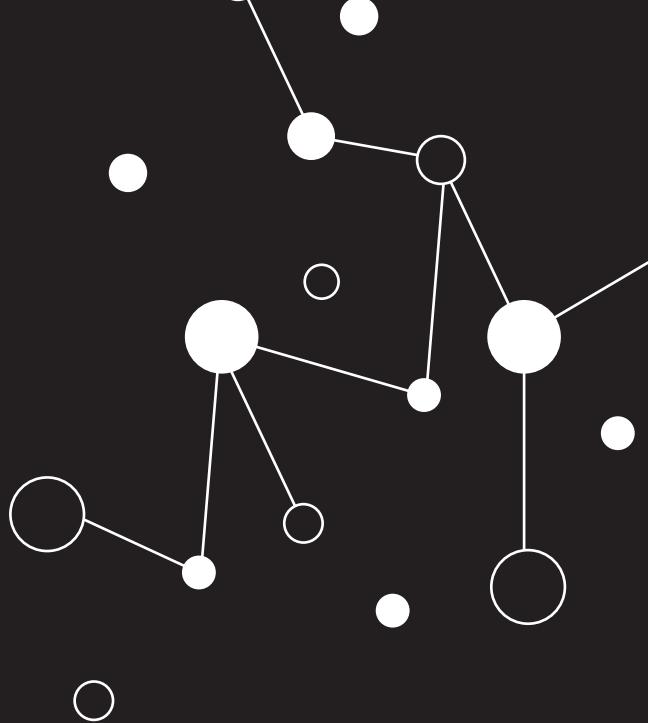


Visualizing Fashion Buzz

the stories behind the trends



Xinhe Yu

Visualizing Fashion Buzz

the stories behind the trends

Thesis Presented
by Xinhe Yu

The College of Arts, Media and Design
In Partial Fulfillment of the Requirements for the Degree of
Master of Fine Arts in Information Design and Visualization

Northeastern University
Boston, Massachusetts
May, 2017

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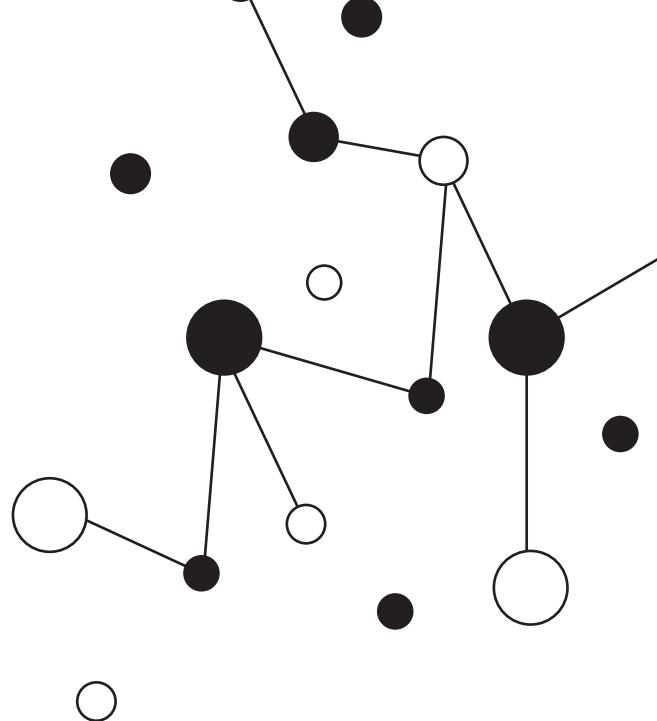
the stories
behind the trends

by Xinhe Yu

Advisor: **Thomas Starr**
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ABSTRACT OF THESIS

Submitted in partial fulfillment of the requirements
for the degree of Master of Fine Arts in Information Design and Visualization
in the Graduate School of the College of Arts, Media and Design of
Northeastern University
May, 2017



Abstract

This thesis examines fashion history and analyzes recent social media to identify fashion trends. It locates a few new rising fashion styles and proposes a method to do more studies on what influences fashion styles and how that could be useful the fashion industry. Studies of fashion terms used in Twitter buzz, and social network visualization of the results, can reveal fashion trends occurring in social media.

The data is based on research into fashion trends and data collected from Twitter and Google. The point of this study is to find the roles of social media in fashion trends, the cultural influence behind all these trends, and to show transformation of the trends through Twitter buzz.

The project for this thesis contains three parts: the first one shows history of one specific fashion style (Flight/Bomber Jacket) by using projection, it is for the comparison of what is the different between trending

of that style in social media and history; the second one illustrates the news stories behind five fashion styles by using interactive website page to show the line graphs, shows what is the reason behind trends; and the last one is about spreading of the fashion buzz in both the U.S. and Japan, and these are two interactions of animated maps display the significant changes of fashion buzz in social media.

The results of this thesis are: fashion leaders, such as celebrities are the reason behind fashion trends and social media; fashion leaders and social media help trends spread into public quickly.

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Introduction

"What's the hottest trend in fashion right now? Social media of course."

Hitha Prabhakar

Discovering the reasons that influence people's decisions of what to wear is always one of the huge problems facing market researchers. Many studies analyze this topic, such as Trickle Down and Bubble Up theories: they both come from economic theories and show two opposite ways that fashion can trend. The Trickle Down theory "predicts a trickle-down of preferences from the elite leisure class to the proletariat", and the Bubble Up shows that fashion could also come from low status to the high, such as "the power of hip-hop fashions." (Galak, Gray, Elbert, & Strohminge, 2016) In recent years, people care more about fashion than before because in this technological era they can connect more with each other and it is easy to compare with one another. In an informed audience, people could easily know global fashion trends. Social media has had one of the biggest impacts in this area: for many fashion brands, it "is now viewed as an opportunity to improve customer relationships and to ultimately capture a larger

audience." (Mohr, 2013, p.18) Social media brings lots of different perspectives to the fashion field and also shows everyone how fashion flows through buzz. The social media buzz comes from buzz marketing (When people talking about social media buzz, they actually mean buzz marketing), which is "the process by which an individual influences the actions or attitudes of others." (Mohr, 2007) Social media is one of the most important communication media in daily life now. Almost all of the information online is received through the Internet and the major channel to get information is social media buzz. Therefore, the word "fashion" is not something far removed from the public; it becomes more approachable. Is social media one of the resources that influences "fashion" and if this is true, then how social media become influential?

This thesis argues that social media deeply influences people's lives in this technological era. Almost everyone uses social media to share their lives, their interests and also to check others' likes and interests. It becomes one of the major tools to help the public look into the world. Technology nowadays is everywhere and people post their lives on social media, which makes the importance of social media grow. Almost everyone can access social media, and can easily learn how to use it. All of these characteristics make social media become an essential tool to illustrate our lives, just like the roles of social media in the fashion field.

The appearance of social media changed the scope of many industries, such as the hospitality, tourist, music and food industries. Possibly more than in any other field, the whole fashion field has become one of the most significantly impacted by social media. People started to post their opinions about what they experienced in

different industries or get information from social media. However, in social media, the fashion industry could not only spread information to the public, but also influence both the public and designer's ideas of what fashion is and what the fashion trends could be. Social media is becoming the primary marketing strategy for fashion brands or events, and it also helps people to share their own voices in fashion, and helps their voices to change the fashion industry. (Ahmad, Salman, & Ashiq, 2015)

Fashion changed from an entertainment of the upper class to a lifestyle to which everyone could have visual access due to the rise of social media. Marcel Pawlas talked about his idea of the relationship between social media and the fashion industry, "Not only do brands and retailers use social media to speak with their consumers, they use it to listen to them as well." (Pawlas, 2014) Nonetheless, how could this relationship be visually realized? If this relationship truly exists, how do people

make it work? People are the creatures which are most difficult to control or predict. How could the fashion industry use social media to successfully spread their fashion trends? Those questions can easily be answered by this thesis and its project.

Twitter is one of the most popular social media outlets that stores data and information that could be used for research. How is Twitter buzz involved with fashion (is influenced by fashion or vice versa), and what kinds of information could be found? Based on the study of this thesis, Twitter buzz could show how some fashion trends transform from one culture to another based on some specific fashion terms because of International users. It also shows the patterns of how the stories behind some specific trends can influence people's decisions. How can we use information visualization to show the relationships and stories behind fashion and social media buzz? The research and design of visualizing the data in this thesis

finds a better way to show how to visualize the fashion buzz based on the research for social media data. The projects designed in this thesis are based on datasets from Twitter and Google.

