Of Christ and Capital: The 'Sunday Question' in the 1893 Columbian Exposition

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Introduction

Research Question

What major themes emerge from news publications and editorials across the United States in the year 1893 regarding the Chicago World's Fair, and who might the stakeholders be in these themes?

Project Overview

When selecting a topic, we were drawn to the Chicago 1893 World's Fair because several of us had lived in or near Chicago and were familiar with the fair's immense impact on the history and culture of the city. We each explored the DSL search, cleaning, and analysis by building content sets based on themes of our choice: Danielle's involved exploring the suffragette perspective; Elise's research began as a broad scan of all news and editorial publications in the United States to get a basic understanding of themes of the event, and the research culminated in the exploration of the seemingly notorious issue dubbed "the Sunday Question"; Ian's involved looking at local newspapers; and Marie's focused on a

single publication, The World's Columbian Exposition Illustrated, and its articles mentioning fair exhibits.

After each creating, cleaning, and analyzing our own content set, we came together as a group and discussed which of them could best represent our topic and address our research question. We selected Elise's content set on the "Columbian Exposition and Matters of Worship" because it offered the most usable documents, coherent theme, and resulting analysis. This exhibit thus presents our analysis based on this content set, in addition to providing a narrative about our process in exploring this topic through the lens of Digital Humanities.

About the "Sunday Question"

The identification of themes in the Columbian Exposition and Matters of Worship data set began at the earliest stages of the content set's creation. While selecting documentation, Elise noticed that headlines gravitated towards some distinct issues. Sabbatarians, as some of them called themselves, seemed to be the proponents of keeping the fair closed on Sundays as an act of religious reverence and observation. This was a question of morals rather than logistics to this particular group. On the other side of the argument sat those who sought to achieve financial gain by leaving the fair open on Sundays, citing the opportunity to generate more capital. A Topic Modeling analysis demonstrated that this question was not only one of economics or morals, but also of the law.

Selections from the Collection

The following are a handful of articles from our content set. The articles are arranged in chronological order and represent both sides of the debate. For articles featured specifically in the StorymapJS visualization, please visit the StorymapJS Items section.

"Church and State" from The St. Paul Daily News, January 16, 1893.

This article begins near the top of the second column from the left:

"Church and State." St. Paul Daily News, 16 Jan. 1893, p. 4. Nineteenth Century U.S. Newspapers, link.gale.com/apps/doc/GT3008582278/DSLAB?u=dslabwa&sid=DSLAB&xid=90183908. Accessed 13 Mar. 2021.

"Shall the World's Fair be closed on Sunday?" from The Woman's Tribune, February 25, 1893.

This article begins at the top of the second column from the right and continues on a later page:

"Shall the World's Fair Be Closed on Sunday?" Woman's Tribune, 25 Feb. 1893. Nineteenth Century Collections Online, link.gale.com/apps/doc/USJHPT752216392/DSLAB?u=dslabwa&sid=DSLAB&xid=f0ac78e9. Accessed 13 Mar. 2021.

"Edwin Walker, the attorney who advised the world's fair directors that they had a legal right to open the fair on Sunday, says he has been deluged with letters from women..." from The Portland Oregonian, May 23, 1893.

This article begins toward the bottom of the second column from the right:
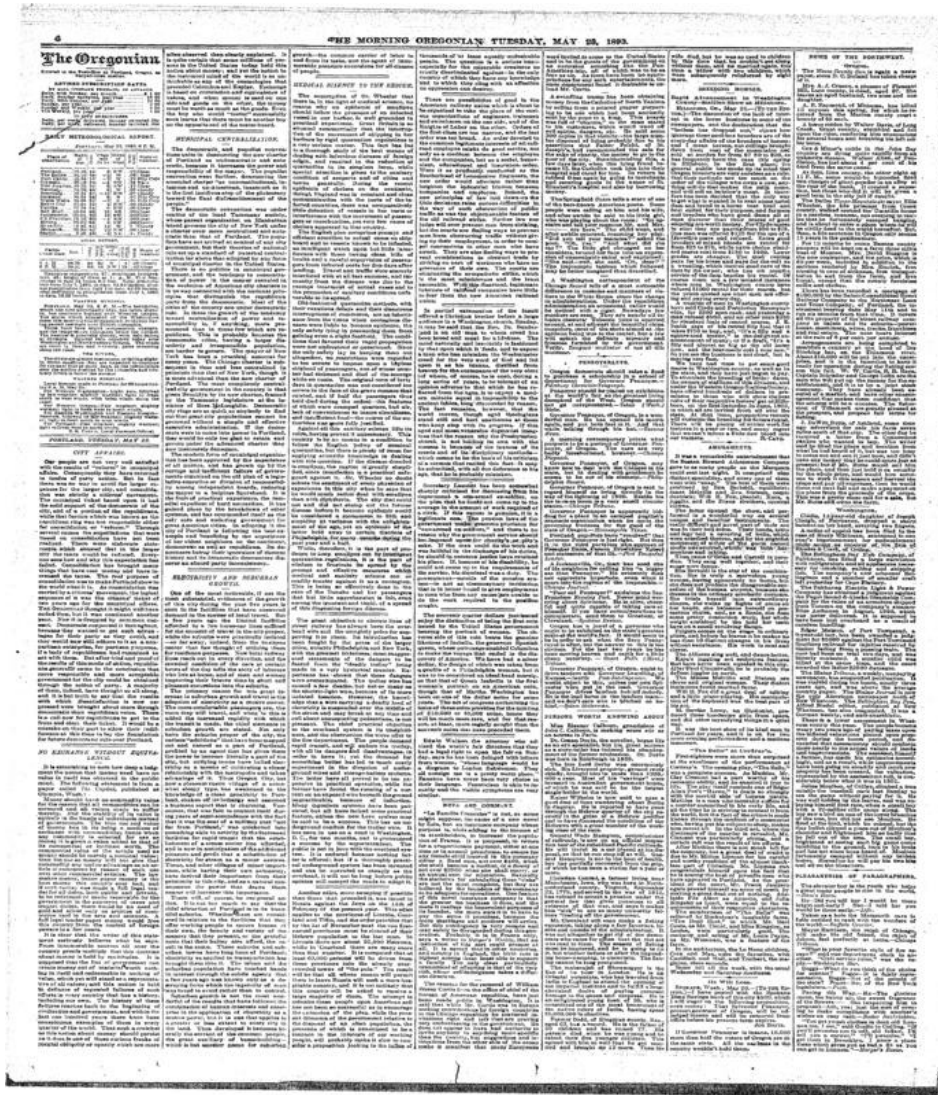
"Edwin Walker, the attorney who advised the world's fair directors that they had a legal right to open the fair on Sunday, says he has been deluged with letters from women, 'whose language would be a disgrace to London fishwomen." Portland Oregonian [Oregon Territory], 23 May 1893, p. 4. Nineteenth Century U.S. Newspapers, link.gale.com/apps/doc/GT3006115002/DSLAB?u=dslabwa&sid=DSLAB&xid=d4b1ffe1. Accessed 13 Mar. 2021.

