Street Food Data Story

1 Introduction

Our Data Journey starts with 6 different people, 6 different ideas, 3 different nations, 4 different ages, 2 different genders and 1 common goal: Finding a topic for our data visualisation. Since analytic skills seemed to be a likely skill for data visualisation, we decided to analyse and compare the 6 ideas concerning meaningfulness; data availability; data diversity; knowledge gathering potential.

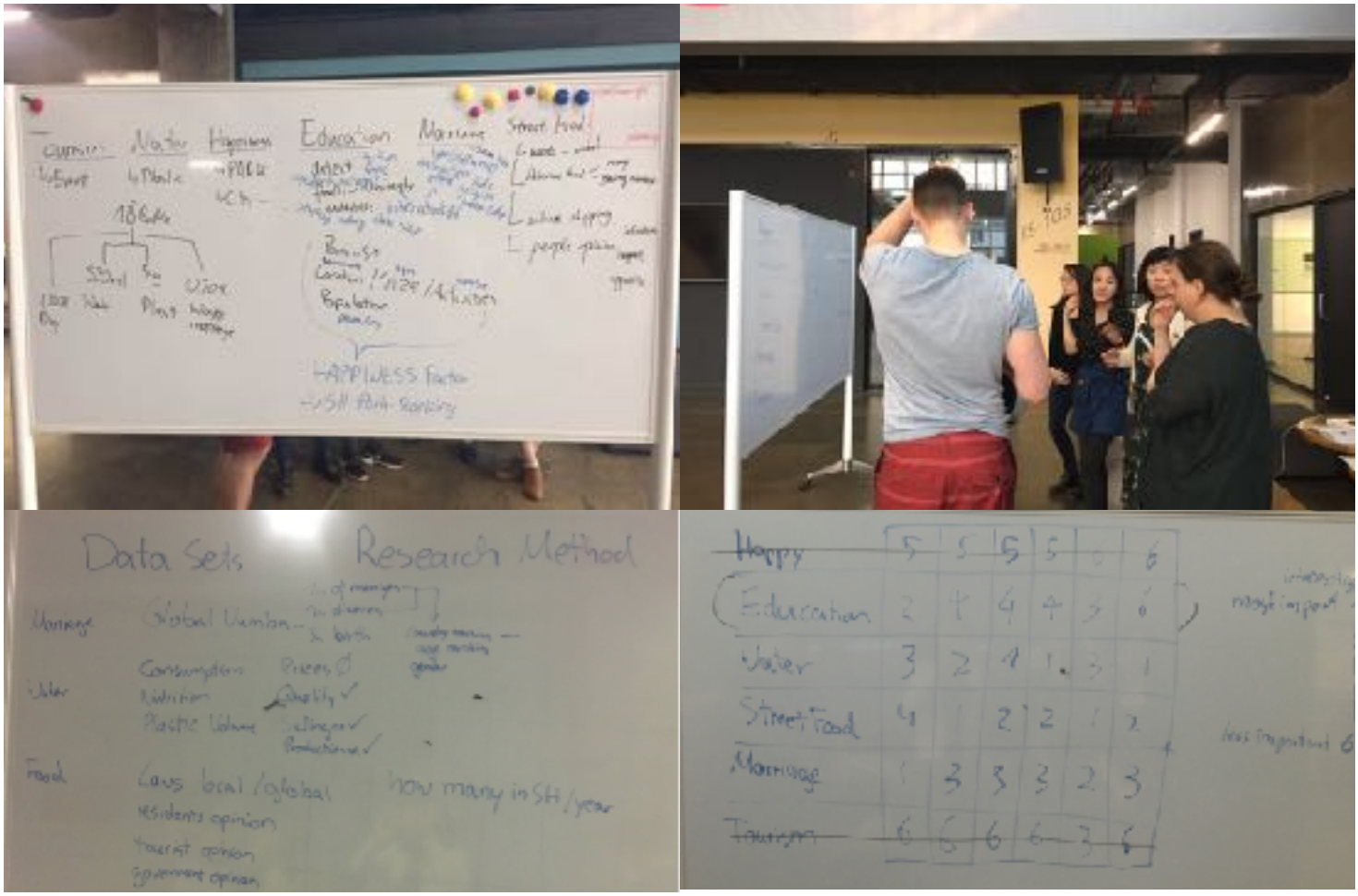


Figure 1

It took two turns of election to choose the winning topic between Tourism, Water, Happiness, Education, Marriage and Street Food （figure 1）. In the end Street Food took over Water the pole position. By choosing this topic we hoped to get a better understanding of this culture and why it is vanishing. We wanted to see the development over time, find out the peoples opinions on the topic and maybe try to find trends. This decision led us to some serious problems, apparently.

Where to get the data?

How to gather data about a topic which is barley illegal and greatly controversial? During our topic discussions we already figured that a good possible data source could be social media as well as a direct feedback from people via questionnaire.

Social Media
To choose the right targets to search for data, we needed to think about the way street food would/ might appear in social media. The first guess was as pictures. People like what they see, take pictures of the food and share it somehow. So we decided to go for a picture-based social website, in specific Flickr. Why Flickr? We thought that a website which focuses completely on pictures may provide well structured amount of meta data of those pictures like Time, Location, ans Tags. On other good option to share food experience we thought must be posting. People express their experiences simply with words. One of the biggest platforms for this is Weibo. Which made the website out second target. Of course these post might come along with pictures as well but since we didn't lay any focus on the pictures it self but only on the data they provide we decided that for Weibo the posts themselves offer the greater amount of data. The posts also made it possible to collect data manually. But of course we also had to use the APIs to get to the data. And since no one of us ever used an API and only one has some proper experience with HTML this wasn't particularly an easy task.

Figure 2

Which keyword to search? For flickr we use "Shanghai street food", and for Weibo, several Chinese words like " 路边摊 街边小吃 街头小吃 路边小吃 "(figure 2) are used to get the datasets of street food. We choose 2013.05-2017.04 as targeting period for the Weibo since four years ago there is still lots of street foods in Shanghai.And with the help of a software Gooseeker, we are able to get enough data download from Weibo.

Questionnaire
Setting up a questionnaire is technically quite an easy task. But yet should be conceptual thought through. We had to set it up as quick as possible in order to get as much responses as possible in the short time. We also made 2 different language versions. It was necessary to balance between getting enough data and keeping it convenient to answer. Our 10 questions contains basic demographic questions and strictly topic related ones. But the most difficult part for questionnaire is actually to find people to answer it, especially if you don't hold large contact data bases. For the english survey the initial plan was to post the link to the survey among expat-forum-websites and travellers websites. Unfortunately these website have restrictions for posting links. So we needed to spread it manually.

This went down with a hoped to be kind of snowball system using WeChat , WhatsApp, Facebook, Weibo, Chatrooms and Email to distribute our surveys.

-Where are you from?
-How long was your stay?
-Did you try Street Food?
-If No, why?
-What kind(s) did you try?
-By any chance, do you remember near which Metro Station it was?
-What is your gender?
-Please tell us your age.
-Which of the following best describes your current occupation?
-Street Food is more and more vanishing from the streets of Shanghai. What are your thoughts on that?

The Flickr data mission

Exploring the Flickr API and gathering the data was the job for Antti as he had the most suitable technical skills to maybe get something out of there. But the job was not near to an easy one. There were many visiting speakers in the class and one of them mentioned Flickr as a source for open data and gave an example of that. During the lesson we looked a bit into Flickr and decided to explore it as a source for our data. We knew that we could also ask help from the visitor speakers if we were to face some technical problems with Flickr. That was good to know, even though I yet had no idea, what would our quest for Flickr data be like.
Soon after beginning to do research on Flickr and the APIs I realised that I didn't really know much about them in practise. My previous education in computer science lacks a bit in practical understanding and skills even though I could do many things in theory. With Flickr I soon understood the principles of API, but had hard time learning to use it in the Flickr case and getting information out of there in practise was also problematic. At this point I went straight to Flickr and explored websites that seemed to be relevant such as:
https://www.flickr.com/services/api/
https://www.flickr.com/services/api/flickr.photosets.getInfo.html
https://www.flickr.com/services/api/flickr.photos.getWithGeoData.html
https://apigee.com/console/flickr

During the next class, there was more discussion about the APIs and searching of data and I we got some basic tips from Francesca about data collection. I would need an XML or JSON file and an excel to support with analysis of the data later. We were encouraged to explore and try to solve situations on our own before asking for help with technical problems. I had the feeling that I should know the APIs and the technology behind a little better to help dealing with Flickr.

Knowing the Flickr API
I started the day with gathering knowledge on using APIs by doing a few short codecademy courses and exploring websites and articles about the use of APIs and different data formats.
https://gigaom.com/2010/10/29/using-apis-not-quite-as-hard-as-it-looks/
https://schoolofdata.org/2013/11/18/web-apis-for-non-programmers/
https://schoolofdata.org/2013/11/21/xml-and-json/
Now I felt more confident to dive more into the Flickr API and see what I could get out of it.

The exploration of the usage of Flickr API in a brief recreation was something like this:

- Documentation of the API https://www.flickr.com/services/api/
  The search command seems to be interesting as I need to search for data about the pictures

- Flickr Photos search https://www.flickr.com/services/api/explore/flickr.photos.search
  Well this is very wide and quite complicated actually, but yes I need photos info from the Shanghai area so maybe I try to search with specific coordinates.

  This lead to exploring many different ways to search for photos according to location and most of them gave no good result.

- Test searching to see if can get photos that contain lat/long values
  https://api.flickr.com/services/rest/?method=flickr.photos.search&api_key=7622fe7cb0a248dc2339b9433de1e05e&tags=shanghai%2C+street%2C+food&tag_mode=all&min_upload_date=2017&has_geo=&format=rest&auth_token=72157682863353235-4f31e97e7b86d250&api_sig=b8a9948f020a50a03a734520475fbc2e

- Test to see what kind of information is available of the photos
- https://api.flickr.com/services/rest/?method=flickr.photos.getInfo&api_key=7622fe7cb0a248dc2339b9433de1e05e&photo_id=34014004772&format=rest&auth_token=72157682863353235-4f31e97e7b86d250&api_sig=892ea163356c52514cbfc4c3da53a1ae

- some search on web for how to find Flickr photos of certain location
- http://stackoverflow.com/questions/6474427/using-flickr-api-to-search-photos-by-location-or-language

- https://api.flickr.com/services/rest/?method=flickr.places.find&api_key=7622fe7cb0a248dc2339b9433de1e05e&query=Shanghai&format=rest&auth_token=72157682863353235-4f31e97e7b86d250&api_sig=db4db1e1f9b8cf76ac98c7b3135cd1d2

- Discovered the Flickr WOE (where on earth) id for Shanghai:
  woeid="2151849" latitude="31.247" longitude="121.472"
  or
  woeid="12578012" latitude="31.113" longitude="121.416"

  Finding photos from SH area

  If we use the WOE id, the radius of search doesn't have effect. What area does this WOE id of Shanghai cover?