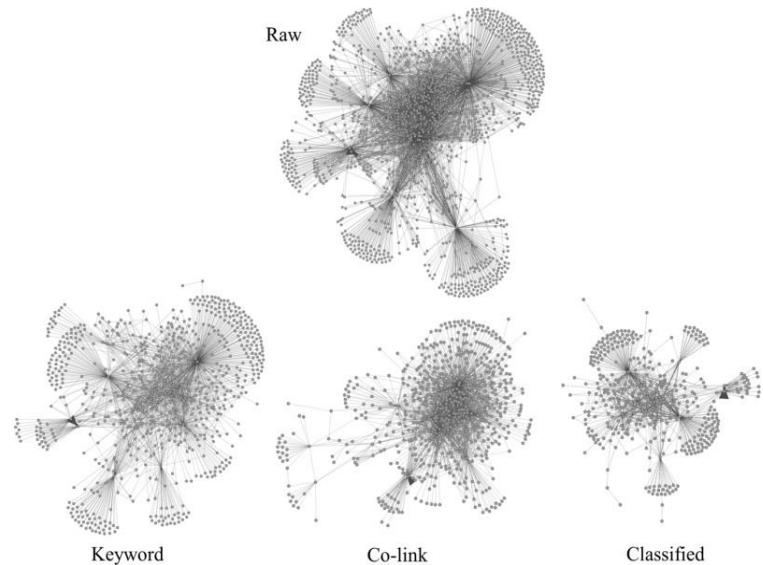
Related Work

Many scientists and visual designers want to visualize people's activities and also analyze the information of those activities. However, the question of how to better visualize the network as a clear graph is always a challenge facing designers, such as how to better visualize a large dataset, and what kinds of data could better reflect people's activities. In the fashion area, the fashion business always wants to find the reasons behind the trends and to forecast those fashion trends to better target the customers. The research discussed below, demonstrate how to organize and analyze big datasets, and how to expose trends in activity.

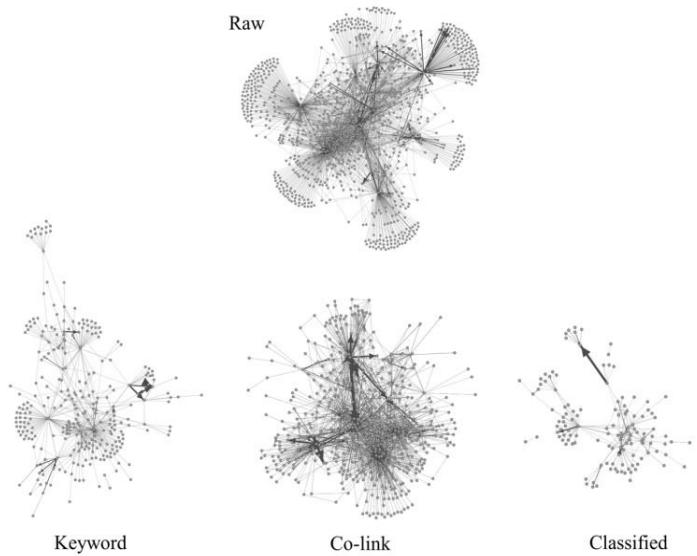
Big Data, Big Noise: The Challenge of Finding Issue Networks on the Web

In this article, authors want to research a big dataset using a webcrawler. The Internet network creates a way for people to express themselves. This makes data analysis more difficult, because it is necessary to filter the different unnecessary information out of the information. The authors start by analyzing food safety issues in Google searches and compare their outside research with experts in the food safety field. Then they used different methods to filter the data that they had collected, and tested ways to make the data collection more effective. This article provides three methods to help people reduce useless information noise and avoid information bias: keyword filtering, machine-learning document classification, and extraction of the core networks. (Waldherr, Maier, Miltner & Gunther, 2016, p.12)

The dataset for this thesis on Visualizing Fashion Buzz, comes from Twitter. This dataset can be analyzed to show how fashion can become a trend. The dataset is really big and comes with a lot of noise to filter out. The authors suggest filtering the noise data out by using a web crawler to collect large datasets and analyze them, using the three methods mentioned above. Based on the authors' filter of the food safety data in Germany and the United States, people could see differences before and after filtering which are really striking. The map uses the linked dots to show the buzz can better illustrate the relationship between each single dot and also shows the dense type of data, but it also has limitation of showing the information behind each dots. In the following context, this thesis will show some actual examples of how to illustrate a large dataset.



(a) United States



(b) Germany

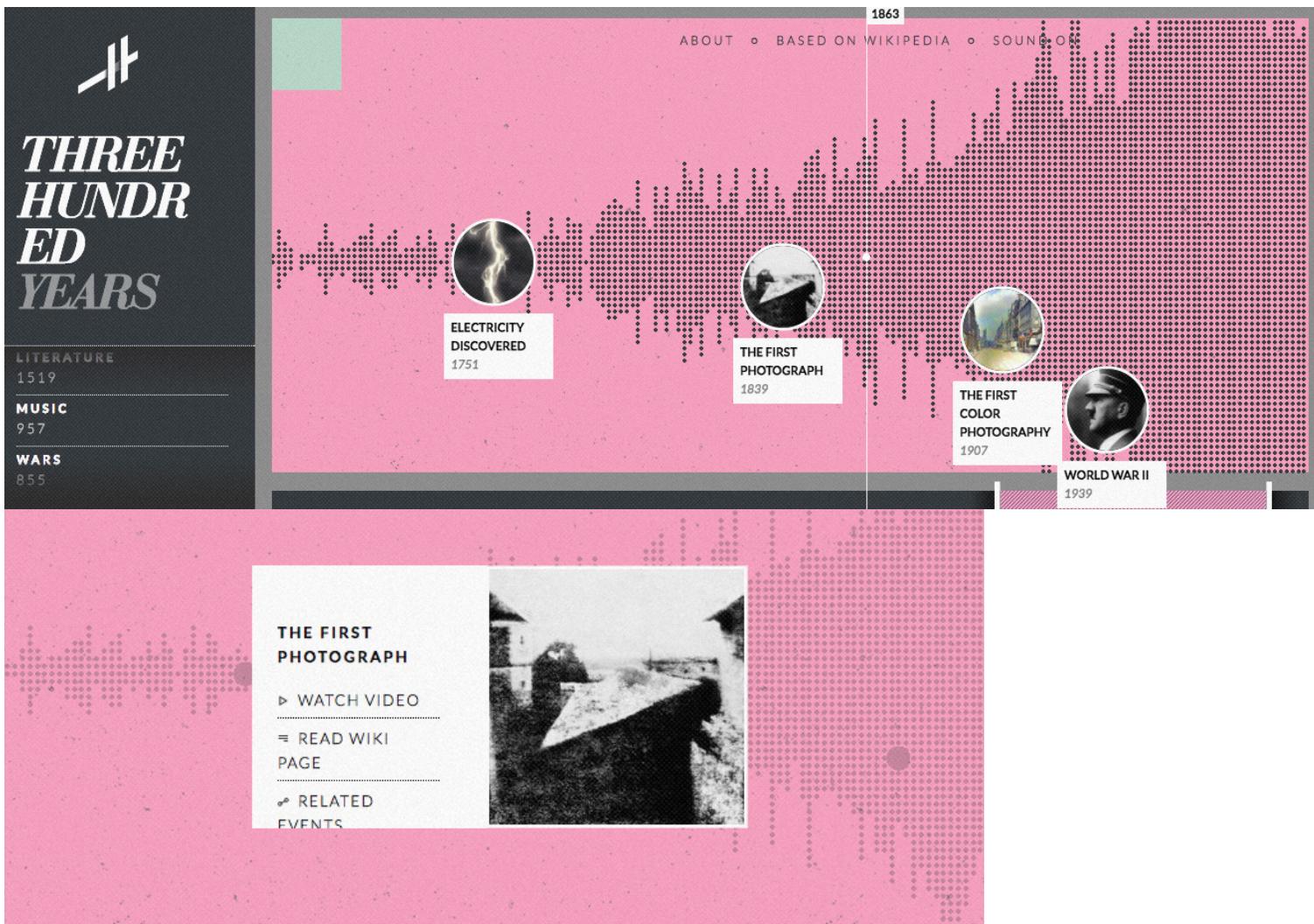
The test cases for empirically evaluating these filtering strategies were hyper-linked networks for the issue of food safety in Germany and the United States: Network structures before and after filtering. (Waldherr, Maier, Miltner & Gunther, 2016, p.12)

Histogram

Histogram is an interaction tool that helps people to visualize historical moments from Wikipedia data. Each of the nodes represents a historical event that could help viewers to visualize big datasets from Wikipedia. People are able to change time ranges by using slider or resizing the bar. People could also click on the nodes to enlarge the picture and find out more information about the history of the nodes.

This visualization shows how people can map big datasets based on a website containing large quantities of information. It provides a way to map large datasets and filter the unnecessary information out of the data based on design issues, and also could link that information to the map to avoid creating an information gap. The visualization of Histogram shows a way to illustrate big datasets, and it includes each events' information by interaction, but it still different than analyzing social buzz. For example, a social network is

even more difficult to visualize than other big datasets because of the complicated connections between each network component. ("Histogram," n.d.)



