Using Publicly Accessible Tools to Create an Open Access Index Database on Periodicals published during the Late Qing and Republican Eras

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Overview

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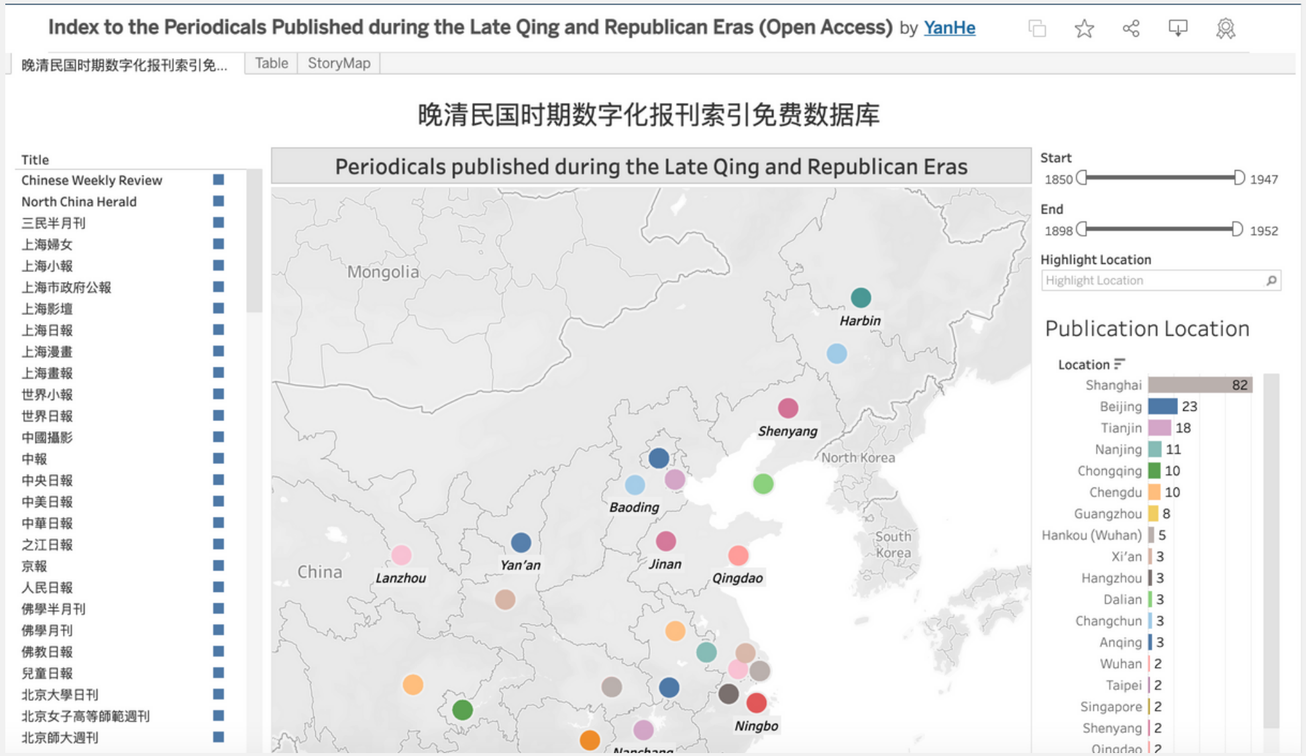
1. Overview of the Index Database

- Data source – tweets
- Index database on periodicals published during the Late Qing and Republican Eras in East Asia
- The digitized content - Internet Archives
- Workflow: Social Feed Manager (collect tweets), Python(extract data), Excel(clean up data), Tableau (data visualizations).



tweet_url	created_	parsed_cre	text	twe
https://twitte	Wed Oc	2021-10-20	民國叢書 - S	orig
https://twitte	Tue Oct	2021-10-19	少年世界 19	quo
https://twitte	Tue Oct	2021-10-19	國聞報 1897	orig
https://twitte	Tue Oct	2021-10-19	@ChienHun	repl
https://twitte	Tue Oct	2021-10-19	民報 1905-1	orig
https://twitte	Tue Oct	2021-10-19	南京日報 19	orig
https://twitte	Tue Oct	2021-10-19	The Chinese	retw
https://twitte	Tue Oct	2021-10-19	You can find	retw
https://twitte	Mon Oc	2021-10-18	A substantia	retw
https://twitte	Mon Oc	2021-10-18	少年中國 19	orig
https://twitte	Mon Oc	2021-10-18	星期 1922-1	orig
https://twitte	Mon Oc	2021-10-18	@SharonDo	repl
https://twitte	Mon Oc	2021-10-18	新中華報 19	orig
https://twitte	Mon Oc	2021-10-18	紅色中華 19	orig
https://twitte	Mon Oc	2021-10-18	人民日報 19	orig
https://twitte	Sun Oct	2021-10-17	2/2 The IA v	repl
https://twitte	Sun Oct	2021-10-17	동아일보 /	orig
https://twitte	Sun Oct	2021-10-17	哈爾濱五日	orig
https://twitte	Sun Oct	2021-10-17	上海書報 1	orig