- The search results in 202 photos if the tag "streetfood" is used
  https://api.flickr.com/services/rest/?method=flickr.photos.search&api_key=7622fe7cb0a248dc2339b9433de1e05e&tags=streetfood&tag_mode=all&min_upload_date=2000&woe_id=12578012&per_page=500&format=rest&auth_token=72157682863353235-4f31e97e7b86d250&api_sig=c9eca65867227cdded449df4c44ea032

- For “food” there are 9210 photos so it seems to be about right https://api.flickr.com/services/rest/?method=flickr.photos.search&api_key=7622fe7cb0a248dc2339b9433de1e05e&tags=food&min_upload_date=2000&woe_id=12578012&radius=30&per_page=500&format=rest&auth_token=72157682863353235-4f31e97e7b86d250&api_sig=0e817a39ff701cab8d4ade71db0ebccb

- Finding a good WOEid to search for photos of the regional size Shanghai area https://api.flickr.com/services/rest/?method=flickr.places.findByLatLon&api_key=7622fe7cb0a248dc2339b9433de1e05e&lat=31&lon=121&accuracy=5&format=rest&auth_token=72157682863353235-4f31e97e7b86d250&api_sig=07f3c97eb9fe29050160d689eec20962

- WOEid: woeid="15017039"

After doing research on the WOE id’s the re was a discussion with Francesca about the amount of data we would need and how would it be good to search the data of photos. The process went on and search for data was done maybe a week later.

How we clean/analyse the data?

After 2 weeks of data hunting we gathered a great amount of data and formed our datasets. But it also was very messy and needed to be properly refined.

Questionnaire
The English Survey was online from 4/21 to 4/30. It collected 58 responses from 16 different Countries. More than 80% think that street food vanishing is very sad.

It is very irritating to see that in the chines survey the number of people caring about street food was only around 50%.

We used SurveyMonkey.com to set it up. Unfortunately this website does not allow to download the datasets as excel files without paying for membership. Furious about this ridicules restriction and of course refusing to pay for a membership for a onetime download we collected the results manually.

Social Media

We collected 1.636 kinds of tags from Flickr and 1.369 posts from Weibo which include the information of:

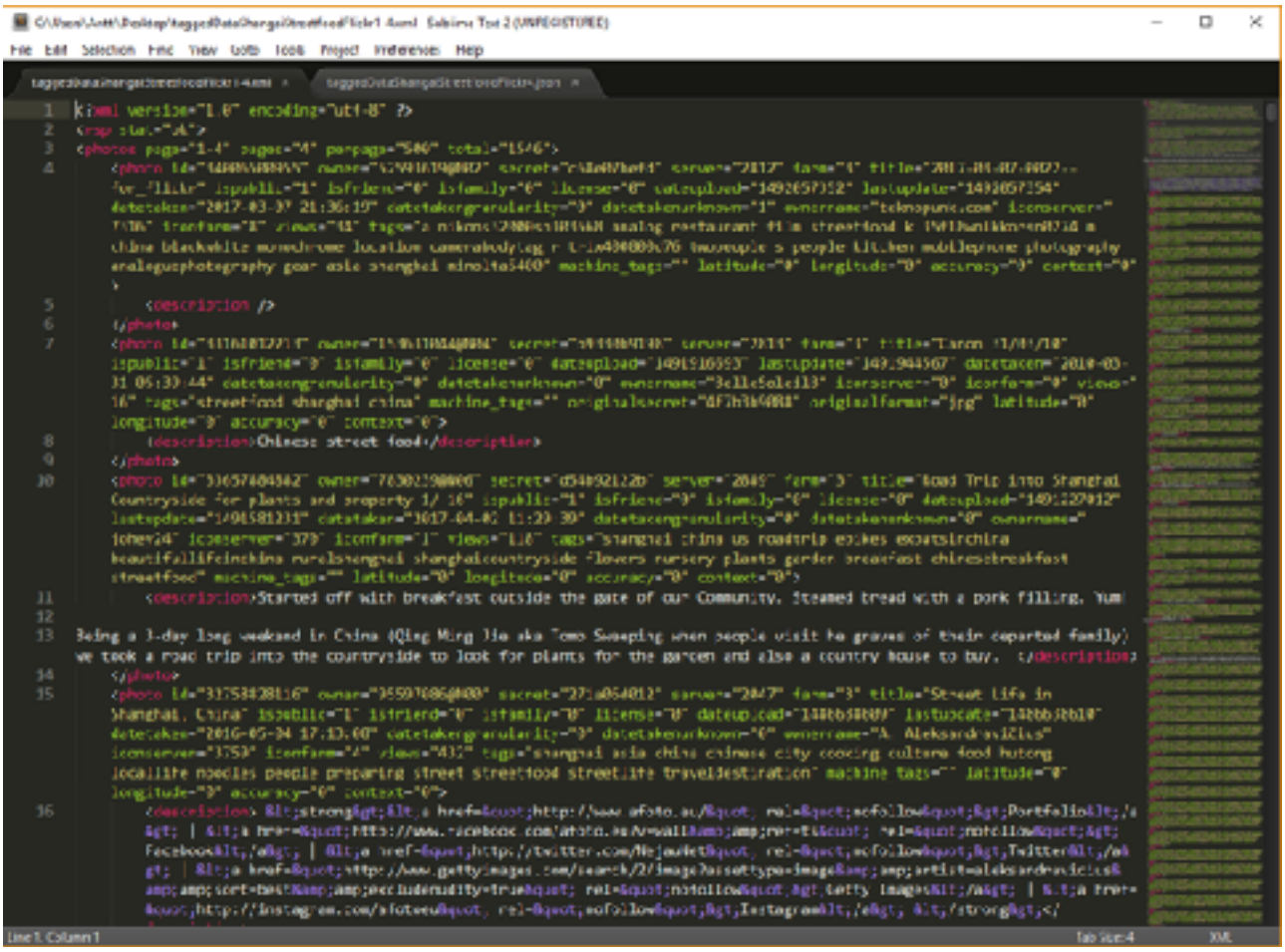
-Time that they were posted at
-Tags of flickr photos and Text of Weibo posts
-Address that were mentioned

Flickr
Many things happened before the final set of raw Flickr data was ready. We doubted our ability to access all Flickr photos, but got a relieving answer from the forums. We almost sent messages to the visiting speakers and to Francesca many times.
In the end we took all the data we could get with the photos.search command and restricted the search with the tags “shanghai” and “street food” and starting from year 2004 as it is when the first photos are added into Flickr.

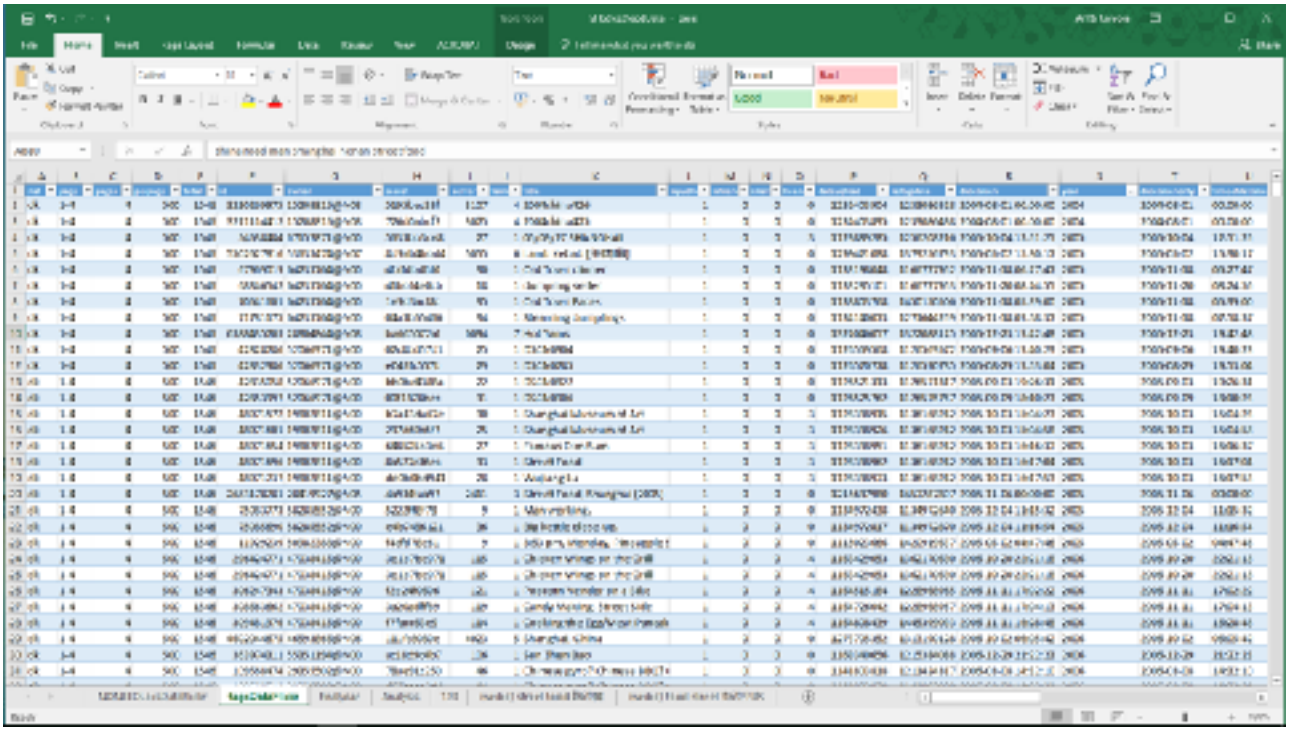
This is the final search command for the XML file:
https://api.flickr.com/services/rest/?method=flickr.photos.search&api_key=1800104bf8400142b341d84f76471c7a&tags=shanghai%2C+streetfood&tag_mode=all&extras=description%2C+license%2C+date_upload%2C+date_taken%2C+owner_name%2C+icon_server%2C+original_format%2C+last_update%2C+geo%2C+tags%2C+machine_tags%2C+o_dims%2C+views&per_page=500&format=rest&auth_token=72157681113028080-b95c7cb762677250&api_sig=ef196f9e8a6f436a0b873a83a470ad6a