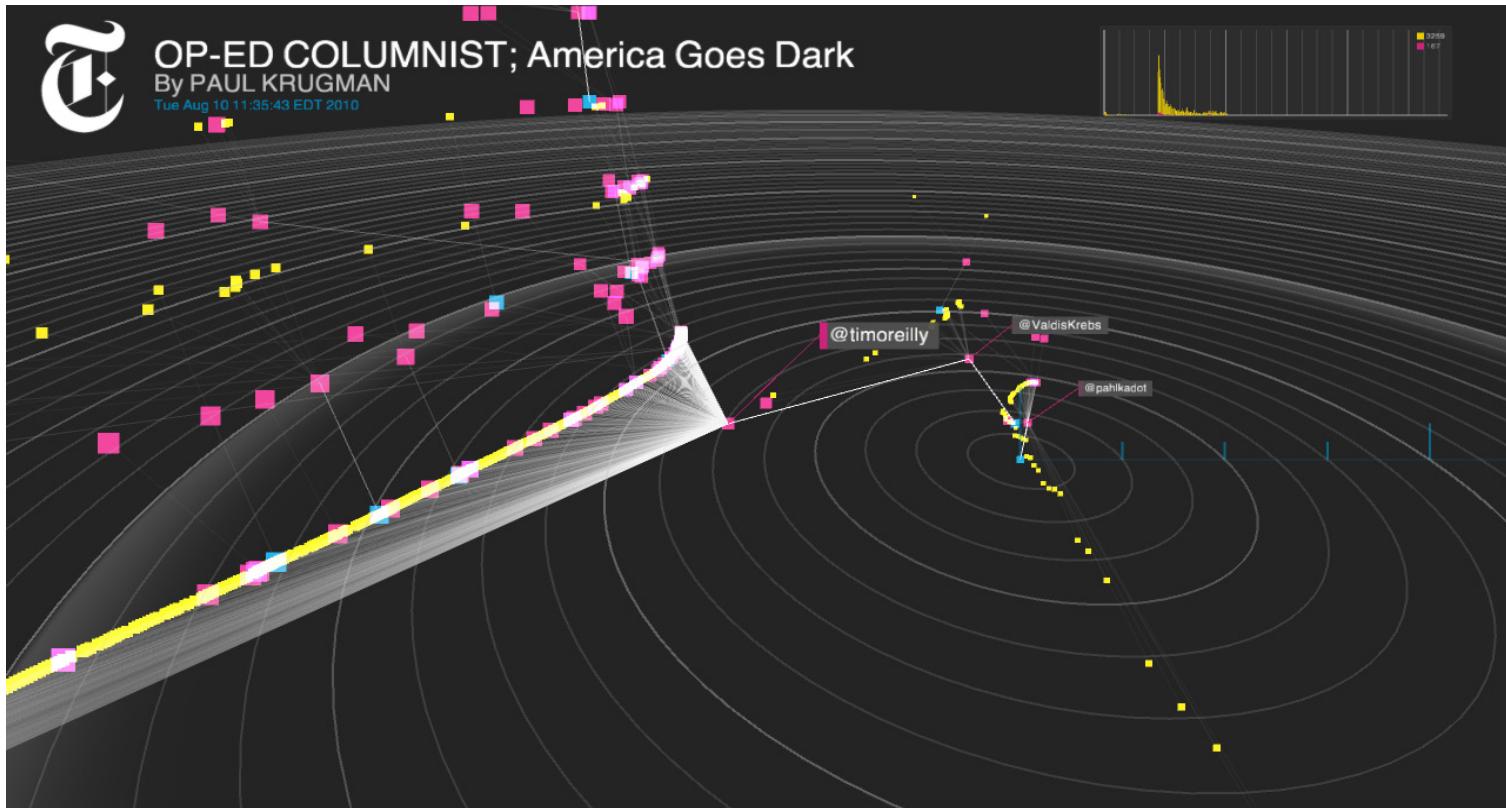
People are able to change the time ranges by using a slider or resizing the bar. Clicking each dot shows more information about historical events.

<http://histography.io/>

Cascade

This project is a visualization of how the New York Times' news tweets spread into the public. It uses several ways to illustrate the data information in this digital map, providing multiple perspectives on how to visualize social media buzz.

The visualization not only shows how conversation flows in social media, but also relates the flow of the news itself. This visualization not only displays a large dataset with many levels of information, but it also makes them into a clear and detailed visualization (which could even be a tool to help people understand the effect between the conversation and their tweets). However, due to the large dataset, this visualization still looks really "crowded". It contains too much information in several different dimensions, and sometimes the illustration may even mislead the audience. Users may feel confused by try to understand which level of the information is what they are looking for. (LaBarre, 2012)



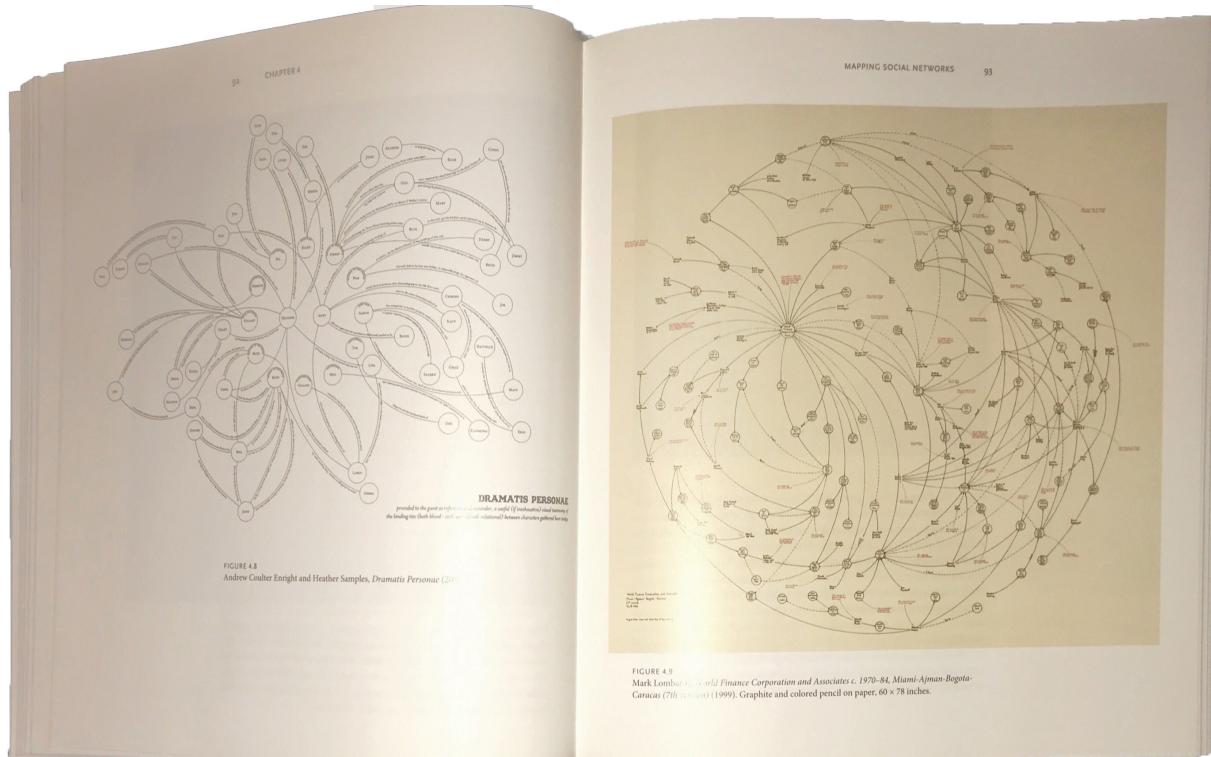
"Unlike most Twitter visualizations, which present a fuzzy snapshot of Twitter's reaction to something in the news cycle, Cascade is both dynamic and exceedingly detailed."

[http://nytlabs.com/projects/images/
ca_closeup.png](http://nytlabs.com/projects/images/ca_closeup.png)

The Social Machine

In this book, Judith Donath talks about how design influences social media and provides ways of visualizing people's actions and conversations with a social media network. It delivers many ways to visualize a social network and tries to find a better way to show how design influences our thinking.

What is the best way to visualize data from social media? Donath said the connection between people is the significant key to analyze social networks. Social networks are built by people's connection with others. The interaction between different users is the key element for an online public space. All multifarious methods that demonstrate the data from social networks inspired further development of this thesis. (Donath, 2014)



For inspiration, this book shows several ways to visualize the social network with the story. (Donath, 2014)

100 Years of Fashion

After considering how designers created a better visualization of social media buzz, the thesis research kept moving in steps, and next started to find the connection with fashion field. How do people show fashion trends through history?

The blog Mode did a video in 3 minutes to show the history of fashion trends from 1915 to 2015. It only uses one model to display the different looks and dresses over time and makes it as a short video to illustrate the history of fashion trends. It is an intuitive approach to visualize the fashion history, but does not work on fashion in social media because it could only show very little information. (G., 2015)

1915

▶ 🔊 0:12 / 2:38

HD YouTube

These is the screen-shot of what 1915's fashion looks like in the video of "100 Years of Fashion"

<https://www.youtube.com/watch?v=M4z90wlwYs8>



2015

▶ ▶! 🔊 2:28 / 2:38

HD

These is the screen-shot of what 2015's fashion looks like in the video of "100 Years of Fashion"

[https://www.youtube.com/
watch?v=M4z90wlwYs8](https://www.youtube.com/watch?v=M4z90wlwYs8)

Google Fashion Trends Report

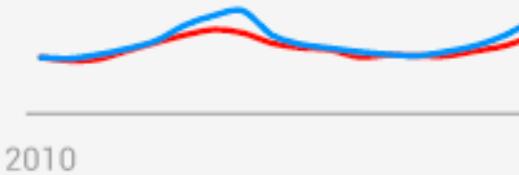
Google did a data analysis report on fashion trends in 2016, based on a huge dataset from Google Internal Data. It lists the data for search results for some specific fashion trends: military chic, free-spirited, and ready-to-go outfits in both U.S. and U.K. and lists the data to prove those were rising trends in this year. It also illustrates the trends' changes of several fashion terms which were listed under those specific fashion trends.