"The opening of the gates of the world's fair yesterday..." from The Oregonian, May 29, 1893.

This article begins toward the top of the middle column:
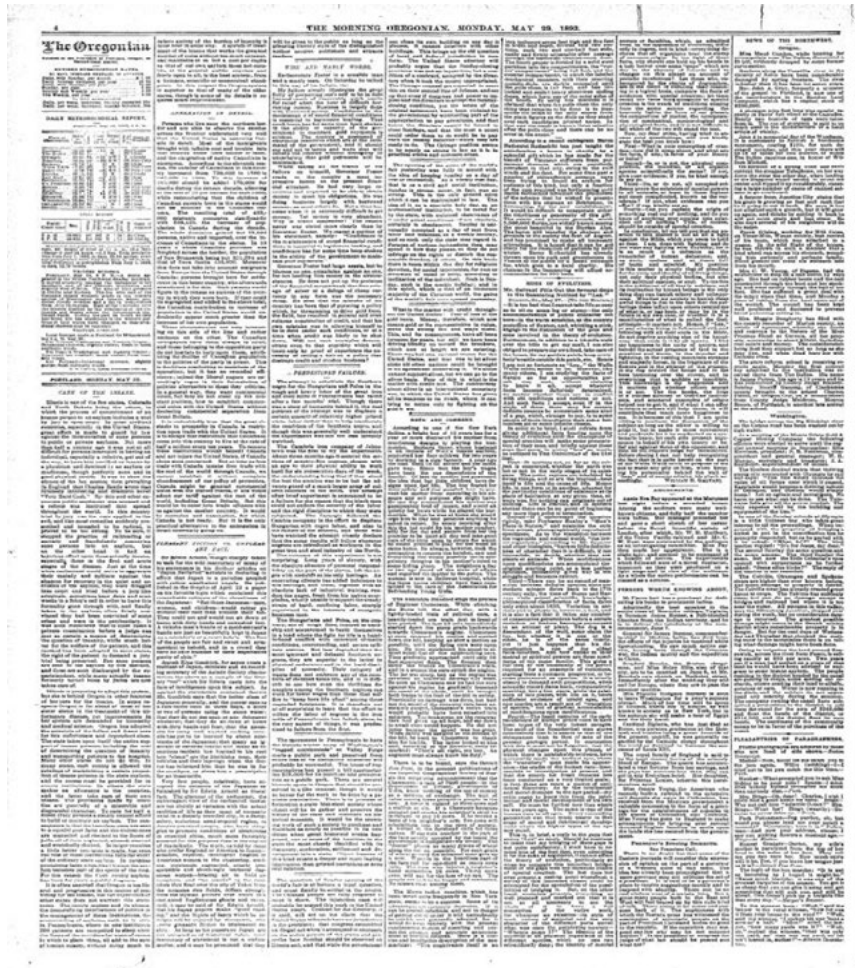
"The opening of the gates of the world's fair yesterday was fully in accord with the idea of keeping Sunday as a day of rest or recreation." Portland Oregonian [Oregon Territory], 29 May 1893, p. 4. Nineteenth Century U.S. Newspapers, link.gale.com/apps/doc/GT3006115632/DSLAB?u=dslabwa&sid=DSLAB&xid=e90f9f77. Accessed 9 Mar. 2021.

"A Southern View: Scripture and Sunday Opening of the World's Fair" from The Daily Inter Ocean, May 30, 1893.

This article begins near the top of the second column from the right:

S. F. C. "A Southern View." Daily Inter Ocean, 30 May 1893, p. 6. Nineteenth Century U.S. Newspapers, link.gale.com/apps/doc/GT3001527258/DSLAB?u=dslabwa&sid=DSLAB&xid=cd25b37b. Accessed 13 Mar. 2021.

Items from our collection selected for StorymapJS

"The Decision of Chief Justice Fuller." Boston Investigator, 28 June 1893, p. 3. Nineteenth Century U.S. Newspapers.

"World's Fair Letter." Woman's Tribune, 3 June 1893, p. 100. Nineteenth Century Collections Online.

"The Sunday Boycott." Portland Oregonian [Oregon Territory], 6 May 1893, p. 4. Nineteenth Century U.S. Newspapers.

"The First Sunday of the Fair." Boston Investigator, 17 May 1893, p. 4. Nineteenth Century.

"It Begins Very Well." Milwaukee Journal, 19 June 1893. Nineteenth Century U.S.

"A Slim Attendance." Rocky Mountain News, 26 June 1893. Nineteenth Century U.S.

Data Curation Journey

Our group initially explored the Digital Scholar Lab (DSL) tools separately by creating our content sets individually. As our research question was designed to allow for broad curiosity about the 1893 Chicago World's Fair and to assess the content based on distant reading techniques, the creation of multiple content sets was deemed appropriate. The following are summaries of our individual experiences before collaboration on our finalized content set.