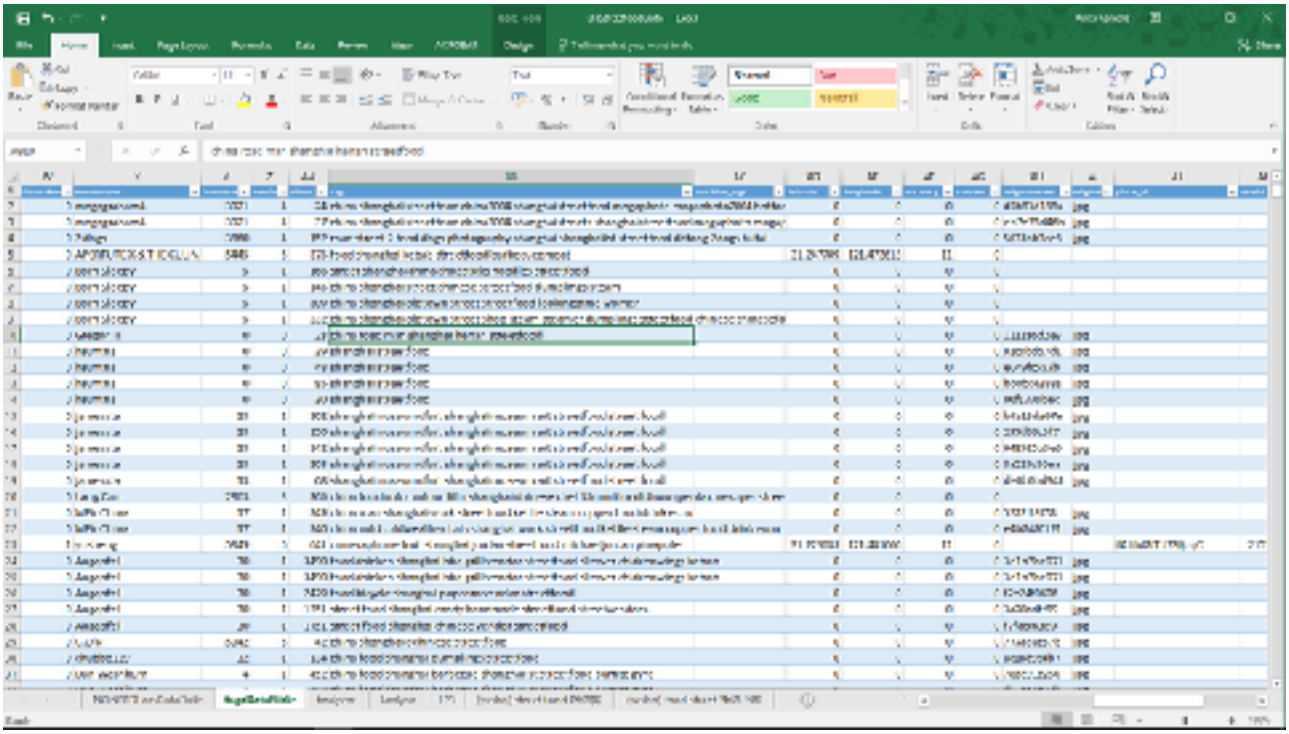
Still after getting the files in XML and JSON format we realised that they are not complete. 4 different files with data for 500 photos each had to be downloaded and combined afterwards to one file. That was done using Sublime text but any text editor would have done the trick.
Now we had a complete set of data from Flickr that could be for example opened in Excel or pasted straight to software for analysis and visualisation.

In the end the combined XML file looked like this in Sublime text:



These are parts of a smoothed down excel table:





Characteristic of the Flickr data set
The dataset contains information of 1555 photos, from beginning of year 2004 to the April 24th 2017, that have the tags “Shanghai” and “street food” linked to them. Each photo information consists of 40 different values that are:

[page, pages, perpage, total, id, owner, secret, server, farm, title, ispublic, isfriend, isfamily, license, dateupload, lastupdate, datetaken, datetakengranularity, datetakenunknown, ownername, iconserver, iconfarm, views, tags, machine_tags, latitude, longitude, accuracy, context, originalsecret, originalformat, place_id, woeid, geo_is_family, geo_is_friend, geo_is_contact, geo_is_public, o_width, o_height, description]

Some values showing in the excel are made up from other values of the data. The main format of the data in excel spreadsheet that allows us to operate on it easily. The original data is also available as a XML file if some software would prefer it to xsl.

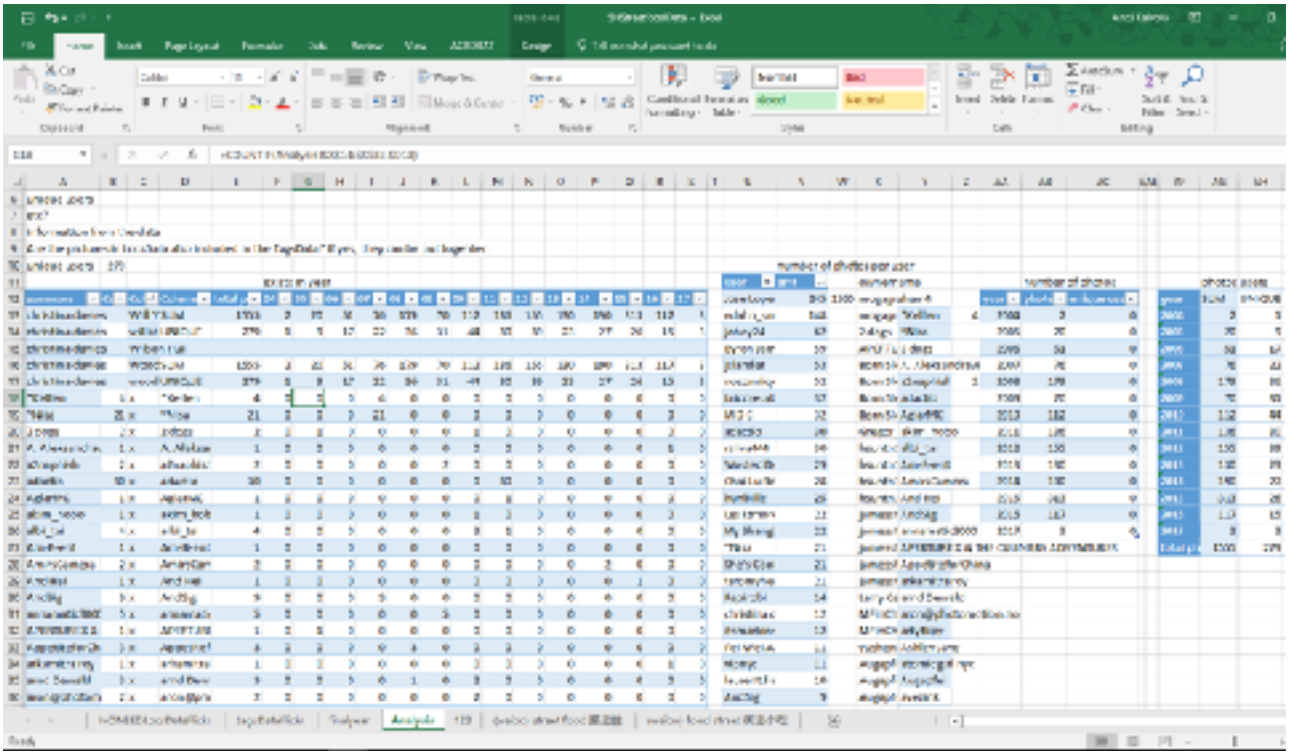
The final dataset of Flickr seems to be quite large enough for analysis. It though has some weaknesses that will decrease our possibilities of being plausible with some analysis methods:

- The Flickr users few compared to some other social media sites.
- Flickr being part of the American born YAHOO! Web service platform might be used more by people from a western background and not by local people in Shanghai.
- Same user might post a huge number of photos to make the data biased
- The photos are spread over a time of 13 years and when taken that into account, the number of photos per year is not so high anymore.
- On the positive side, the dataset has a lot of values to analyse for each of the photos.
- We do not have the actual photos as part of the dataset, but they can be searched for from Flickr as each photo has a unique id.

The data collection phase was not complicated but had a lot of “side quests” that lead to some direction that was not relevant for getting the final dataset. In the end the things needed to be able to get meaningful data from Flickr were: Basic understanding of APIs in general, basic understanding of data types such as XML and JSON, good understanding of the Flickr API and what can be done with which command. In the end the photos.search command gave all the information that we required even though many other commands were explored along the way.

How we analyse the data
The refining and modification of the data never stopped along the process as new excel sheets were created daily to respond to the needs of specific data visualisation software, techniques and ideas. The whole process was depending on refining the data to suit our needs. The first analysis in excel was done about the users of the Flickr on street food Shanghai. Those people that have posted the photos.