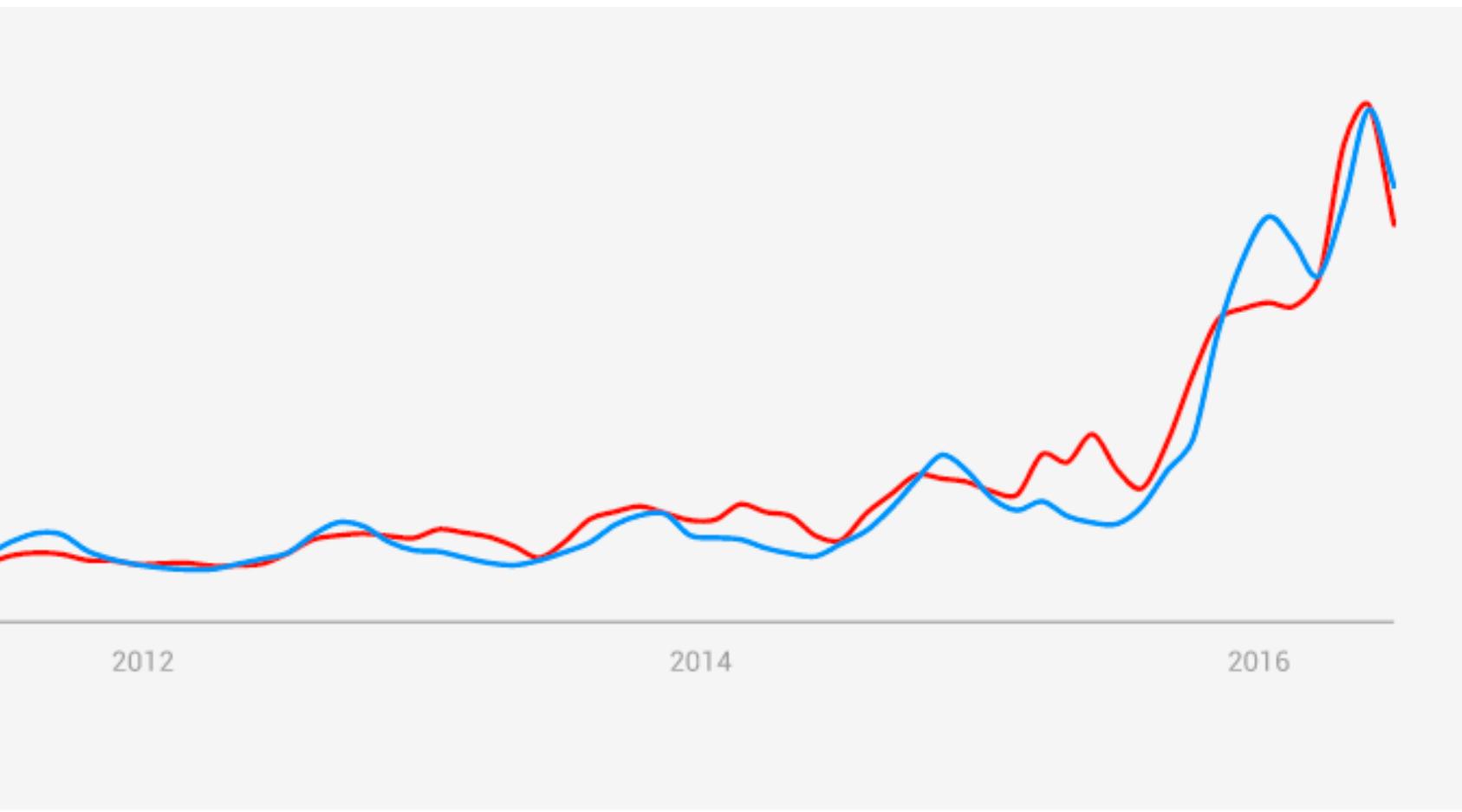
The visualization of those terms uses various ways to help the audience to easily understand the information behind the data. It uses lines to show the change of the trends and the bubble map to show the scope of those trends. However, due to the limitation of just showing graphs is that cannot keep too much information. To summarize the report, it also lists four themes under the dataset. Nevertheless, if this report had provided more details of the reasons causing those trends, the reasons behind each trend would be a good approach for fashion buzz analysis. ("Fashion Trends 2016," n.d.)

In April, searches for bomber jackets grew 297% YoY in the U.K. and 612% YoY in the U.S.

- United States
- United Kingdom

Source: Google Internal Data, U.S. and U.K., indexed by May 2010 search volume for "bomber jacket," May 2010–May 2016.



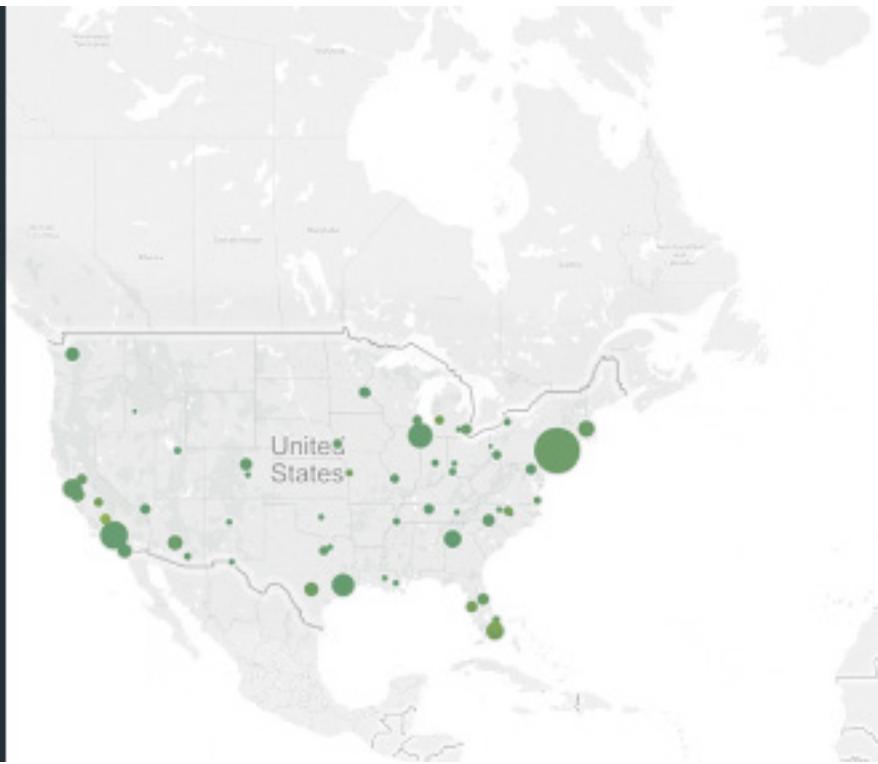


The report uses line chart to show the fashion trends of bomber jackets through time.

[https://www.thinkwithgoogle.com/
articles/fashion-trends-2016-google-data-
consumer-insights.html](https://www.thinkwithgoogle.com/articles/fashion-trends-2016-google-data-consumer-insights.html)

Search Trends by City

By May 2016, the off-shoulder look became more prominent across both the U.S. and U.K.



The report uses the size of the circles to measure trends' change based on Geo-location on the bubble map.