Elise

Building the Content Set

The first iteration of my content set absolutely reflected my novice skill set. I began with a simple search I hoped would yield documentation that spoke to the fair's most general themes and stakeholders. That said, there wasn't much intention here. I began by using the search terms ``World's Fair" OR "Columbian Exposition" OR "Chicago World's Fair 1893", then set limiters for only news sources and editorials that were published in the year 1893, per our team's scope. I also wanted to select for only local news sources, however found it difficult given the small number of relevant publication sources. Additionally, the resulting content set was miniscule, sitting at just about 30 documents.

Regardless of the set diminutive size, I was still able to pick out themes after running NER, Ngram, and Topic Modeling analyses. From here, I was able to pick out some emerging themes. I briefly explored how international publication outlets wrote of the fair, however found this to be mostly a dead-end. This was likely because my search strategy was not as pointed as it could have been. The most notable theme was regarding Sundays and the question of whether or not the fair would be open. When I revised my search to explore this issue, I found a wealth of publications that spoke to this question. The terms I used were "World's Fair" OR "Columbian Exposition" AND "church" OR "worship" OR "Sunday" OR "god" and I limited the results to only news publications and editorials from 1893. I compiled a content set totaling 270 documents published in the year 1893 by American publication sources. Given that the results for this search was in the low thousands, I could have endeavored to find more. I thought that 270 was sufficient for this assignment, especially given that the results contained many duplications of the same publications and a decent number of out-of-scope publications.

The Cleaning Process

The first time I attempted creating a cleaning configuration, I wasn't exactly certain of my goal. My first instinct was to run the default configuration to see what would happen. I tested this configuration on 10 of my documents and found them largely unchanged. I utilized DSL's videos to grapple with my understanding of the cleaning process, which helped me understand some of the technicalities associated with this step but my

conceptualization was still pretty amorphous. I didn't know what ASCII characters were, or the purpose of removing punctuation or capitalization. I wasn't even certain of what 'stop words' were and how they affected the cleaning process. In the group discussions I read one of my colleagues was using the Ngram tool to discern 'noisy' words from those relevant to their topic. I began using Ngram and NER analysis to eliminate unhelpful words and soon emerged the more interesting terms, one of which was "Sunday", which showed up as one of the most mentioned entities. This is what led me to re-evaluate my content set and build the World Fair and Matters of Worship set.

The final cleaning configuration I ultimately came up with removed punctuation, ASCII characters, numbers, and special characters. The stop word list took several iterations to reach a satisfying place. Characters and terms that were removed include Chicago, world's, mr., mrs. Patton, fair, Columbian, exposition, J., United, States, New, Dr., W., T., C. A., H., St., DID, 1,0, -, . , E., L., F., Miss, M., D., &, fair., -the, brought, called, B., P., given, said, Sunday., Sunday, , shall, make held, ", way, days, taken, o'clock, O., old, having, and finally, say.

Ian

One team member's content set was formed by running an initial basic search within the DSL's "Nineteenth Century U.S. Newspapers" archive for the terms "world's columbian exposition" OR "chicago world's fair". This search result of 7,850 sources was then filtered by date (only results from 1983), type (only "articles"), and by publication. Only sources from newspapers in the upper Midwest were included. These publications were: Daily Inter-Ocean (Chicago, IL), Milwaukee Daily Sentinel (Milwaukee, WI), Milwaukee Journal (Milwaukee, WI), St. Paul Daily News (St. Paul, MN), Yenowine's Illustrated News (Milwaukee, WI) and Wisconsin State Register (Portage, WI). This resulted in a content set of 886 documents.

After running the default cleaning tool with special characters being removed as well, the content set was analyzed with topic modeling, Named Entity Recognition (NER), ngram analysis, sentiment analysis, and parts of speech tagger tools. These analyses revealed a need for more cleaning of the Optical Character Recognized (OCR) text, as they were generally unclear and garbled. For example, topic modeling revealed topics including words like "tile, tie, tihe, ill, thle, thie". These terms were likely OCR misrecognitions and needed to be removed as stop words from the content set.

Topic 2				
IDENTIFIED IN	**TERMS**	**COUNT**	**PROBABILITY**	**DOCS**
194 Documents	tile	728	0.0164	128
TOPIC MEASURES	tie	249	0.0056	90
	tihe	230	0.0052	88
Tokens 44461	ill	212	0.0048	63
Document Entropy 4.406	thle	143	0.0032	66
Average Word 3.8 Length	thie	131	0.003	57
Coherence -49.9172	year	114	0.0026	39
Uniform Distance 2.6104	tho	113	0.0025	60
Corpus Distance 2.8311	April	104	0.0023	26
Exclusivity 0.5237	week	100	0.0022	32

Ngram analysis revealed that many of the most common words throughout the documents were either OCR misreadings, generally meaningless words, or terms used in the initial search and thus their existence was already known. The ngram analysis then served as a tool to identify terms that were garbling analysis results and were removed. These terms included: "Mr., World's, Mrs.,shall, J., W., A., Chicago, said, vs, C., Fair, ., Columbian, H., E., t, F., M., World's Columbian, B., S., L., D., INTER, World's Fair, fair, P., G., T., R. No., N., e, INTER OCEAN, Chicago., Fair., r, n, l, t., s, Mr. Mrs., o, et, d, tihe, f, p., I., m., c, C, a., and, thie, S, h, it". With a cleaner content set, analyses were run again.

Danielle

Building the Content Set

Another team member's content set was generated by running an Advanced Search within DSL using the Keyword terms "World's Fair" and "Chicago." I then added limiters for date to filter out results from before or after 1893, the year of the Fair. Furthermore, I filtered by Content Type given that the scope of our research question excluded types of content other than Newspapers and Periodicals. My search resulted in 7,819 documents. To learn more about these results, I explored the left-hand bar's sources drop-down menu and found something that intrigued me: There were two suffragette periodicals. Thinking that this might reveal something about how women specifically, and women activists, nonetheless, thought about the Fair and interacted with it. I further limited the results to include only those from "The Woman's Journal" and "The Woman's Tribune." This reduced my content set to 48 documents. Although OCR confidence on these documents was low, ranging from the 30's into the 50's, I decided it was worth cleaning and exploring.