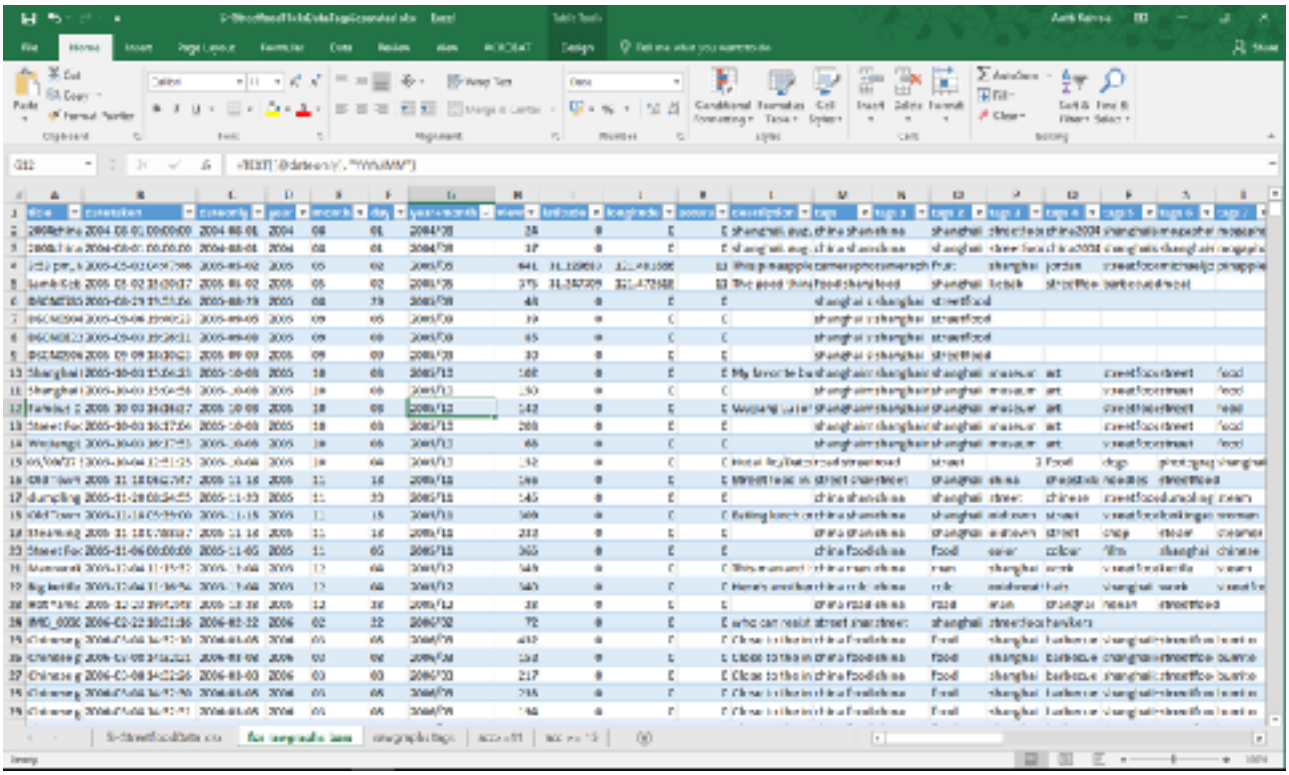
Here is part of the User analysis excel:



Formulas used along the way required of course some googling and on this sheet on line 18 are:

Cell	Formula
TB18	=COUNTIF(tagsDataFlickr!X:X, A18)
D18	=IF(C18>"",A18,"")
E18	=IF(C18>"",B18,"")
F18	=COUNTIF(Analysis!$X$12:$X$13,$D18)
G18	=COUNTIF(Analysis!$X$14:$X$33,$D18)
S17	=COUNTIF(Analysis!$X$1563:$X$1565,$D18)
AB18	=COUNTIF(tagsData[year],[@year])
AC18	=COUNTIF(Analysis!AE7:AE8,Analysis!D23:D301)

Some of the formulas were deleted along the way as values were pasted instead of formulas. In the end also the resulting tables were converted to real values as they were analysed after completion. The formulas on the first table counted yearly number of photos from another table called “Analysis” which was sorted in yearly order. So for example the photos of year 2005 were found on rows 14 to 33 in that table. This analysis gave us the number of unique users and the amount of photos they posted each year as well as the total number of photos each year and total number of photos posted by each user. This helped us in evaluating the feasibility of visualisations and further ways of analysis. Also as few “power users” were discovered, we could exclude them from some further analysis if we wanted to do so. Pursuing one visualisation idea we wanted to separate the tags and see if there was some development in them that could be seen over years. This required separating tags from one cell so that all tags had their own cells. It was done with OpenRefine.

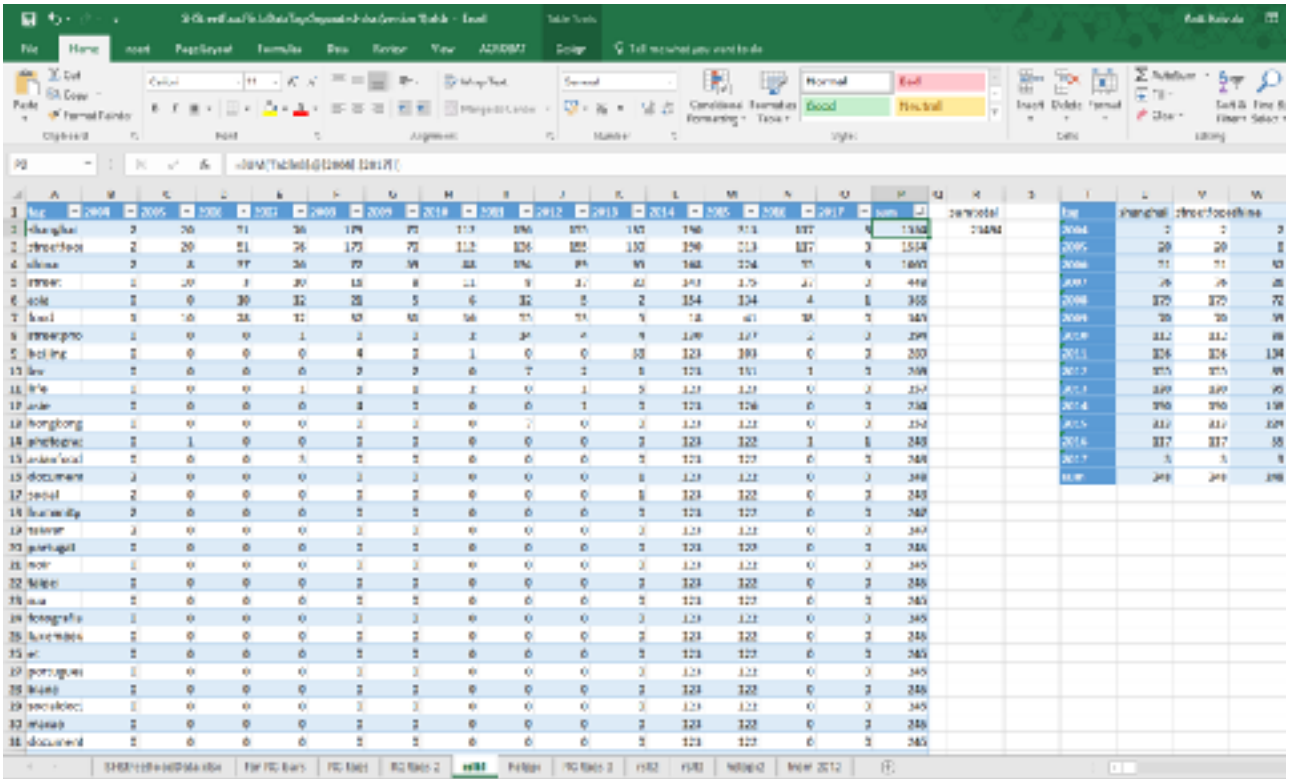


The excel sheet has following formulas on row 2:

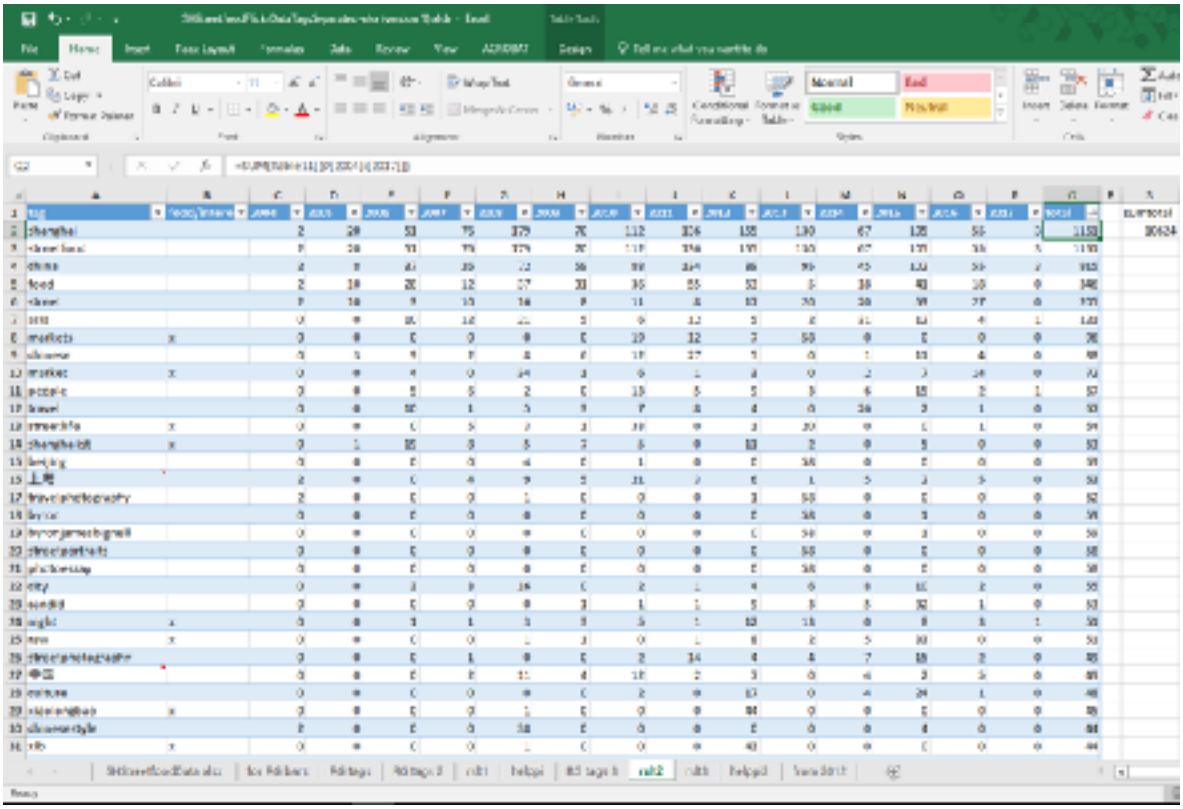
Cell	Formula
C2	=LEFT([@datetaken],10)
D2	=LEFT([@dateonly],4)
E2	=MID([@dateonly],6,2)
F2	=RIGHT([@dateonly],2)
G2	=TEXT([@dateonly], "YYYY/MM")

The formulas were used to separate the time from one cell to different cells for each measure of time. Now it should allow us to find the number of different tags appearing each year and make a visualisation of for example the most popular tags for each year.