2. Data Collecting Using SFM

- Social Feed Manager
- Capture tweets through following individual account or hashtag/keyword
- The tweets fields we used

3. Data Extraction Using Python

- Data Extraction by Python
  - Using string manipulation/text analysis (Pandas)

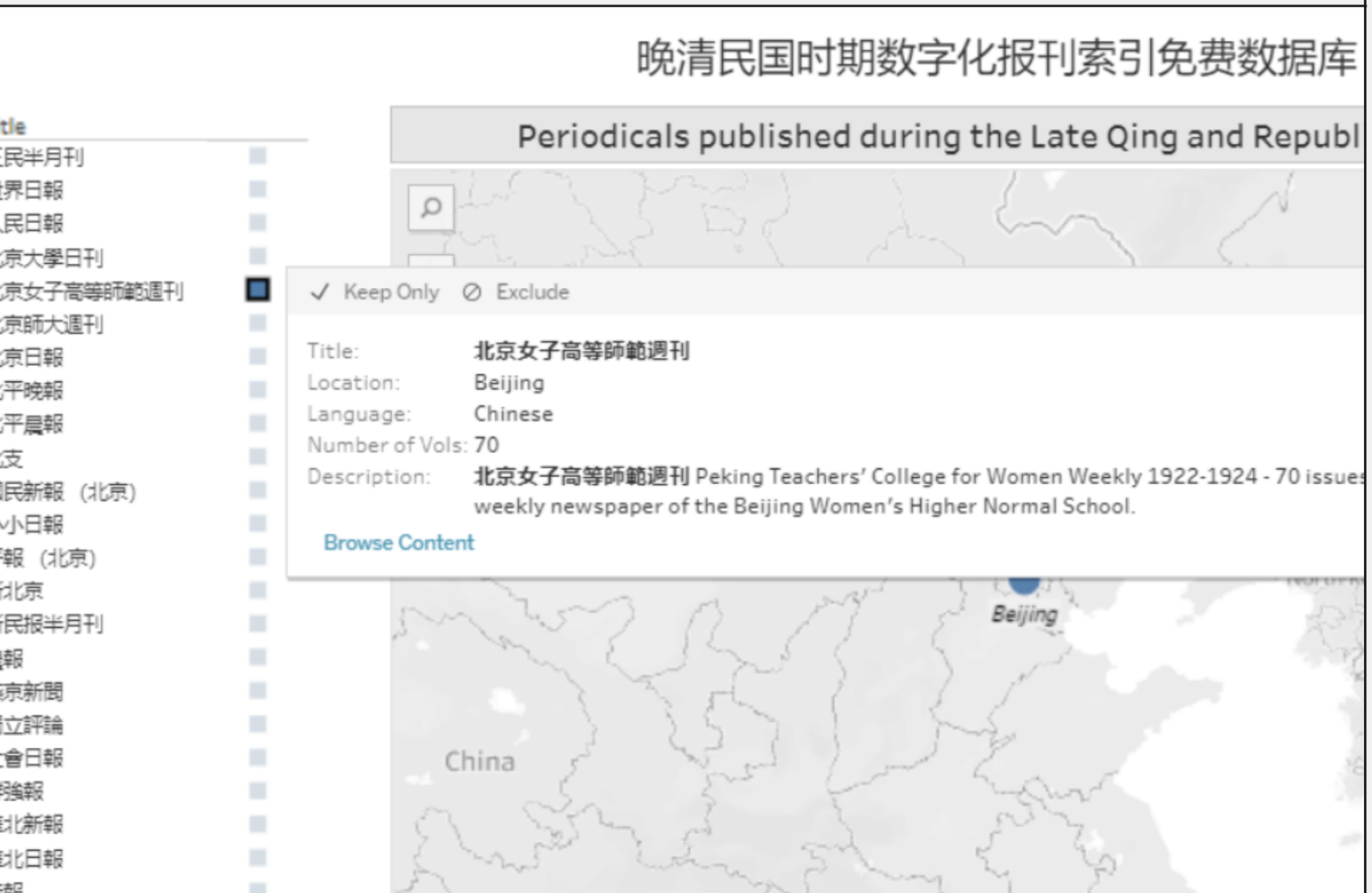
```
def comma(s):
    return(s.replace(',', ''))

def chinese(line):
    for n in re.findall(r'[\u4e00-\u9fff]+', line):
        return n

def start_year(SearchMe):

    find_tx=SearchMe.find("-")
    sec_tx=SearchMe.find("-", find_tx+1)
    third_tx=SearchMe.find("-", sec_tx+1)
    if find_tx == -1:
        return 0
    else:
        if (SearchMe[find_tx-3:find_tx].isdigit() & SearchMe[find_tx+1:find_tx+4].isdigit()):
            start=SearchMe[:find_tx].split(" ",-1)[-1]
            if len(start)>4:
              return(int(start[-4:]))
            else:
              return(int(start))
        elif (SearchMe[sec_tx-3:sec_tx].isdigit() & SearchMe[sec_tx+1:sec_tx+4].isdigit()):
            start=SearchMe[:sec_tx].split(" ",-1)[-1]
            if len(start)>4:
              return(int(start[-4:]))
            else:
              return(int(start))
        elif (SearchMe[third_tx-3:third_tx].isdigit() &
            start=SearchMe[:third_tx].split(" ",-1)[-1]
            if len(start)>4:
              return(int(start[-4:]))
            else:
              return(int(start))
        else:
            return 0
```

```
def find_issues(line):
    ct_issues=line.count('issues')
    ct_volumes=line.count('volumes')
    ct_over=line.lower().count('over')
    if ct_issues!=0:
        fnl=re.findall(r'(\d+) issues', line)
        for p in fnl: return(int(p))
    elif ct_volumes!=0:
        fnl=re.findall(r'(\d+) volumes', line)
        for p in fnl: return(int(p))
    elif ct_over!=0:
        find_over = line.lower().find('over')
        new_cover=line[find_over+5:].split(" ",1)[0]
        return (int(new_cover))
    else:
        return 0
```