The Cleaning Process

I ran the default cleaning tool and continued to perform (NER) analysis, Ngrams, Topic Modeling, and Sentiment Analysis. The Ngrams tool indicated the need for further cleaning through the removal of stopwords which were not valuable. These words were "Woman" "Mrs" "World's Fair" and "Miss." Running the tool a second time revealed that there were stopwords related to those I removed previously such as "women" "Mrs." "Fair" ";" "World's." This indicated that I needed to further remove stopwords as well as configure the cleaning tool to remove special characters. Once again cleaning the content with the additional stopwords special characters, and Uppercase letters removed, I ran Ngram analysis pictured below. High word frequencies for words like "work," "congress," "new," and "building" were not at once clearly indicative of anything to me. When we met as a team and shared our independent searches, Elise's content set echoed parts of my own: the high frequency of the word "congress" in my content set matched her findings of the ubiquity of the debate before Congress as to whether the Fair ought to be closed on Sunday. This indicated that Elise's content set might reveal more items of note.

Term Frequency

Term	Frequency
work	83
congress	81
new	77
building	67
state	52
day	49
e	49
great	47
club	46
art	45
public	45
presented	43
school	42
city	41
people	40
time	40
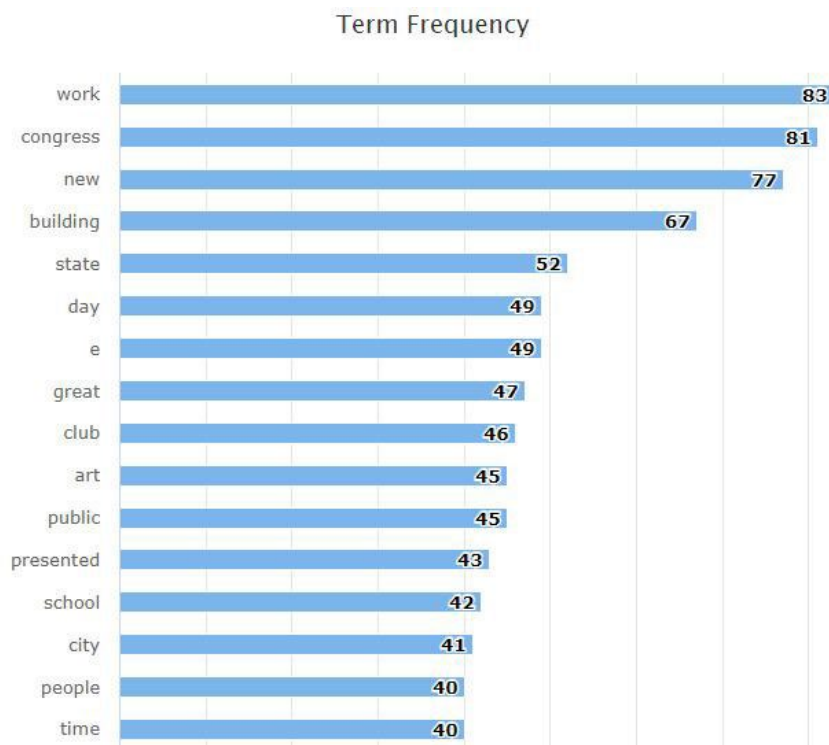
Marie

My first content set mainly represented my exploration of the DSL via search, cleaning, and analysis. My initial search involved the following parameters:

- Keyword (chicago) AndKeyword ("world's fair" Or "columbian exposition") LIMITS:Content Type ("Newspaper" Or "Periodical") AndPublication Language ("English") AndPublication Date (1893)

I added all of the results of this search (over 8000) to a content set called "MP World's Fair Columbian Exposition 2-12." I used a handful of these documents to test out OCR cleaning, which I mainly ran according to the default configuration with some minor tweaks.

I tried building my next content sets around the theme of suffragist newspapers and the Fair, a topic that Danielle brought up during our team meeting. After finding two suffrage papers in the DSL, The Woman's Journal and The Woman's Tribune, I started with these search parameters:

- Search Terms: Basic Search ("chicago") AndBasic Search ("world's fair" Or "columbian exposition") LIMITS:Content Type ("Newspaper" Or "Periodical") AndPublication Date (1893) AndPublication Title ("The Woman's Journal")

I added all of these results (about 800) to a content set named "MP Woman's Journal 1890-1894 2-16." I then repeated my above search with The Woman's Tribune and added those results (about 300) to another content set named "MP Woman's Tribune 1890-1894 2-16."

I used these two suffrage content sets for most of my early analysis (Voyant, Ngrams, Topic Modeling). One thing that came up in several types of analysis was the abundance of words like "Miss" and "Mrs" in the documents, which I made note to include as stopwords in future cleaning configurations. I had hoped that a more specific topic would emerge from these analyses, as we had read about in class, but I was having a hard time finding any significant patterns or themes. From my analysis results, I began to suspect that I had picked up a large amount of irrelevant articles with my search and was not sure how to refine those without going through the articles in my sets one by one.

After our group met again and discussed that we would try to each create a content set with a different focus, I set out to build a new content set. I decided to focus on a publication I had seen in my initial search, the World's Columbian Exposition Illustrated, and ran this search through the DSL:

- Basic Search ("exhibit") Or Basic Search ("exhibition") LIMITS: Publication Title ("World's Columbian Exposition Illustrated")

This search yielded 440 results, all of which I added to my new content set: "MP World's Columbian Exposition Illustrated--Exhibits." Of my content sets, this one was by far the most comprehensible when run through cleaning and analysis. In particular, Named Entity Recognition was useful for identifying which states and countries were represented in the World's Fair exhibits:

Top 200 Entities	Category	Documents	Count
American	CULTURAL GROUP	75	136
French	CULTURAL GROUP	35	53
Columbian	CULTURAL GROUP	45	51
German	CULTURAL GROUP	20	43
Womans	CULTURAL GROUP	26	37
Spanish	CULTURAL GROUP	25	33
Indian	CULTURAL GROUP	21	32
European	CULTURAL GROUP	23	31
Japanese	CULTURAL GROUP	14	27
Indians	CULTURAL GROUP	18	26
British	CULTURAL GROUP	18	26
Mexican	CULTURAL GROUP	13	25
Catholic	CULTURAL GROUP	11	25
Christian	CULTURAL GROUP	10	20
Greek	CULTURAL GROUP	8	12
Italian	CULTURAL GROUP	7	11

Data Visualizations

Our final content set describes the debate about whether the 1893 Chicago World's Fair could be open on Sundays through newspaper articles. Digital Scholar Lab and Omeka offer multiple tools to view these data in meaningful ways. Our group opted to utilize sentiment analysis, geographical presentation tools, and topic modeling. Tracking how sentiment may have changed by analyzing newspaper articles reporting on, and involved in, the debate offers possible insight into how attitudes shifted over the time period of 1893. Visualizing the events around this controversy over time and by place gives the viewer a deeper understanding of the debate as well. Topic modeling allows us to explore themes within this content set, including legal and theological questions.

The following is a word cloud representing the most frequently occurring words in our content set:

Sentiment Analysis Visualization

Our group found that one of the shortcomings of the Digital Scholar Lab (DSL) for our project was that the sentiment analysis tool focused on yearly data and a content set cannot be analyzed at a more granular level. As our content set deals with newspaper articles from only the year of the 1983 Chicago World's Fair, the Digital Scholar Lab

sentiment analysis graph was a single datapoint. We were curious to see if a focus on monthly analysis over the full year might bring any insight into how newspapers were writing about the question of whether the World's Fair should have been open on Sundays.

To do this, we first needed to download the content set and separate the articles by month. This was done manually and was one of the more time consuming aspects of this endeavor. Digital Scholar Lab does not provide any metadata about each article when one downloads a content set so in this case, the DSL content set page provided the metadata necessary to designate publication month. There was also a process of removing duplicate articles. Once documents were separated into monthly folders, we could start on the analysis.

Using code from the [Programming Historian,](https://programminghistorian.org) the Natural Language Toolkit and other necessary tools were imported into a python environment. We used a Jupyter notebook for this process. The next step was to access one article and make sure it was opened in the system. Usually this process requires the removal of stop words, but our content set had already been cleaned using the default cleaning configuration in DSL before downloading it. The first block shows the program accessing the path to a sample file (Against_Sunday_Openi_GT3011668832). Below it is the output of the program reading that .txt file.

```
[4]: #Importing a single file from 'January' falder
     from pathlib import Path
     import io
     import os

     january_data_folder = Path("C:/Users/ianre/Documents/UWSeattle/LIS_598I_DH/Group_3/content_set/clean/January")

     file_to_open = january_data_folder / "Against_Sunday_Openi_GT3011668832.txt"

     f = open(file_to_open)

     print(f.read())
```

Sunday Opening World's Fair.Bishop Doane says: "The main question issue World's Fair shall opened Sunday not. life seen spaci ous arguments forward advanced favor opening World's Fair Sunday, principle policy other, principle sure win. argument is, Ex position partially open Sunday, think people allowed grounds all, satisfiel looking machinery lying still, tltrsty, liuor ? w ant Americanu Sunday Amirica. Chicago Sunday American Sunday, reason American Sunday, bec-tse large foreign element compositi on popllatiou Chicago. intend teach American Sutnday is, ;and begin closing World's Fair Sunday.

```
[5]: #importing full 'January' folder
     for path in glob.glob(os.path.join(january_data_folder, "*.txt")):
         with io.open(path, mode="r", encoding="utf-8") as fd:
             january_content = fd.read()
```

```
[6]: #run sentiment analysis on january_content
     january_scores = sid.polarity_scores(january_content)
     for key in sorted(january_scores):
         print('{0}: {1}, '.format(key, january_scores[key]), end='')
```

compound: 0.5622, neg: 0.054, neu: 0.795, pos: 0.151,

Example of code for sentiment analysis showing January articles

The next block is grabbing all of the .txt files in the "January" folder and compiling them into one file to be analyzed in the final block of code. The output of this analysis is "compound: 0.5622, neg: 0.054, neu: 0.795, pos: 0.151".

The next step was to run this same code on the remaining 11 folders, one for each month of 1893. Finally, we could graph this data over time. I think there is a slicker way to do this, but we wrote out lists of all the data points and, using [matplotlib,](matplotlib) graphed these data points. Below is the code for the graph.

```
[33]: from matplotlib.pyplot import figure
figure(num=None, figsize=(12, 9), dpi=80, facecolor='w', edgecolor='k')
plt.title('Sentiment 1893')
plt.xlabel('Months')
plt.ylabel('Scores')
#compound
plt.plot(month_list, [0.5622, 0.9876, 0.9788, 0.9881, -0.9104, 0.9997, 0.9571, 0.9504, 0.8332, 0.872, 0.3612, 0.9477], label=
#neg
plt.plot(month_list, [0.054, 0.009, 0.043, 0.018, 0.109, 0.051, 0.041, 0.023, 0.107, 0.0, 0.032, 0.0], label="neg")
#neu
plt.plot(month_list, [0.795, 0.739, 0.752, 0.842, 0.773, 0.757, 0.775, 0.845, 0.703, 0.86, 0.903, 0.706], label="neu")
#pos
plt.plot(month_list, [0.151, 0.252, 0.205, 0.14, 0.118, 0.192, 0.184, 0.132, 0.19, 0.14, 0.065, 0.294], label="pos")
plt.legend(loc="upper left")
```