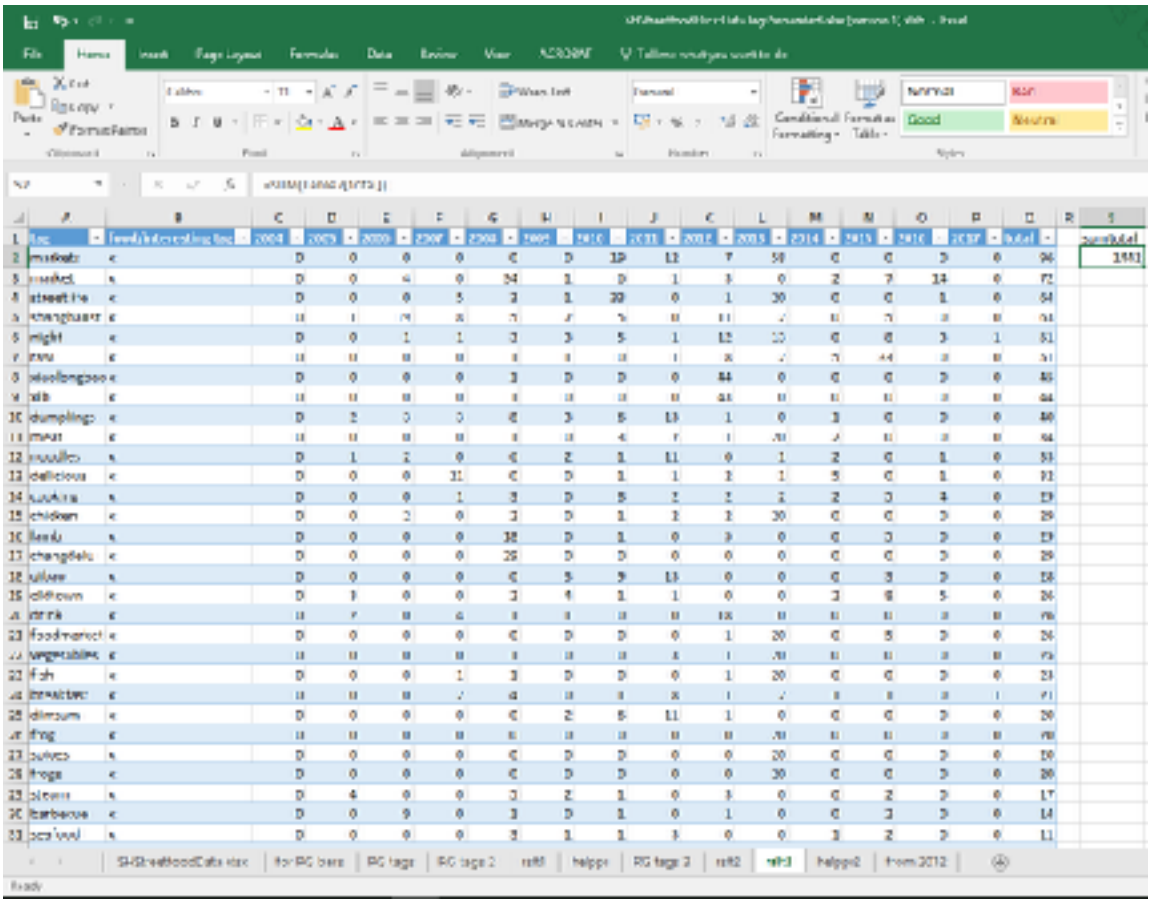
The process was not really easy as the tags were so many and so varied and rawgraphs.io wouldn't take in such a massive number of different tags. So sorting had to be done and yearly number of usage for each tag was needed. No suitable filtering command was found to separate unique tag-values from a range of 1500 x 50 cells. After thought some manual work was done to organise first the different tags for each of the 50 columns and they were then pasted together into one column that was then filtered to in the end find the 1635 different tags out of the total 23 494 tags connected to the photos.



After the tags data was in a suitable form, we could straight away see some problems with it. It was no surprise that Shanghai and street food were most popular as they were our requirement for the data. Among the top 50 most popular tags there were about almost 40 tags that had only been used by the one power users. This data would be very biased if we made a visualisation out of it so the next step we decided to take was to eliminate the photos of the two power users.
It took some time as the tags of the power users were removed from the years they had taken photos and the revised tags seemed to be much more reasonable at first glance:



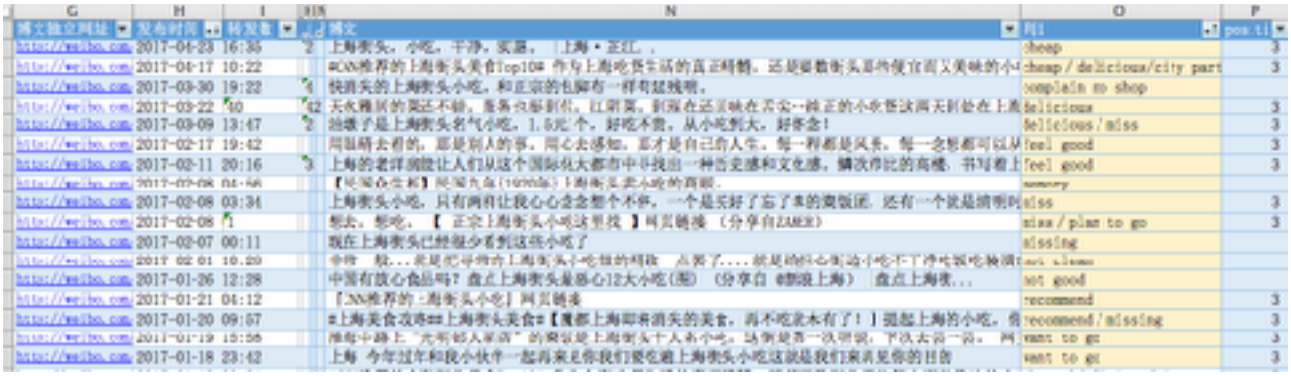
In the data there were still some users that had used the same tags for all of their 58 photos for example, but that didn't tip the data so badly. Thinking later, one way could have been to restrict the amount of photos taken into the tags data so that for example each user could have a certain number of photos per year or per month. Or that each tag could only be counted once (or once a month or five times etc.) from each user. There could be numerous ways to organise the data so that we could be closer to a more suitable dataset for us.
At this point we also realised that if we did many filtrations or conditions, our original dataset would not be big enough. If one wanted to do a visualisation over time and take some conditions into account, the original amount of data should be huge. The complexity or specific nature of the visualisation and analysis requires big amounts of data also in the divided areas of the original dataset.
This data seemed to be okay quality for us to do the analysis. However, some of the tags there didn't look very relevant when we were visualising the development of the street food culture. One more step was to go through the tags and see which of them were relate to food, food culture or would be generally interesting. After some manual going through the tags, the resulting data was like this.



Now this seems to be related to street food culture in Shanghai! Nevertheless, a previous problem realises at this point. The data is scattered and single users still have a big effect on some of the tags that they used. We are facing the same problem that we had in the beginning. It is hard to draw conclusions on the development of the street food culture of the 24 million people Shanghai with opinions of only 279 unique photo takers. Instead we could see how has the popularity of "Shanghai Street Food" developed in Flickr.

Weibo

Our starting point is to use Weibo data to see the development of people's word on social media over time, and find out the peoples opinions on the topic. But it's always hard to distinguish people's attitudes from thousands of texts. So we use keywords and tags to analyse all the posts. First we use excel to select out the keywords that have similar meaning, like words "好吃 美味 味道好极了" were used to describe that something tastes good, and they can be marked as "delicious". By this way we are able to analyse all the posts and add tags for each of them.



The examples are showing here. （figure 3）

Figure 3

While adding tags for each post, the keywords that show people's emotion were also picked out and labeled as positive , negative or middle. As the 21 kinds of tags below:

1.Not clean （negative)
2.Not good （negative)
3.Too many people(negative)
4.Expensive （negative)
5.Complain no shop （negative)
6.Urban management （negative)
7.Lonely（middle）
8.Happy to see it become shops（middle）
9.Earn lots of money (middle)
10.Recording （middle)
11.Missing （middle)
12.Memory(childhood/alley/Shanghai) （middle)
13.City(middle)
14.City particulars (positive)
15.Ask for recommend （positive)
16.Cheap (posiitive)
17.Want to go （positive)
18.Better than restaurant （positive)
19.Feel good (positive)
20.Miss（positive）
21.Delicious （posiitive)
22.Recomend （posiitive)

After the labelling work , we are able to have a clean dataset of all the Weibo post. While labelling and searching keywords, there are also some interesting findings:

-The number of posts over time show some trends.
-Many posts that discussed Shanghai street food also mentioned other cities.
-The food type that were mentioned show some difference.
-Some posts were related to the events at that time.

So, we started our visualisation exploring based on the new dataset and these interesting thoughts, and then see what's gonna happen.

Exploring

It's really interesting to see how the number of posts changing over time. First we thought to the web "raw" -- a online visualisation tool -- to do some exploring. Several graphs were made (**figure 4**), the effects of curl lines and circle to show numbers changes are particularly good. so we decided to continue using these effects.