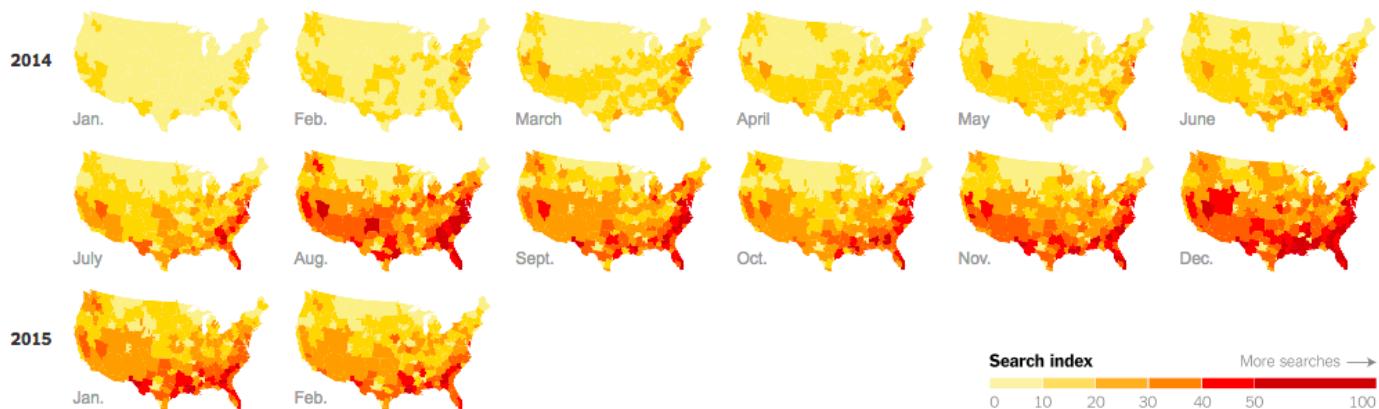
[https://www.thinkwithgoogle.com/
articles/fashion-trends-2016-google-data-
consumer-insights.html](https://www.thinkwithgoogle.com/articles/fashion-trends-2016-google-data-consumer-insights.html)

Fashion is Trending, in Google Searches

This project is also based on Google Searches. New York Times visualized the trending of several fashion trends by using heat maps. Those maps tried to show how trends spread between people in the United States. It lists several maps showing the popularity of some fashion trends in different states and arranges those maps in chronological order (by months). The visualization could show the changes of fashion trends spreading into the U.S. and heat maps is better to show the density of the dataset. It not only shows how those fashion trends spread into all of America, but also shows how they disappeared. However, the major point of heat map focus on the difference between each area, and it is not a good way to show the changes through time. (Tabuchi & Katz, 2015)

Trading Jeans for Jogger Pants

Jogger pants burst out of the gym and onto the streets in a big way last year, and Google's data shows interest percolating along both the East and West coasts, with early blips spotted in Oregon, home to Nike, maker of some of the most popular jogger pant styles. Akin to jeans for millennials, the pants have gone national, with jeans stalwarts like Gap and Levi's jumping on the bandwagon.



Fashion Is Trending, in Google Searches

[http://www.nytimes.com/
interactive/2015/04/27/business/google-
fashion-trends-map.html](http://www.nytimes.com/interactive/2015/04/27/business/google-fashion-trends-map.html)

Fashion on Social: Top Fashion Brands and Their Social Media Performance

This is a case study from the “Talkwalker” website which makes Social Media Analytics for the business of fashion. Talkwalker is a company that helps businesses to analyze datasets from social media. In this case, Talkwalker analyzed data of some fashion brands to check how they appear on social media. They used charts to illustrate how those fashion brands operate in the social media business. This visualization contains enough information of the dataset because it uses the combination of several graphs and the interaction of the graph could help users gain insight into the cases. (“Fashion on Social, ” 2016)



Results 104.3K

SHARE OF MEDIA TYPES

SHOW TOP 5 10 25

Media Type	Share (%)
Twitter	75.7%
Online News	8.2%
Instagram	5.0%
Blogs	1.7%
Forums	1.4%
Facebook	1.1%
Newspaper	0.6%
YouTube	2.0%
Magazine	1.1%
Other	2.6%

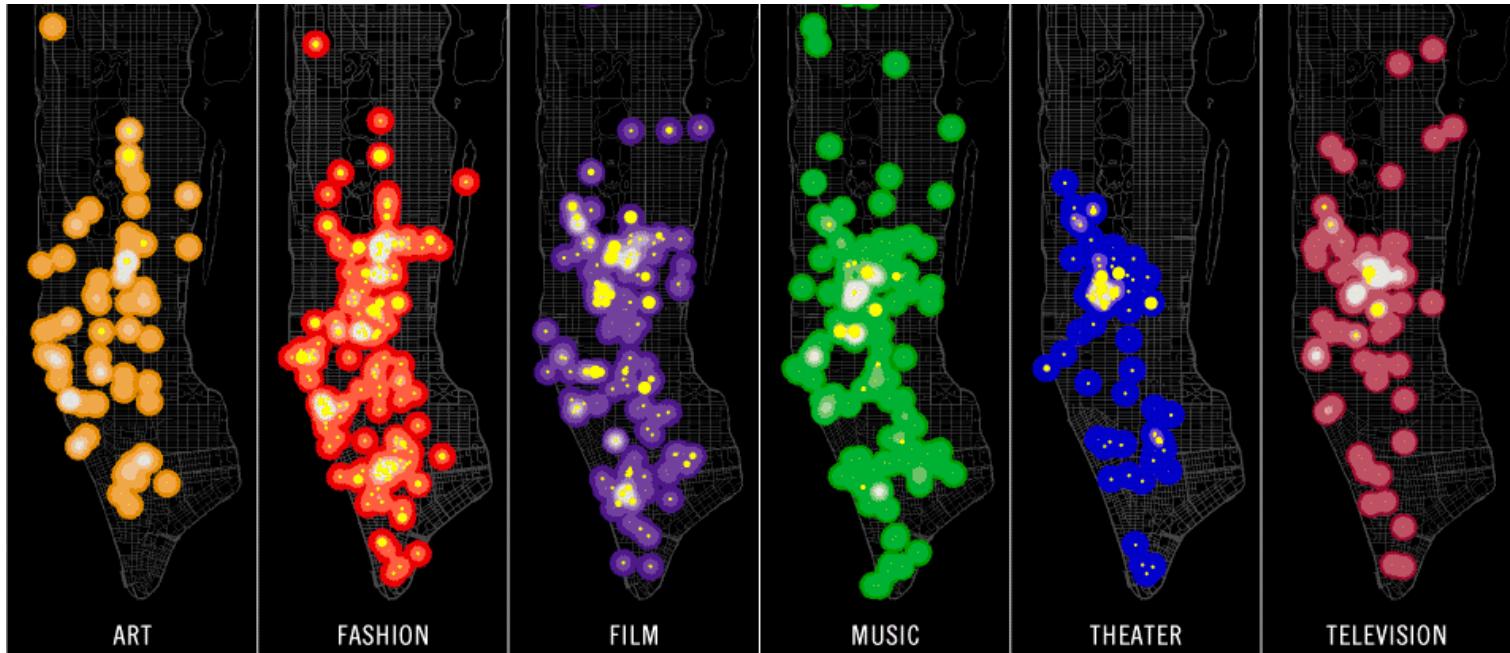


Let's Talk Fashion: On Twitter, Instagram or in the News?

<https://www.talkwalker.com/resource/case-study/retail/Case-Study-Fashion-on-Social-Top-Fashion-Brands-and-Their-Social-Media-Performance.pdf>

The Geography of Buzz

This project uses social media buzz with a geographic dataset to visualize how social environment affects culture. It uses the density of buzz from different cultural events and industries to research the impact of how those social events distribute into different places. This project shows that one of the huge influences for cultural industries is media. The bubble map is one of the best way to visualize geographic datasets because it could not only show the density of the data, but also visualize the location of each data element clearly. (Ryzik, 2009)



This density buzz map shows the different types of cultural events in New York and its distribution based on the geography.

http://www.nytimes.com/2009/04/07/arts/design/07buzz.html?pagewanted=1&_r=0

The Reflection of All Works

All of these works provide many different ways to visualize big data in social media or fashion area, and lend inspiration to this thesis about how people analyze this kind of data and information. Some of the works are about illustrating large datasets and some of them talk about visualizing fashion or social media fields. However, if those projects could combine these two fields into one, the information could be clearer. The drawbacks of those works help to avoid unnecessary challenges in this thesis.

Conceptual Framing

The beginning of this thesis started with something related to the fashion field, where people have a lot of passion in this information era. In going through the topic, it was interesting to consider how fashion is changed or even transferred from social media? What kind of "things" influence people's decisions of what they should wear? How do they affect people? What are the cultural impacts or stories behind fashion trends? How are these stories showing up in social media? This thesis has organized those ideas into three parts: the Tipping Point, social media and fashion; then this thesis uses these three fields to build up and find the answers of all those questions.

The Tipping Point

Malcolm Gladwell talks about the concept of "The Tipping Point" in his book,

"The Tipping Point is the biography of the idea... that the best way to understand the emergence of fashion trends, the ebb and flow of crime waves, or the rise in teen smoking...is to think of them as epidemics. Ideas and products and messages and behaviors spread just like viruses do."

(Gladwell, 2002, p.7)

He also believes that a trend is a dramatic change, which allows people to notice it easily. He talks about the story of how Hush Puppies became a trend. A tipping point made it like viruses spreading into public: it started with a small change or difference. Even so, not everyone agrees the metaphor of "Viruses". Henry Jenkins criticizes, when the information of the media spread into public, the changes becoming dramatic and broad; but this is

not exactly same as the characteristic of viruses. The spreading of viruses is unconscious, but the spreading of information involves other users' decisions. (Usher, 2010) So, how people influence the social media information spread over? In this book, Gladwell lists three agents of change may answer this question, the three agents are: "the Law of the Few, the Stickiness Factor, and the Power of Context." (Gladwell, 2002, p.19)

The Law of the Few means “The Tipping Point” is controlled by some of the key roles as messengers and they spread the messages by word-of-mouth (WOM) which is the “interpersonal communication about products and services between consumers.” (Mohr, 2013) The network is created by some of the key people and they helped others to connect with each other. Those people have the skills to communicate with others and they could easily influence other people’s feelings, emotions and even their minds. The connections between those people with public make the trends keep spreading with everyone’s contribution of the information.