Code for sentiment analysis graph
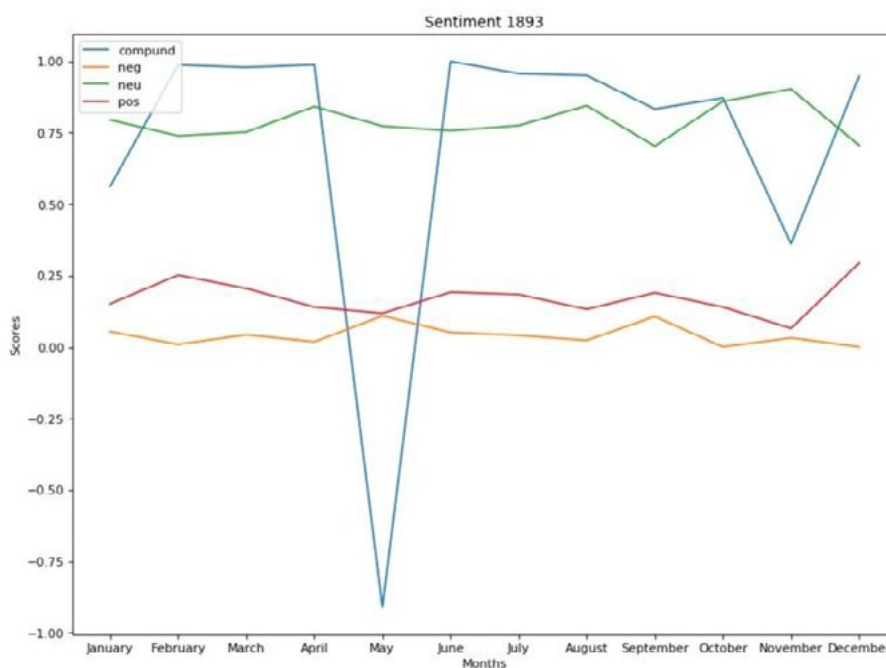
Graphing sentiment from newspaper articles debating whether the 1893 Chicago World's Fair should be open on Sundays

There do not seem to be any especially large fluctuations in any of the sentiment measures except for a large dip in the 'compound' measurement in May. The bulk of the articles are from May, June, and July so this may be significant as the amount of text analyzed for each of these months is substantial. For example, I would be less inclined to think much of the dip that occurs in 'compound' in November because there is only one article from November. Thus if this one article portrays negative sentiment it can skew the graph substantially. What makes May interesting is there are nearly 60 articles from this month being analyzed together, meaning there is enough data to potentially be meaningful. More research is needed to assess why this output has occurred.

Works Cited

Saldaña, Zoë Wilkinson. "Sentiment Analysis for Exploratory Data Analysis." Programming Historian, 15 Jan. 2018, programminghistorian.org/en/lessons/sentiment-analysis.

Topic Modeling Visualizations
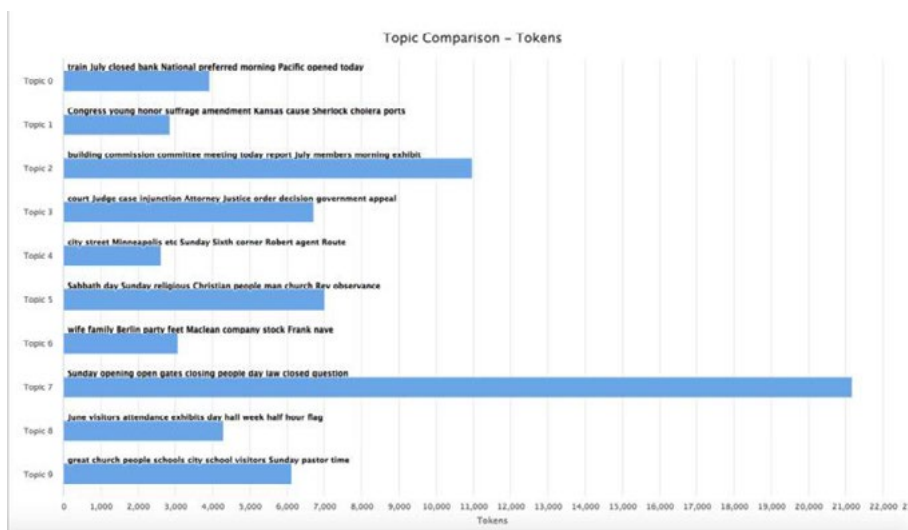
This Topic Modeling analysis utilized Elise's final cleaning configuration (see Data Curation page for details). To interpret these results, I began with the Topic Comparison graphs. I appreciated the 'snap shot' of token words provided in the bar graph, giving me a bit more information and an overview of the different tokens emerging in each topic. It is clear immediately that the topic with the most tokens was Topic 7. From here, Topic 2, Topic 5,

and Topic 3 make up the top four of the ten topics the analysis identified. From here, there appears to be a significant drop between the fourth ranking topic and the fifth, so I chose to focus specifically on these top four.

Topic 7				
IDENTIFIED IN	**TERMS**	**COUNT**	**PROBABILITY**	**DOCS**
242 Documents	Sunday	652	0.0308	194
	opening	340	0.0161	155
TOPIC MEASURES	open	281	0.0133	132
Tokens 21161	gates	227	0.0107	103
Document 5.0922	closing	205	0.0097	99
Entropy	people	192	0.0091	100
Average Word 5.5	day	189	0.0089	98
Length	law	150	0.0071	63
Coherence -37.5973	closed	147	0.007	85
Uniform 2.7859	question	146	0.0069	69
Distance				
Corpus 0.8501				
Distance				
Exclusivity 0.75				

Topic 7

Topic 7 drew from 242 of my 270 documents in the set, so I imagined that these terms could function as an overview of the entire content set. Just by virtue of building this content set, there were certain themes I was expecting to see reflected in these results. I was unsurprised to see that "Sunday" was the most occurring token word in this largest topic category, showing up a total of 652 times in this group of documents. There is quite a gap between the most and second most occurring words. The word 'opening' appears second most often at 340 occurrences. "Open", "gates", and "closing" were the next tokens on this list. This solidified the overall conversation I was expecting: that there was some conversation happening in 1893 regarding the fair's Sunday status as open or closed. Further down, the appearance of the word "law" is interesting in that unlike the other terms which seem morally neutral, the word "law" takes this conversation as I was imagining it beyond the bounds of a simple "question" and into the realm of jurisprudence.