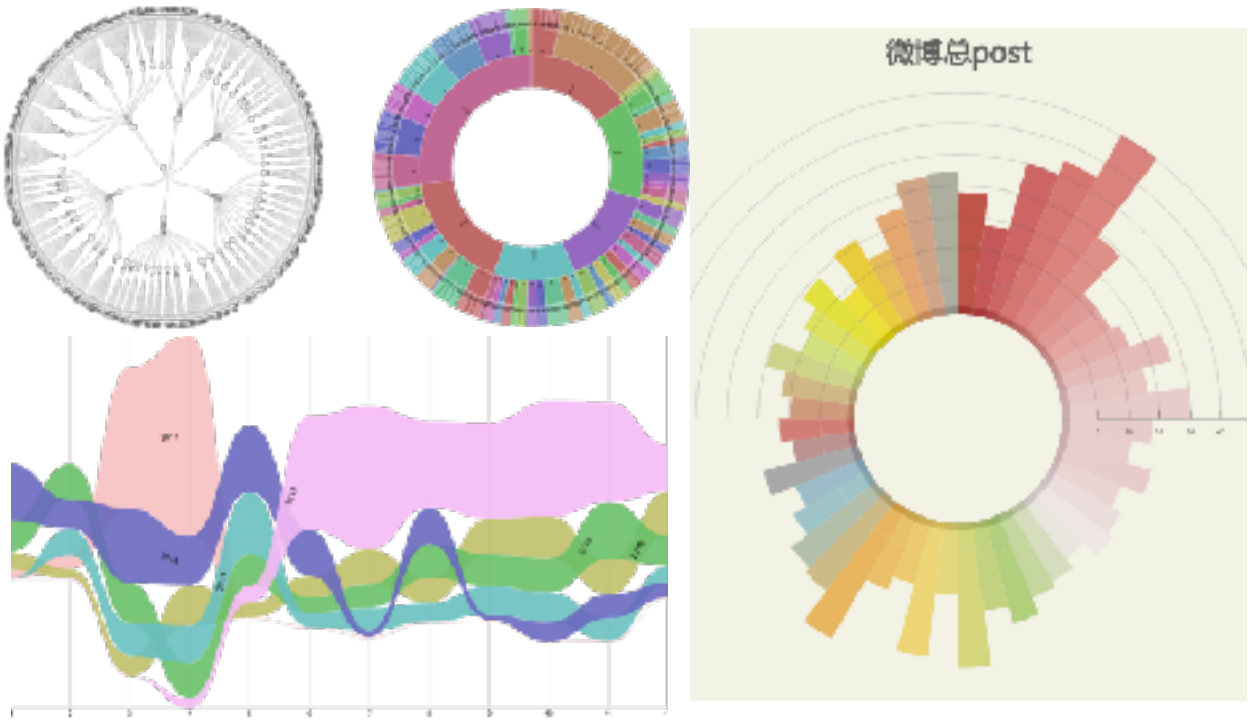
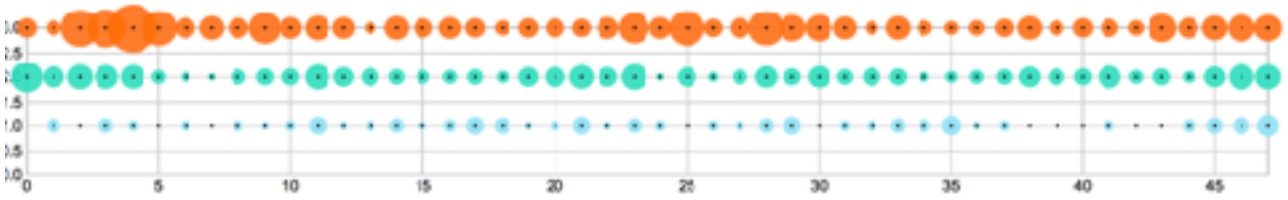
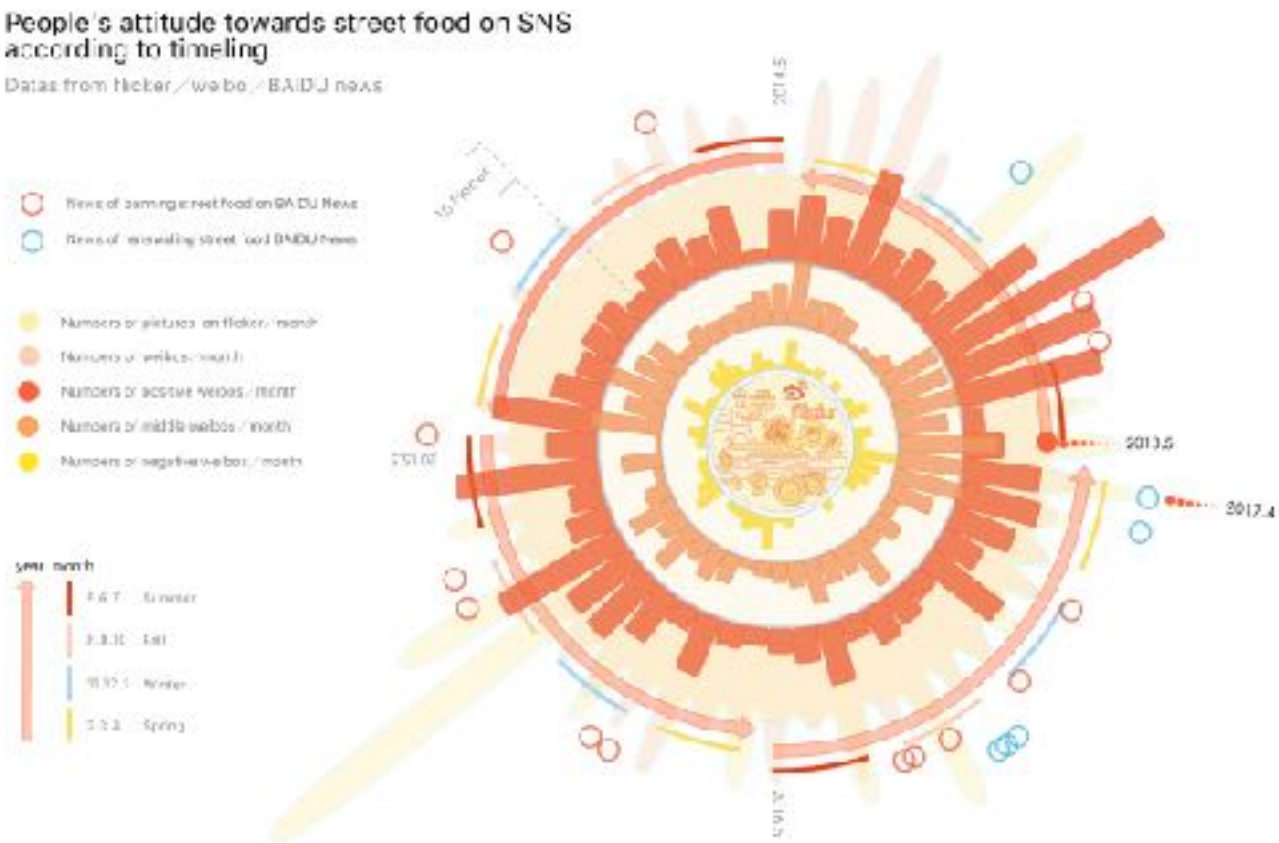


Figure 4

Then we try to use the attitude of those Weibo posts (positive, middle, negative) to explore the trend of people's attitude of street food according to time. In figure 5, we tried three kinds of graphs, in each graph, three different colours stands for three different attitudes



Combining all the datas and graphs we made before, we had this graph. The circle histograms show the numbers of people's attitudes from May 2013 to April 2017. Three different colours stand for three different attitudes (positive, middle, negative). And the shape of light colour outside stand for the total number of pictures on Flicker and Weibo posts. Each hollow circle means one event of rectification of street food, red ones mean banning and blue ones mean rebuilding (move to shop). The arrows shows the timeline, with four colours showing seasons.



As for the cities that were mentioned while talking about Shanghai street food, we picked out their information and then also put them into a chart (**figure 5**). However, the shortage is that cities are recognisable in this way. Then it occurred to us, why don't we put them into the map, so the readers can directly recognise these cities.

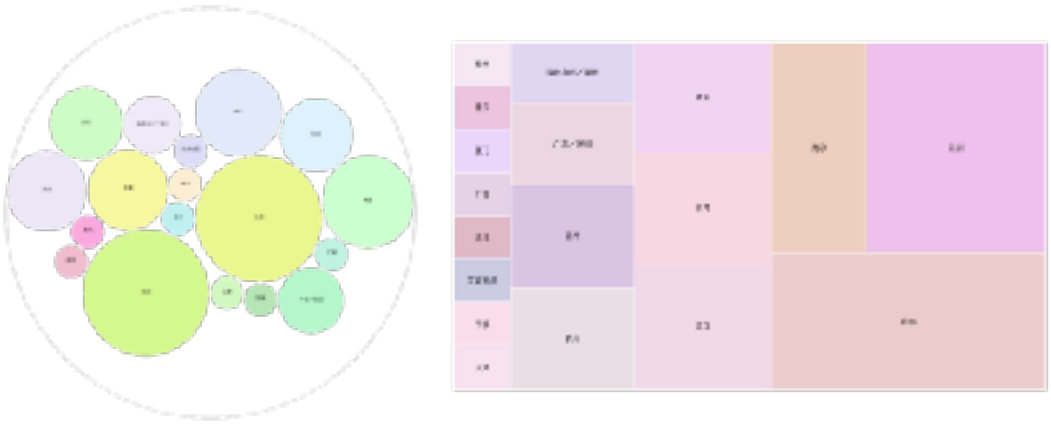


Figure 5

In the final vis, cities are marked by icons and divided as Chinese cities, foreign cities, which forms a China map and a world map. (**figure 6**)Lines are drawn between these cities and Shanghai to show their relations.

