## 2<sup>nd</sup> Case Construction: "1999-2015 香港区议会" by Tableau

### **Original News:**

https://theinitium.com/project/20151012-hk-district-council-elections/

### **Data Source:**

https://github.com/initiummedia/hk district council election

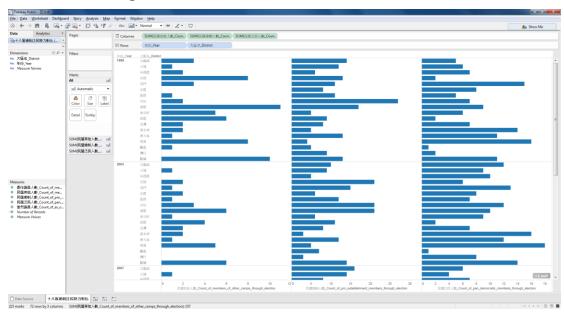
#### **Case Reconstruction**

Visualization Type 1: "十八区建制泛民势力对比" Original data visualization by Initium:

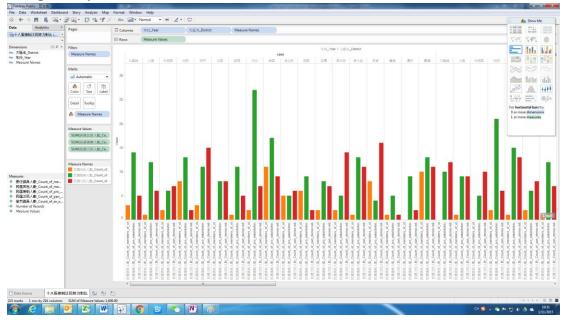


The original visualization type shows the different riot of "建制派", "民主派" and 其他" in different district in Hong Kong in 1999, 2003, 2007 and 2011. Let's see the result if we use Tableau.

### Visualization Using Horizontal Bars:



### Using side-by-side bars:



### Let's do it step by step:

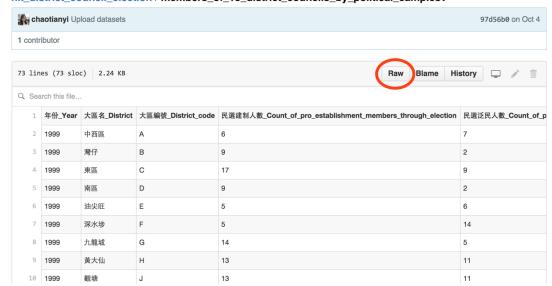
**1. Download data:** go to the data source link about, find the data below and rename it as "十八区建制泛民势力对比".

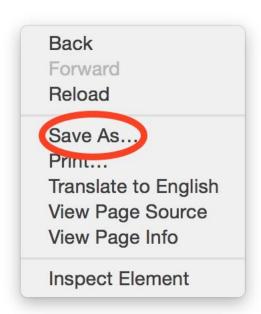
## Catalog

- 1. 原始數據
  - o name list of all winning candidates.csv
- 2. 區議會選舉總版圖變化
  - · winning candidates by camp.csv
  - · uncontested candidates by camp.csv
- 3. 選民登記率與投票率
  - voter\_registration\_rate.csv
  - voting rate.csv
- 4 十八區建制泛民勢力對比
  - members\_of\_18\_district\_councils\_by\_political\_camp.csv\_
- 5. 深水场、灣仔、葵書原版團絲化
  - o sham shui po winning candidates by camp.csv
  - · kuai tsing winning candidates by camp.csv
  - wan\_chai\_winning\_candidates\_by\_camp.csv
- 6. 各政黨參選情況
  - o candidates\_by\_party.csv

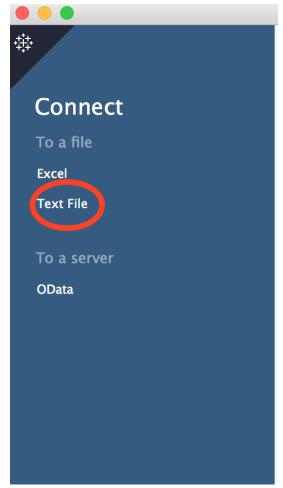
Click the data to open, then click "raw" to open the raw data, right click the mouse to click "save as". The file will be saved as csv.

hk\_district\_council\_election / members\_of\_18\_district\_councils\_by\_political\_camp.csv