Topic 2			
IDENTIFIED IN			
120 Documents			

TOPIC MEASURES

Tokens	10973
Document Entropy	4.3105
Average Word Length	7
Coherence	-49.6441
Uniform Distance	2.4984
Corpus Distance	1.3671
Exclusivity	0.7024

TERMS	COUNT	PROBABILITY	DOCS
building	142	0.0129	48
commission	106	0.0097	34
committee	104	0.0095	52
meeting	93	0.0085	48
today	74	0.0067	39
report	68	0.0062	30
July	66	0.006	23
members	54	0.0049	30
morning	53	0.0048	34
exhibit	52	0.0047	27

Topic 2

The second-most prominent topic begins with the words "building", "commission", "committee" and "meeting". In the context of Topic 7, where I determined the basic question and the fact that the law was a piece of this debate, these token words leave room for the inference that governing bodies were discussing this issue. That is not to say that I am inferring from these words that the United States government was taking a position on this issue, rather that perhaps groups tasked with managing the Fair itself and the logistics therein were also taking part in this conversation. Regardless, these words lead me to believe that the "Sunday Question" was not a debate only taking place in print. Committees were meeting over this issue; reports were being made. In physical spaces and amongst real people, this issue was being debated.

Topic 5			
IDENTIFIED IN			
103 Documents			

TOPIC MEASURES

Tokens	7015
Document Entropy	4.151
Average Word Length	6.2
Coherence	-50.4273
Uniform Distance	2.5171
Corpus Distance	1.7291
Exclusivity	0.5882

TERMS	COUNT	PROBABILITY	DOCS
Sabbath	136	0.0194	47
day	88	0.0125	44
Sunday	75	0.0107	45
religious	62	0.0088	31
Christian	59	0.0084	28
people	53	0.0076	35
man	52	0.0074	25
church	48	0.0068	34
Rev	47	0.0067	22
observance	42	0.006	25

Topic 5

Topics 7 and 2 told us that the setting of the Sunday Question debate was not merely within the confines of printed news sources, but one of law and one that committees and commissions were actively discussing. Topic 5 shows us that this debate was also being held in Christian churches. On top of being a matter of law and logistics, it was also a matter of faith. I thought it was interesting that "Sabbath" appeared more often than the word "Sunday". To me, this demonstrates a certain cultural context through which this issue is being conceptualized. "Sabbath" is a non-secular term and a concept that is deeply embedded within some religious traditions, in this case the Christian tradition. I am also interested in the abbreviation "Rev" that appears towards the bottom of the list. This could mean that church leaders (like reverends) were weighing in on this issue, though I cannot infer the extent. The last word demonstrates that this is an issue of religious observance as well, in addition to jurisprudence.

Topic 3				
IDENTIFIED IN				
78 Documents				
TOPIC MEASURES	**TERMS**	**COUNT**	**PROBABILITY**	**DOCS**
Tokens 6719	court	169	0.0251	46
Document 3.6352 Entropy	Judge	76	0.0113	30
Average 6.8 Word Length	case	76	0.0113	32
	injunction	66	0.0098	29
Coherence -39.3845	Attorney	59	0.0088	24
Uniform 2.7596 Distance	Justice	57	0.0085	18
Corpus 1.7678 Distance	order	57	0.0085	25
	decision	55	0.0082	22
Exclusivity 0.8129	government	50	0.0074	17
	appeal	48	0.0071	25

Topic 3

Since the appearance of the word "law" in Topic 7, the other top topics picked up in this analysis made no mention of legal terms. Topic 3 provides more insight regarding how the law might have been involved in the issue of the Sunday Question. Nearly each of the token words appearing in this topic can be dubbed legal terms to some extent. Words like "injunction", "order" and "appeal" lead me to believe this was an on-going issue in the courts, one that was not so straightforward and could not be wrapped up neatly in a single

hearing. We are seeing here that court officials made injunctions and orders, and that some unnamed party was possibly filing appeals to challenge these proceedings. This illustrates a sort of back-and-forth happening between the courts and some group in opposition to their decisions. Could this be the "committees" and "commissions" we saw in Topic 2? Or perhaps the members of the Christian community we met in Topic 5?

Discussion

The Topic Modeling Analysis tool was incredibly illuminating in identifying deeper themes and topics associated with the Sunday Question. We were able to catch a (vague) glimpse of the stakeholders in this argument: courts and American law, the Christian community, and some amorphous groups addressed merely as "committees" and "commissions". We are able to see that the realms of religion and law come together in this argument in some capacity, though this analysis tool does not indicate whether U.S. courts and Christian churches were in agreement or opposition. And even if courts and churches were taking the same position, there is no way of determining if these groups were drawing from a shared ethos. If the courts and the churches were in total agreement, then the Sunday Question becomes a matter of separation of church and state. However, this tool does not address these questions. In short, while this tool illustrates the parties involved and paints the picture of an issue that was of national, legal and religious importance, Topic Modeling was not able to reveal any concrete positions these stakeholders had and failed to define relationships and connections between these entities.

From reading some of the documents in our content set and being familiar with the headlines of these publications, I know that the courts and the churches seemed to be in agreement. One document published in the St. Paul Daily News on June 9, 1893 (available for viewing in this exhibit) mentioned that federal courts had ordered the fair to remain closed on Sunday. In addition to this decision, the federal government itself was prepared to enforce this decision by utilizing the United States military. Approximately 1,000 soldiers stationed at Fort Sheridan were said to be ready to make the 25-mile journey to Chicago to enforce the court's decision. While building the content set, I also noticed that proponents of opening the fair on Sundays did so in the name of generating more capital and providing working people with a day to enjoy the fair. I was hoping to see these themes reflected in this analysis, but did not. Topic Modeling brought up the key players in the broadest sense,

but left many of the relevant details out. Being that I am a novice to the Digital Humanities field, I am likely not utilizing the right tools to tease out this information. Perhaps there is a better method of analysis to give us a more solidified conception of the stakeholders involved, their positions, and their connections to each other.