The Stickiness Factor is about content of the information and how people can make sure their messages are remembered by others. The basis of remembering the information is making it easy for the audience to understand. Keeping people’s attention and making the information less likely to be rejected could help people to create epidemics.

The Power of Context shows that the environment is one of the reasons to create “The Tipping Point”. Even small changes of time, location, and other conditions could cause the start of epidemics. External context could impact people’s minds quickly and easily even without any notation.

The book provides an idea of how epidemics or trends spread through the public and also introduces the way to find the law of “tipping point”. The three agents help this thesis to identify what is the epidemic or the trend. Based on that, this thesis started to look at the different fashion terms and tried to use these three agents to find the stories behind them. This includes what is the “few” of those trends, how does it stick into public (how it changes people’s action), and also how the context influences the trends. Those approaches help people to find how the trends happened and how did they started in this thesis.

Social Media

The research for this thesis is based on the social media buzz, and mostly on Twitter because it is one of the most popular social media tools now. In his book "Mining the Social Web", Matthew Russell talks about what Twitter is,

"One way to describe Twitter is as a microblogging service that allows people to communicate with short, 140-character messages that roughly correspond to thoughts or ideas. In that regard, you could think of Twitter as being akin to a free, high-speed, global text-messaging service. In other words, it's a glorified piece of valuable infrastructure that enables rapid and easy communication." (Russell, 2013, p.7)

Social media is a tool that helps people document almost all moments of their lives and shows them to the public. Almost everyone has access to social media, and it is free to monitor their and other people's lives. The users could

simply type a short paragraph to document their lives on Twitter. That possibility enables designers get data and analyze people's actions.

Twitter is the best way, for people to follow the others and news that are not in their own circle. It could get any information from everyone easily and get the data of fashion from Twitter without connection or following with others, those functions create a way to avoid subjectivity in this thesis.

Hence, the science that studies social networks starts to be a tool to help designers or scientists to analyze the data from social media, "a computational social science is emerging that leverages the capacity to collect and analyze data with an unprecedented breadth and depth and scale." (Lazer et al., 2009, p.722) Computer scientists started to use all kinds of languages to analyze the data and information from social media. However, the social

science still has to overcome several challenges. For example, the API is created by the social media outlets themselves and it cannot access all the information, and sometimes commercial use of the information is not allowed. In this thesis, the research of the project used a dataset from the Twitter API at the beginning, but since the API had the limitation that it cannot gather a large number of the datasets. After the first try, this project also decided to mine the data by scraping through Twitter and Google's web pages using Python.

Fashion

Fashion is not something new to our society, and it has a really long history. Not only have feminists influenced fashion history, but the culture behind fashion history causes huge changes in the fashion field as well. The local culture changes fashion when it spreads into different regions. Fashion becomes a local symbol when it fuses with the culture of that place. Just like Valerie Cumming said in her book "Understanding Fashion History",

"The perceptions we have now about glossy designer retrospective shows, the constant media spotlight on how people look, dress and reinvent themselves with natural and surgical means were in their infancy, as was the impact of the feminist movement." (Cumming, 2004, p.7)

War influenced female social status, and especially World War Two. Before WWII, women were mostly housewives and only lower classes went to work. Men were serving in the military during the war, and women started to work in factories. Their old home-style dresses cannot fit on their work place, and they need to think out a solution. In addition, the liberation of women made them start to pay more attention to what they wore. The most interesting fashion change was women started to wear military style. During the war, the designers used remaining fabrics from military to design the military fashion styles to show people's patriotism. (Monet, 2016)

"There was a time when women dressed for men. Today, they're dressing more like men, reappropriating traditionally masculine styles like bomber jackets and biker jeans." ("Fashion Trends 2016," n.d.) Based on the data from Google Trends, the military style has also kept trending recently; people started to search fashion terms related to military styles, such as the rising topic of Flight Jacket, which used to be the uniform of military pilots. ("Google Trending Searches," n.d.)



The Utility dress - less fabric to conserve materials for the war effort

[https://bellatory.com/fashion-industry/
Fashion-History-Design-Trends-of-the-1940s](https://bellatory.com/fashion-industry/Fashion-History-Design-Trends-of-the-1940s)

The Combination of Three Fields

As a combination of those three fields, this thesis was trying to find the cultural impact (how different cultures influence a specific fashion style) and the changes of social status behind fashion trends based on social media data. However, after the initial research was done, it seemed clear that the change of social status cannot be visualized into social media in a vivid way. Social media data cannot show growth and development of the female status from WWII to now (Twitter was invented in 2006, after 2006, the female status did not have a dramatic change which could be easily visualized). Based on this research, the project was refined to focus on the reasons that influence the peak buzz in fashion trends on Twitter, the roles of social media on fashion trending in different nations or cultures, and how Japanese culture impacts changing and spreading of the Flight Jacket/Bomber Jacket in the world on Twitter. Nevertheless, at the beginning of the experiments for this thesis's project, those ideas were not yet in their final shape, meaning that the progress took lots of time and mistakes.

Initial Experiments

Last year, the concept of this thesis started to build with how people could use APIs to collect data from social media. The topic of how does fashion bloggers influence the Instagram fashion could be really popular these years because of the growth of fashion bloggers in Instagram. Therefore, the original idea was to choose 10 different Instagram fashion bloggers, and make a map to show their locations during fashion week in 2015 based on their Geo-location posts on Instagram. By choosing chronological order and ranges on four fashion weeks in four regions, audiences could see that the bloggers were mostly in the location where the fashion week was held in this visualization. This project is called: Fashiongram.

At the beginning of this thesis, I tried to use the same datasets and do more analyses on it such as finding cultural influence behind bloggers' posts when they were in different regions. Fashiongram showed their posts with Geo-locations on a map, which required

manually analyzing their posts to find out whether it was possible to identify what kinds of clothes they wear in different places. Unfortunately, Instagram locked their API for normal users. That means that the data cannot be collected in real-time. As a result, the thesis project of started to use Twitter as the social media tool to collect data.

FASHIONGRAM

by Xinhe Yu

Search Users:

fashion

Search

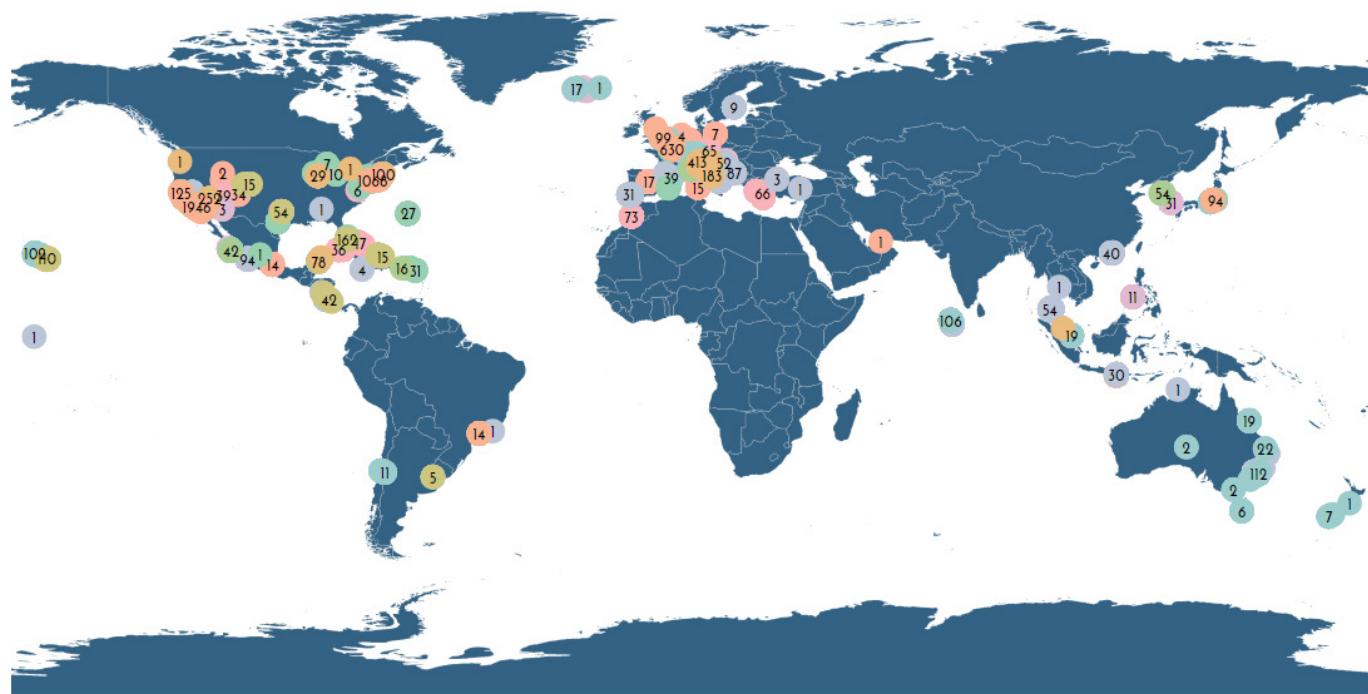
Choose Popular Fashion Bloggers:

Select ▾

Show

Or

Only show media which has location mark



2015

April

July

October

2016

April

July

October

2015 Fall-Winter ▾

2016 Spring-Summer ▾

2016 Fall-Winter ▾

Show All

Project "Fashiongram"
<https://xiaoyunver.github.io/Fashiongram/>

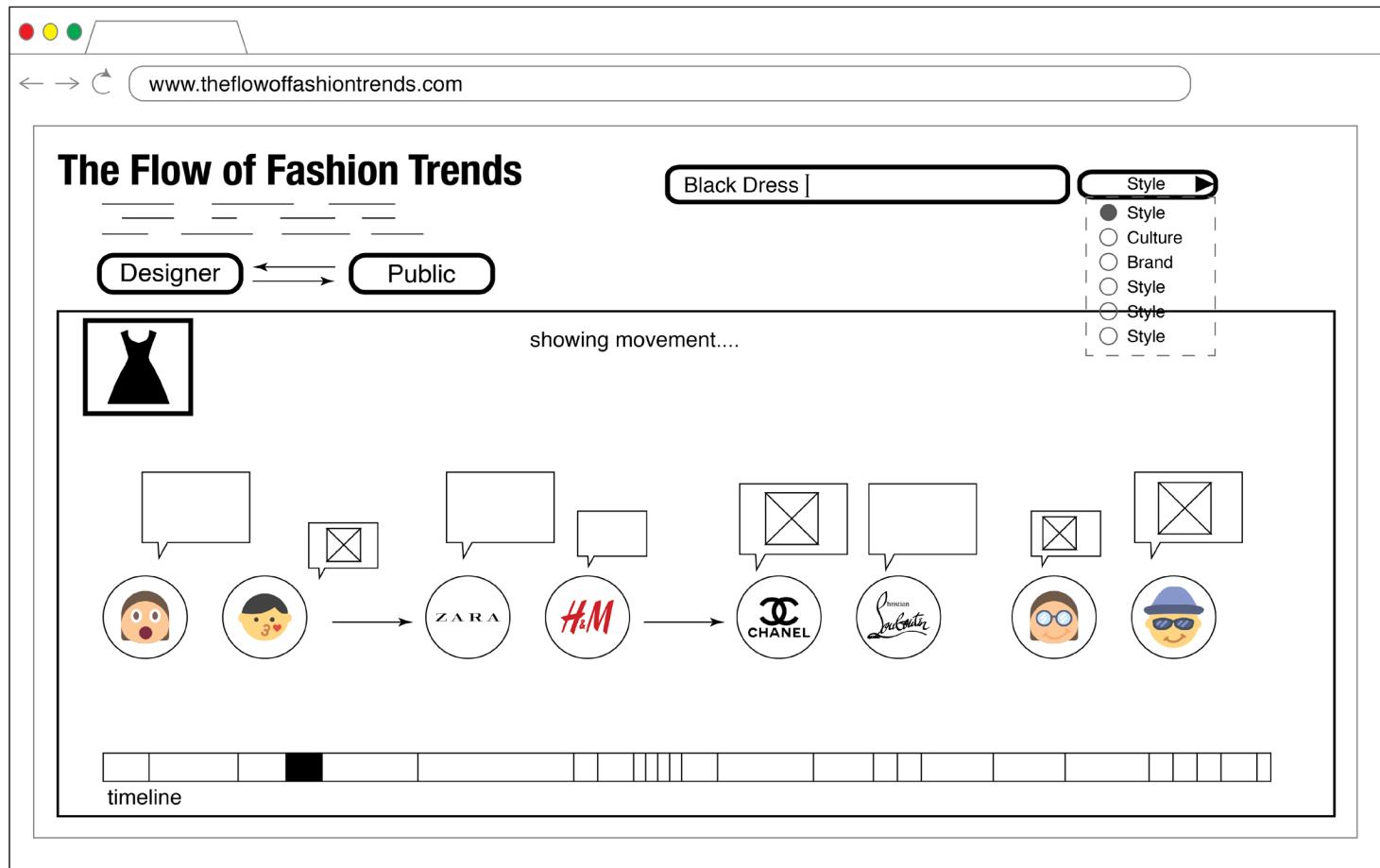
Sketch out Ideas

When I decided to use Twitter as the project dataset, it started by sketching out ideas of what possible ways to show the dataset (how to visualize).

The first sketch was made at the beginning, so it has a similar format with Fashionogram, it is called: The Flow of Fashion Trends. It shows the buzz between fashion designers and the public, and it made a map of the buzz conversation through the selected time period. It was trying to make these maps to show the movement of the conversation between different market level of fashion. As a tool, this project wished to let people search the terms they want and to get the results between those twitter conversation buzz.

However, this was not a good basis for the thesis research because the communications between fashion markets are controlled by fashion industry companies. Fashion designers and fashion industry companies use social

media as a tool for public relation strategy, and they use social media to target the users. This means that the results of this project cannot be the buzz and also cannot be the trends because the line between brands and customers are controlled by the fashion industries sometimes. (Preece, 2012) The results are not effective and subjective to analyze.



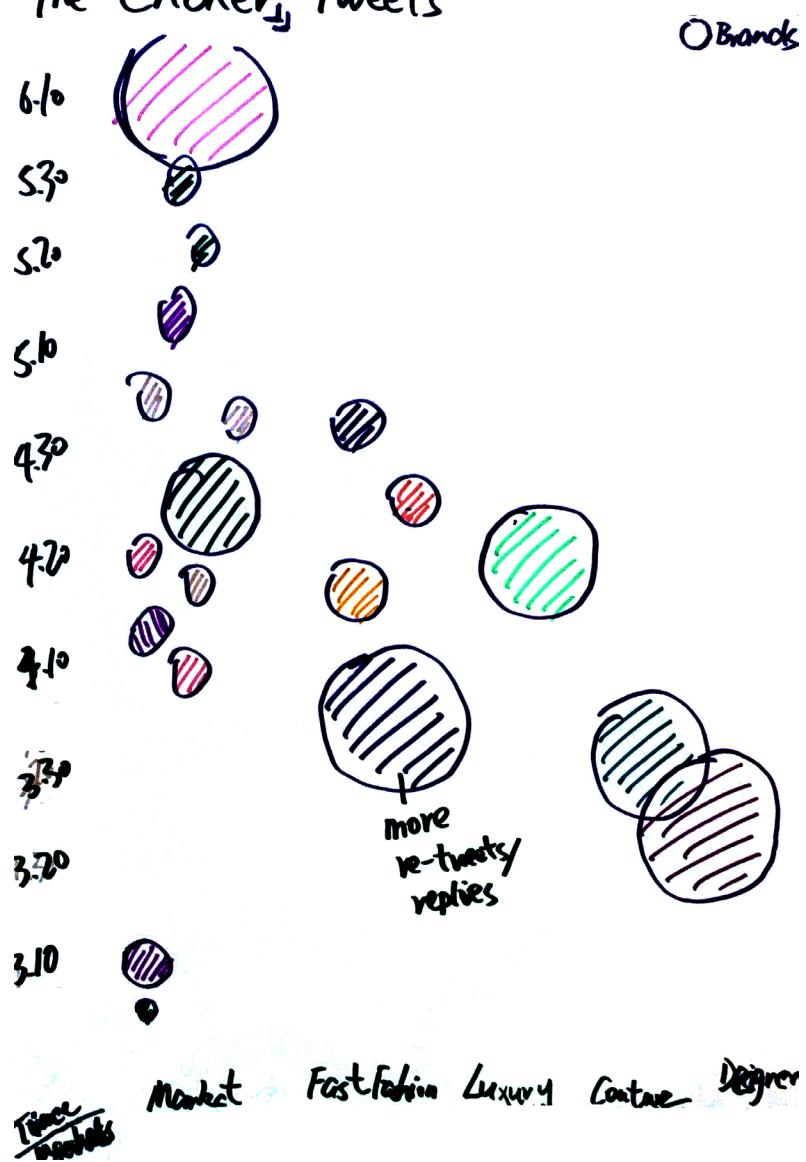
First sketch of thesis project

After that, the process of this thesis focus on finding the projects, articles and books about how to analyze big datasets. Mostly, people use flow maps to visualize big data and use bubble diagrams to show the movement of social network buzz. (Eick, 1996) After looking for plenty of different examples, the experiment of the project used brain drawings to sketch several ideas for the data visualization. The purpose of those sketches was to find a better way to start out all ideas and illustrate them into some clear infographics.

The sketches include 4 kinds of ideas. The first one is based on the fashion term: Choker, which is a style of necklaces. This map was used to show the change of data through a time range based on various fashion brands on a corresponding fashion market level, such as fast fashion and luxury. The second sketch is a node map which focus on the starting point for trends and the relationships between them. The third sketch is a node-

linked diagram which illustrates how the "Choker" trends changed through time after being involved in brands or market. The last sketch is for one specific fashion term, it is a combination of three types maps: flow map, tree map and network map.