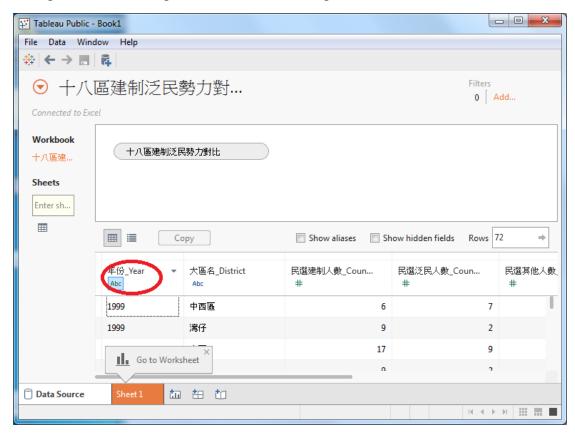




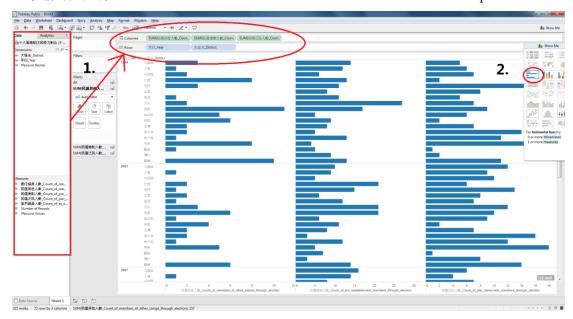
2. Import data: open Tableau and import data. (Click "Text File" instead Excel because it is csv)



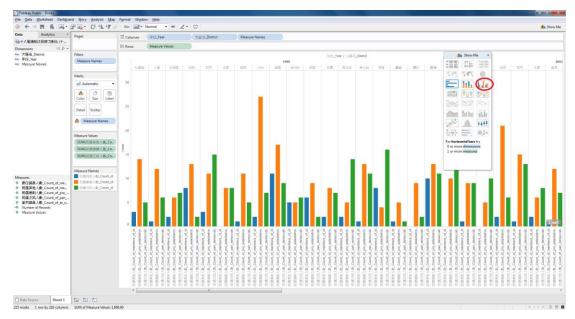
Change "Year" to string and click "Sheet 1" to go to worksheet.



**3.** Drag "District" and "Year" to "Rows", "民选建制人数", "民选泛民人数" and "民选其他人数" to columns. Choose **"horizontal bars"** in **"Show me"** panel.



**4.** Choose "Side-by-side" bars in "Show me" panel. Then you will see the result below:



You can use either one you like to show the result.

**5. Rename the worksheet:** double click the "sheet 1" and change name to "十八区 建制泛民势力对比".



### Visualization Type 2: "區議會選舉總版圖變化"



This graph further add the type of "自动当选议员" and "民选议员", using different types.

In tableau, let's see what we do next.

1. **Download data:** similarly, we need to download the data first. For this one, you need to copy and paste the data into Excel to format it, because we need to clean up the data like below.

### Catalog

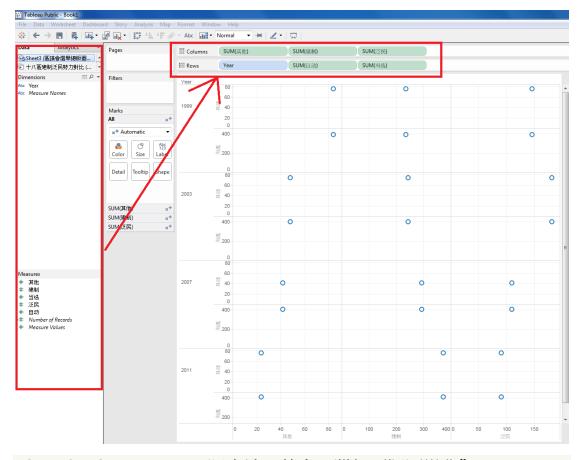
- 1. 原始數據
  - name list of all winning candidates.csv
- 2. 區議會選舉總版圖變化
  - winning\_candidates\_by\_camp.csv
  - uncontested candidates by camp.csv
- 3. 選民登記率與投票率
  - voter registration rate.csv
  - voting rate.csv
- 4. 十八區建制泛民勢力對比
  - members\_of\_18\_district\_councils\_by\_political\_camp.csv
- 5. 深水埗、灣仔、葵青區版圖變化
  - sham\_shui\_po\_winning\_candidates\_by\_camp.csv
  - kuai tsing winning candidates by camp.csv
  - · wan chai winning candidates by camp.csv
- 6. 各政黨參選情況
  - · candidates by party.csv
- **2. Deal with data.** Clear up the data like below:

Year	泛民	建制	其他	自动	当选
1999	146	236	84	76	390
2003	182	244	48	74	400
2007	110	294	42	41	405
2011	91	373	24	76	412

3. Import data. Click "sheet 2" and rename it as " 区议会选举总版图变化". Then click "data" and then "new data source" on the tool bar, to import the new data set.