The Sunday Question: Closure during the 1893 Columbian Exposition: StoryMapJS

Using Named Entity Recognition (NER) analysis, we determined areas of significance throughout the fairgrounds (buildings, lawns, gates, streets, etc.) pertaining to the controversy surrounding the Sunday Question. Place entities were plotted manually based on souvenir maps of the fairgrounds from 1893 held by the Library of Congress. Each slide has an explanatory note beneath the map which describes the significance of the excerpted document and the location it references.
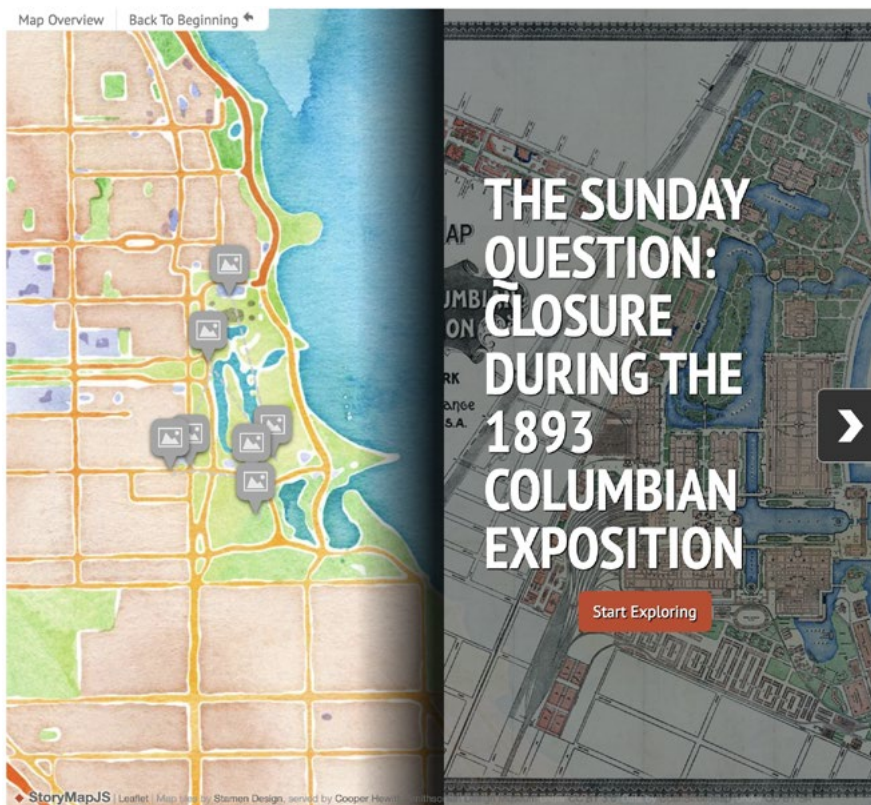
Link to the full version

THE CASE FOR U.S. AUTHORITY OVER THE FAIR BUILDINGS

The World's Columbian Exposition of 1893, otherwise referred to as the World's Fair or the White City, was built on the grounds of Jackson Park. Although the issue in question was the closure of the Fair gates on Sundays, the court decision was actually who had authority over the fairgrounds and why. As illustrated in this newspaper clipping, the monetary investment made by the United States was substantial and was contingent on closing the park on Sundays among other stipulations.

BALANCING THE BOOKS

The corporation's argument, summarized in this article, distinguished the money invested by the U.S. as having arrived after the completion of the fairground facilities, and at only a fraction of the total expenditures necessary to construct the White City. While the courts determined that the U.S. had "qualified possession," they found that more questions and arguments needed to be debated and there would be no time to do so before the natural conclusion of the fair. The corporation would therefore maintain possession of authority over Jackson Park by default.

ANTICIPATING THE FIRST SUNDAY OF THE FAIR

While the case brought before the courts pertained to control over the entirety of Jackson Park, the question for the public pertained to "the gates of Jackson Park " and whether or not they would remain open on Sundays. The Fair ran for several weeks before the court's decision was announced and this article shows the assumed intent of the corporation to open on Sundays. The majority of religious and secular persons alike supported the opening of the park on Sundays for the enjoyment of the working class.

RIOT AT THE GATES

The gates, however, were closed the first Sunday of the Fair and chaos ensued. Attendees thronged the closed gates, but were not granted admittance, spilling out into the streets and surrounding areas just outside the gates. Energies were high and crowds began to destroy private property and even damaged the gates themselves. Among the crowd seeking entrance were notable dignitaries and even the infamous Buffalo Bill. Stony Island

Avenue was vandalized and all this to underscore the public demand for the Fairgrounds to remain open on Sundays.

RELIGIOUS SUPPORT AT THE WOMEN'S BUILDING

Just following the court's decision which retained the corporations authority over the Fair, a report from the Women's Tribune indicated the support of religious personages that Sunday on fair grounds. Religious services were offered inside the Women's Building and "eighteen ordained women ministers representing thirteen recognized denominations occupied the platform." While there was great showmanship in the problematizing of Sunday openings by Methodist clergy, this display indicated that other Christian denominations did not share their objections.

CROWDS SWARM ON SUNDAY, BUT BOYCOTT LOOMS

Sunday Fair attendance remained high just after the court ruling for the corporation. Although many of the buildings and their exhibits remained closed on Sundays, the gardens and natural park spaces were enjoyed so much that "the entire east front of the Administration Building was black with people assembled about the band stand." However, the Methodist Church issued a call to their 5,000,000 followers in the Chicago area to boycott the Fair, not just on Sundays, but on weekdays as well.

CROWDS DWINDLE AFTER CALL TO BOYCOTT

Following the call to Boycott by the Methodist Church, attendance on Sunday dropped substantially so that "even the Midway Plaisance...was dull." Blame, however, was not placed on the boycott, but rather on the understanding that grew among working class families that "all the United States exhibits...as well as those of Great Britain and a part of the French exhibit" were closed on Sundays, although the Fairgrounds were open. The Fair on Sundays was deemed not worth the price of admittance.