killing, authorities, time, control, mosley, activists, university      | 16.5% |
| 5 | police, war, black, government, british, party, white, <b>vietnam</b> , civil, minister              | african, american, independence, national, prime, island, strike, movement, class, native, troops, killed, shot, eventually, tsafendas, attack, put, protest, communist, panther | 15.2% |