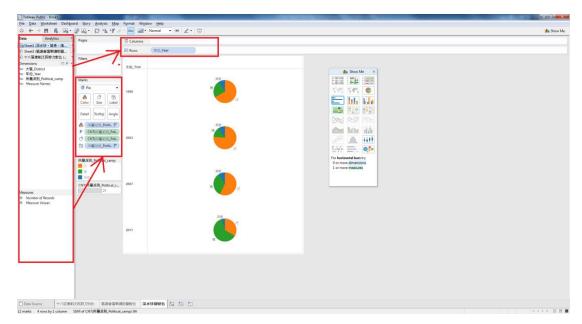
**4. Visualize data.** Drag corresponding elements to the columns and rows like below.



Visualization Type 3: "深水埗、葵青、灣仔區版圖變化"

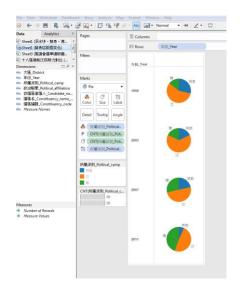


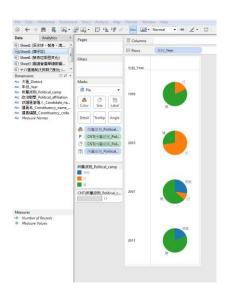
Let's omit the first steps in Tableau including downloading data and importing data, because they are all the same with the first 2 visualization types, just using different data type.



Drag the elements into the **Marks** and **"Year"** to **"Rows"**, choose "Pie chart" this time, you will see clearly about the idea "深水埗區,傳統泛民選區,前三屆民選議員都是泛民佔多數。但 2011 年,建制議席大幅度超過泛民。".

Then you can do the same with district "葵青" and "湾仔".

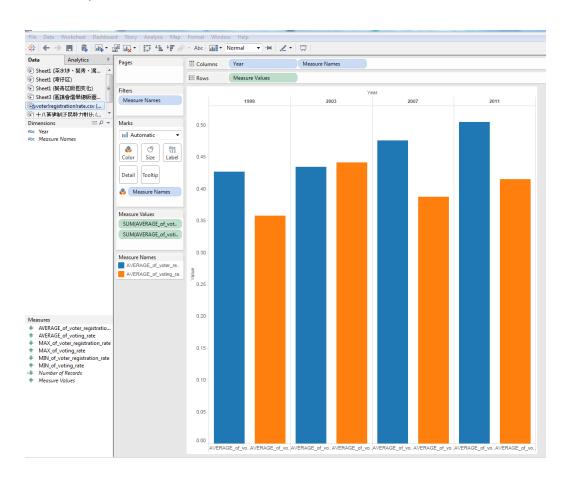




# Visualization Type 4: "選民登記率與投票率"



#### In tableau, we do like this:

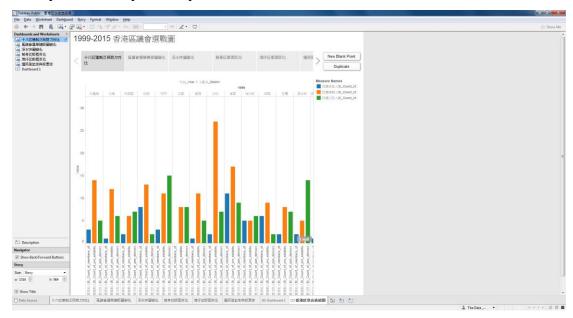


#### **Constructing Your Story:**

1. Click the **"add"** button to add your story, name it as "香港区议会选战图"。



2. Then you can edit your story like below:



3. Publish your story: click "file" on the left top corner then "save to tableau public", and then log in, finally, "Save".

Here is an example:

https://public.tableau.com/profile/publish/ 3976/sheet7#!/publish-confirm