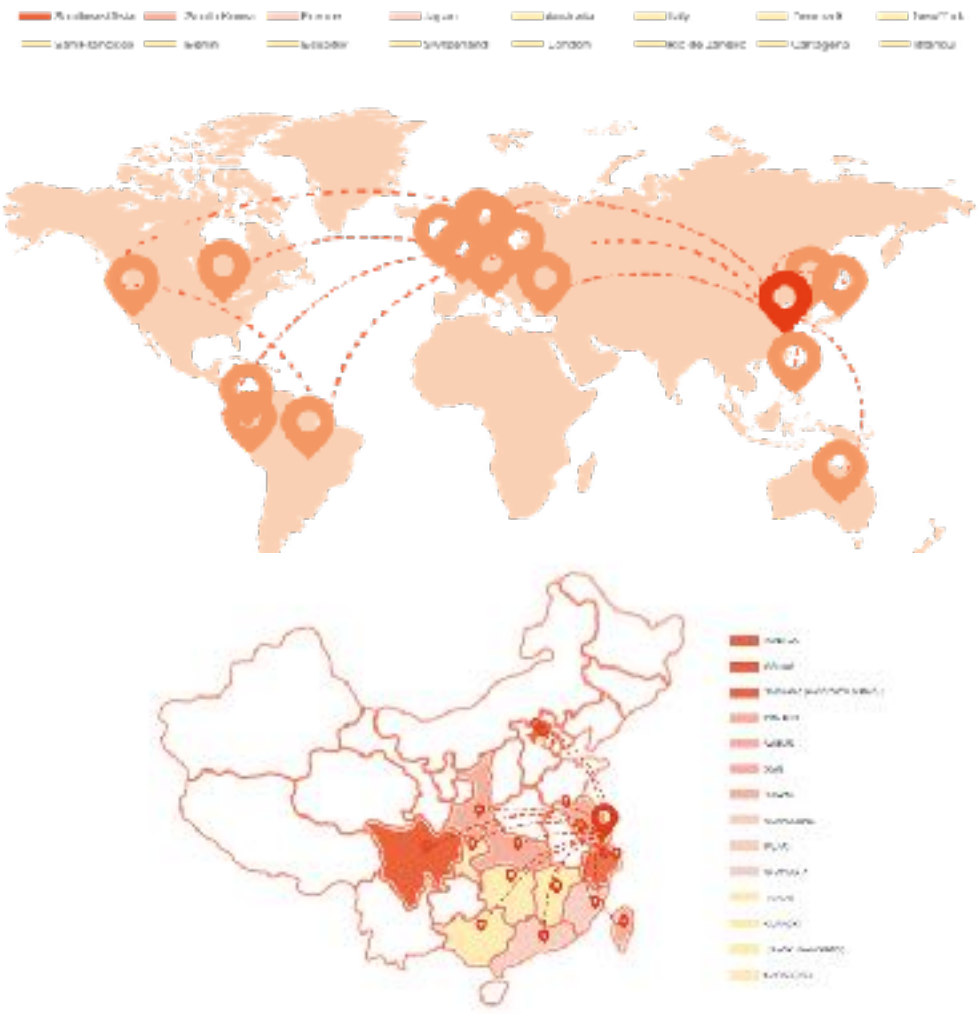


Figure 6

This data we collected by ourselves and did not depend on any software. We search the keywords “上海街边小吃”and“上海路边摊” on Weibo and we have got 600 Weibo posts, we picked out 295 Weibos personally which mentioned the same food more than 5 times from the 600 Weibo posts that we have collected, and calculated the frequency of these wolds and picture appeared on Weibo.And visualised the data. Also, when we cleaning the data personally, we found a lot of Weibo posts mentioned “烤串” would also mentioned night snacks, and others mentioned “Pie” would mentioned breakfast, we think maybe there have some connection between different food and the time, so we separated the data that mentioned“night snacks” “Breakfast” in top 3 food(Barbecue / Rice noodle/Pie). We first visualised these data by “Raw graphics”, then drafted the image generated by “Raw graphics” to AI to visualised the data by ourselves , the method can help us visualised our data in a correct proportion. To unify the style, we choose several main colours before.

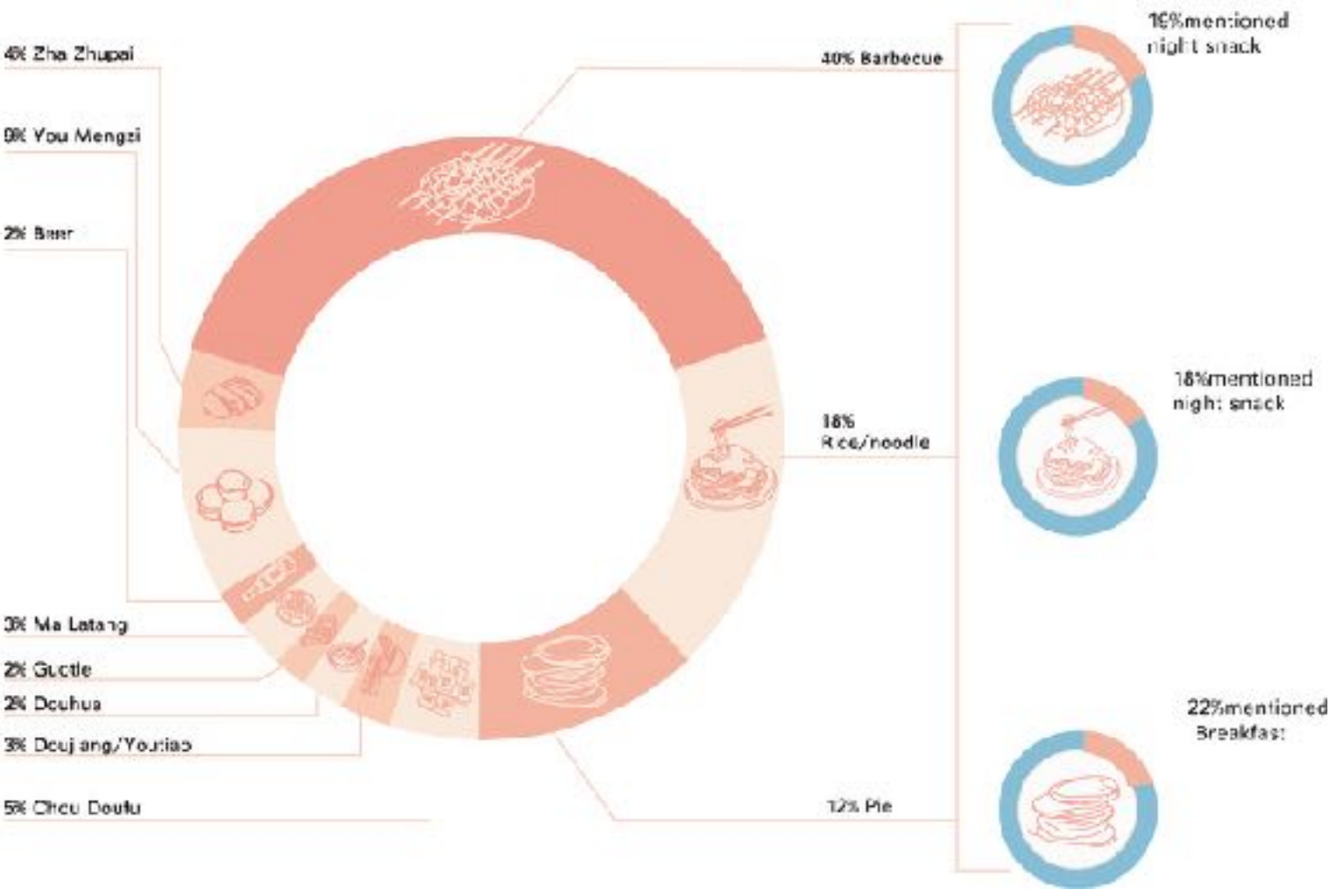
2012/5-2017/4 (the foods mentioned more than 5 times)

Food	Barbecue	Rice/ Noodle	Pie	You Mengzi	Chou Doufu	Zhu Pa	Dou Jiang / Youtiao	Ma Latang	Dou Hua	Beer
Numbers	118	54	36	27	14	12	8	8	7	6

Image generated by RAW GRAHCS(the frequency of different foods mentioned on Weibo)

Image generated by RAW GRAHCS(the frequency of data mentioned“night snacks” “Breakfast” in top 3 food(Barbecue / Rice noodle/Pie)

The frequency of different food that people mentioned in Weibo/The frequency of top3 food mentioned night snacks andebreakfast
The data from Weibo,collected by ourselves.(2012/4-2017/5)



Similar to the main graph, according to the attitude of Weibo content, it is divided into three categories: negative, middle and positive. And statistics from May 2013 to April 2017 four years respectively (due to the time setting of data crawler, our one year's time is set from 5 month of the year to April of next year), and the respective numbers of three types of attitudes in each year. Because our data are the three dimensions of time, quantity, and attitude. After discussion we chose the radar map directly as the prototype, and on this basis, keeping the critical numerical values unchanged while outer contour were slightly adjusted to beautify. (**figure 7**)

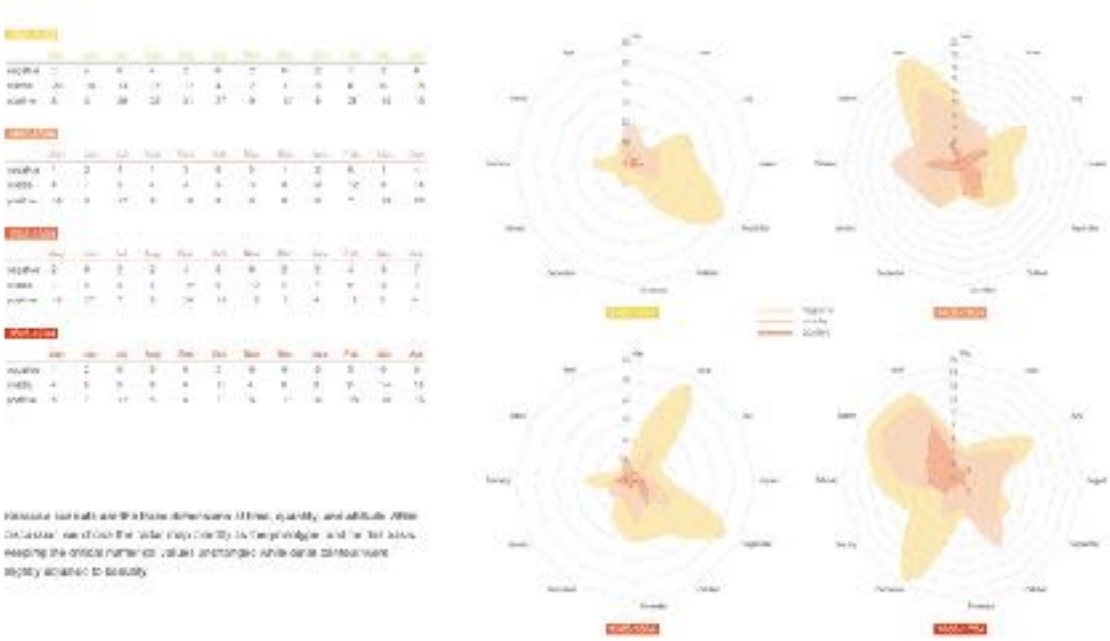


Figure 7

This diagram (**Figures 8-10**) shows the frequency of tags based on content in Weibo and Flickr. Among them, Weibo has 21 Tags, Flickr has more than 100 labels, but in order to contrast the data, we select the first 21 Tags from flicker and compared with Weibo's 21 Tags. First of all, we will import Weibo and Flickr tag data into Tagxedo-Creator (one software), then the two label distribution diagram are generated, the bigger font, the tag has the higher the frequency. This visually intuitively feels the frequency of the label. Then you can clearly see the exact frequency through the histogram, and finally list the top 6 labels with the highest frequency.