4. Data Clean-up Using Excel

Title	Language	Location	start	end	Number o	url	description	Latitude	Longitude	Time Span
安慶新報	Chinese	Anqing	1940	1944	1,179	https://arc	安慶新報 - 安	30.5363	116.9113	1940-1944
民岩報	Chinese	Anqing	1921	1936	93	https://arc	民岩報 - 安徽	30.5363	116.9113	1921-1936
皖報	Chinese	Anqing	1934	1948	127	https://arc	皖報 - 安徽安	30.5363	116.9113	1934-1948
晉察冀日報	Chinese	Baoding	1938	1948	2,767	https://arc	晉察冀日報	38.8707	115.1945	1938-1948
三民半月刊	Chinese	Beijing	1928	1932	70	https://arc	三民半月刊	39.90622	116.3913	1928-1932
人民日報	Chinese	Beijing	1945	1949	1,303	https://arc	Over 1000 iss	39.90622	116.3913	1945-1949
北京大學日刊	Chinese	Beijing	1917	1932	2,867	https://arc	北京大學日刊	39.90622	116.3913	1917-1932
北京女子高等師	Chinese	Beijing	1922	1924	70	https://arc	北京女子高等	39.90622	116.3913	1922-1924
北京師大週刊	Chinese	Beijing	1923	1926	91	https://arc	北京師大週刊	39.90622	116.3913	1923-1926
北京日報	Chinese	Beijing	1906	1922	2,237	https://arc	2000 issues o	39.90622	116.3913	1906-1922
北支	Japanese	Beijing	1939	1943	51	https://arc	The Japanese	39.90622	116.3913	1939-1943
新北京	Chinese	Beijing	1938	1943	1,988	https://arc	新北京 1938-	39.90622	116.3913	1938-1943
獨立評論	Chinese	Beijing	1932	1937	243	https://arc	獨立評論 19	39.90622	116.3913	1932-1937
北平晨報	Chinese	Beijing	1930	1937	2,413	https://arc	北平晨報 19	39.90622	116.3913	1930-1937
國民新報（北京	Chinese	Beijing	1925	1948	628	https://arc	國民新報 19	39.90622	116.3913	1925-1948
小小日報	Chinese	Beijing	1925	1936	355	https://arc	小小日報 19	39.90622	116.3913	1925-1936
平報（北京）	Chinese	Beijing	1921	1938	5,486	https://arc	平報 1921-19	39.90622	116.3913	1921-1938
新民报半月刊	Chinese	Beijing	1939	1943	99	https://arc	新民报半月刊	39.90622	116.3913	1939-1943
燕京新聞	Chinese	Beijing	1934	1948	361	https://arc	燕京新聞 19	39.90622	116.3913	1934-1948
群強報	Chinese	Beijing	1913	1936	3,330	https://arc	群強報 1913-	39.90622	116.3913	1913-1936
世界日報	Chinese	Beijing	1925	1928	708	https://arc	世界日報 19	39.90622	116.3913	1925-1928
北平晚報	Chinese	Beijing	1931	1937	2,002	https://arc	北平晚報 19	39.90622	116.3913	1931-1937
社會日報	Chinese	Beijing	1922	1926	1,440	https://arc	社會日報 19	39.90622	116.3913	1922-1926

5. Data Visualizations Using Tableau



- Dashboard/Table/Story map
- Lists, Maps, Location/Time Period Filter, language, number of issues
- Interactive
- Sharable embedded html code
- Link to the digitized copies

6. Limitations and Future Plans

- Limitations:
  - We are not content provider and content owner.
  - The digitized materials are subject to change.
- Future plans:
  - We will need to find a way to track the change of accessibility for each title.
  - We can create similar index databases using information from tweets or other data sources.
  - We would like to share our tips on how to use SFM, Python, Excel and Tableau if there is interest.

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- Internet Archives that host digital content