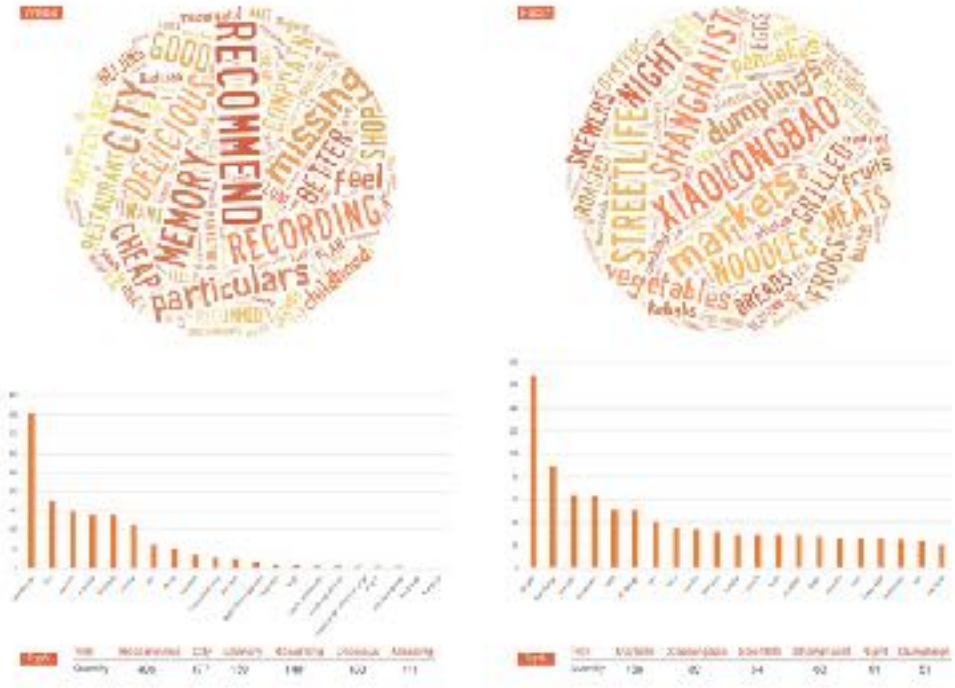


Figure 8

Questionnaire

There are really some interesting findings in the questionnaire. Most people said they like street food, but some of them also said it's happy to say street food vanishing. And people's attitudes are different according to their time of staying in Shanghai. We use raw to explore the connection between them.

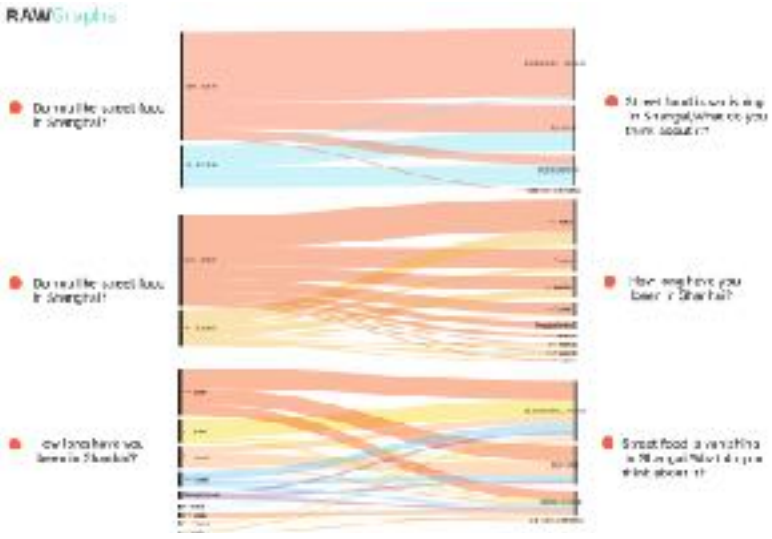


figure 9

Combined the three graphs, we get a final graph. it shows the connection of three questions：
1.How long have you been in Shanghai?
2.Street food is vanishing, what's your attitude?
3.Do you like street food in Shanghai?
Also, we add some pie charts to show the percentage of different answers.

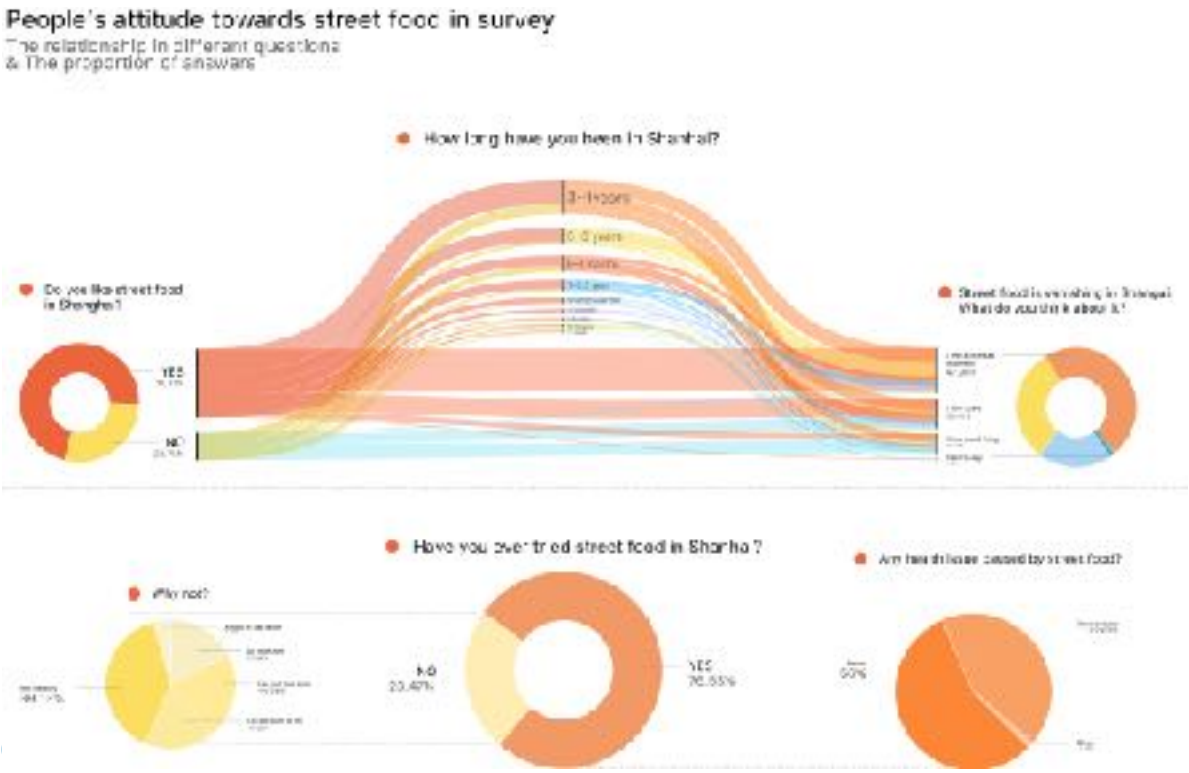


figure 1

Metro Map
On other, visualisation we produced, was the deformed Metro Map of Shanghai. This visualisation is less informative then the previous once. It is more understandable as an slightly artistic peace, produced in order to playfully draw attention to the topic and therefore getting people to engage.

We collected the location data from all our sources. The questionnaires provided concrete metro station information (one question asked for it). Some of the Weibo posts contained address informations. Flickr provided coordinate data. We manually assigned via google maps to the nearest metro station. 386 data points mentioned 80 different metro stations and at least one station of each line.

Figure 11

Shanghai Metro – single data

Weibo | Flickr | Chinese Survey | English Survey

Figure 12

Variations of Shanghai Metro – combined all data

Figure 13

Figure 14

How was it generated

To create this visualisation we used and combined two different programs. The first step was to redraw the metro map. For this we simply imported a picture of the map in Rhino3d and set a point for every station. Then we used the Rhino3d plugin Grasshopper3d to assign names and lines to the points. We connected every station of every line with an adjustable circle component to be able to offset circles according to the amount of times a station was mentioned in our sources. To recreate the appearance of a metro map we connect the outcome of these circles with tangent lines to get one closed shape for every metro line. After baking and cleaning the lines and circles in Rhino, we imported everything to AdobeIllustrator to finalise the graphic. We preserved the original colours of the metro lines, but tried out different shapes and transparencies.

How we chose the Finalist

After reviewing the graphics, figure 11 became the finalist due to the following. First is to mention that because of overlapping and transfer stations with more than just one line, transparency was a key method to lack a necessity of sorting out priority. In Figure 15 and 16 the priority was generated simply by counting down the numbers of the lines. Line 1 in the very front and line 16 in the very background. But this did not seem very reasonably, so we determined them. Figure 13 shows the graphic with a line style. Here it was nice to see single strokes interfering and merging to the circles. But overall this graphic appears very light and fragile so it nether really fit to the topic of food nor

Figure 15

Figure 16

metro. Figure 14 show a version where we deleted all strokes and only left the circles. They were given a transparency so overlapping generated a new colour. We liked that this version was the most abstract but on the other hand it felt a bit more static and empty than the final version shown in figure 11 and 12.

Conclusion

Gathering data for a topic which is totally of the books was an exciting journey. In the end we were very satisfied with the amount of data we collected. Of course the data contains a lot of bias due to the limitations of our research. But nevertheless it was informative and interesting to see certain peoples mindset about Shanghai Street Food.

Along with the development and improvement of Shanghai City, sadly many street food vendors have been banned. With our research we detected that meanwhile more and more people began to miss it, complain about the disappearance and talk about it as one of the things which make the city lovable.

With these results and websites like http://www.sh-streetfood.org and books like Shanghai Strassenküchen - Menschen, ihre Geschichten und Rezepte we hope that this declining trend of street food will soon make a turn and increase again.