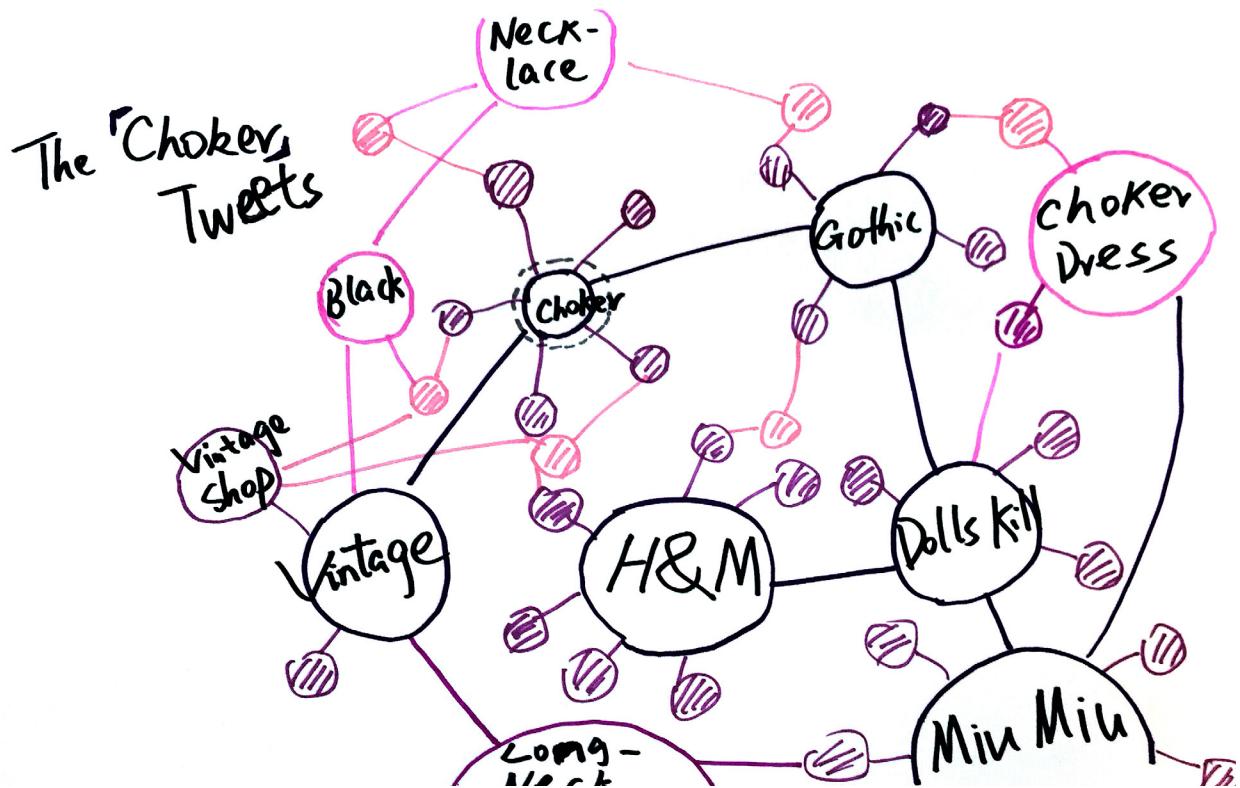
The "Choker" Tweets



Four different sketches of initial visualization of the data, the first one : bubble chart for a specific fashion term "Choker";

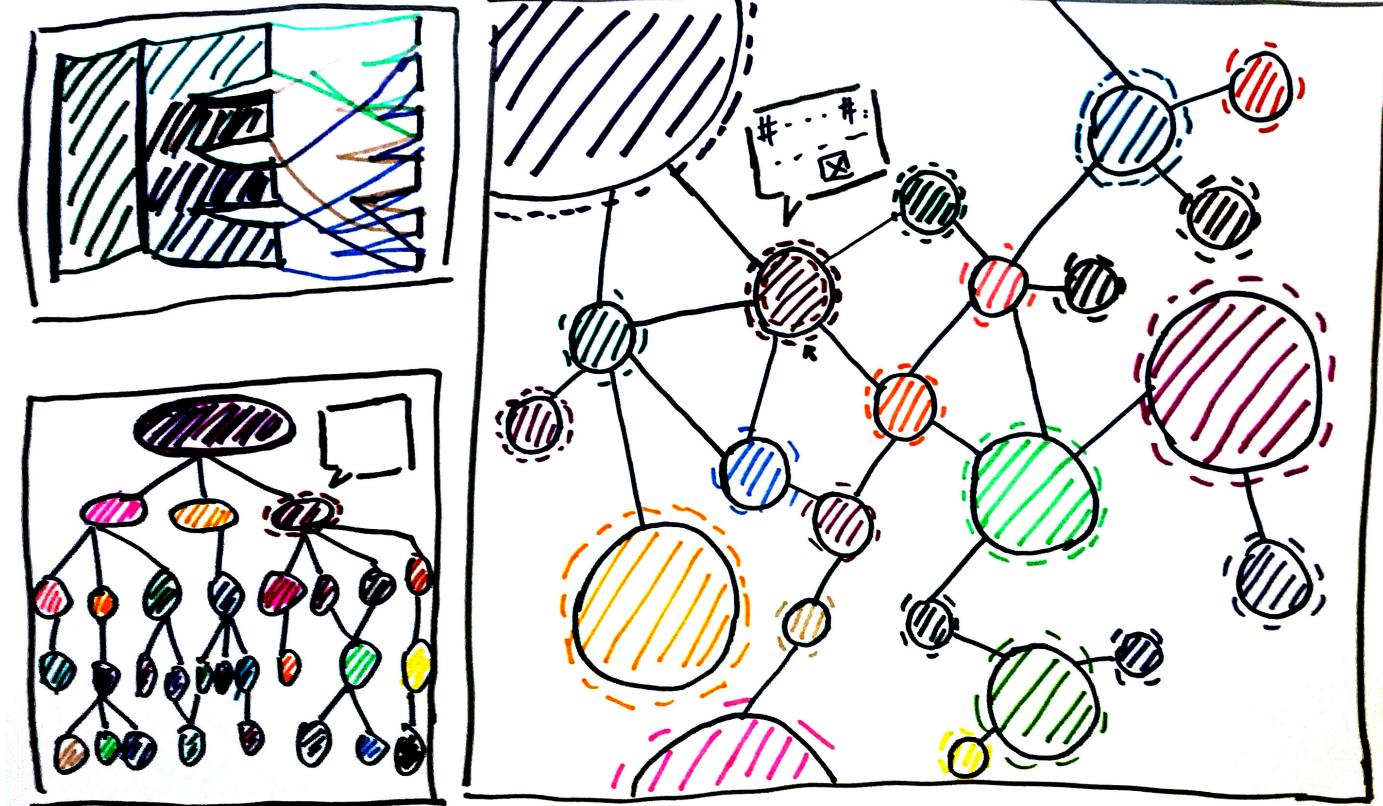


Four different sketches of initial
visualization of the data, the second one :
Nodes map for the one trends buzz;



Four different sketches of initial visualization of the data, the third one: Nodes link diagram shows the change of one fashion term "Choker";

The Flow of Fashion Trends



Four different sketches of initial visualization of the data, the last one: a combination map of flow map, tree map and network map for a specific fashion term.

Finding data

Once the sketches of the idea had been completed, the next step was setting out to find the data from Twitter. The original idea was to find the data representing the original start point (specific tipping point) because most of sketches were built on that. Though the Twitter Rest API does not allow the developers to access the code to find the first tweets for key words or hashtags. Accordingly, the decision was to find the first tweets of four specific fashion terms manually. Beginning in a subjective perspective, the terms were chosen by manually under the subjective knowledge of fashion. The four terms are: Cold Shoulder, Skinny Scarf, Slip Dress and Souvenir Bomber Jacket. It was assumed that those four terms were in really high raised fashion trends in those days.

Those data are based on a subjective perspective which had not been researched. They cannot be the evidence of my research for thesis. To avoid the same mistake, the

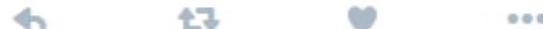
research started to look for more effective entry points to be the start of my data collection. Finding the Google Fashion Trends Report broke the ice of the research, it is the data of what kinds of fashion terms are in the trends now. At the beginning of this report, it said "With every query typed into a search bar, we are given a glimpse into user considerations or intentions. By compiling top searches, we are able to render a strong representation of the population and gain insight into this population's behavior." ("Fashion Trends," 2016) On the basis of what is the importance of searches, the research resolved to find the data of terms using Google and Twitter search.

The project started to use Twitter REST APIs to search hashtags, accounts and specific terms or words, and attempted to get results for several fashion terms which are the most popular terms mentioned many times in Twitter. First, it started to search tweets from all users with both hashtag fashion and style (#fashion, #style) to



RedCarpetVictim @RedCarpetVictim · 2007年12月10日

Styledash Dress of the Day: Shelly Steffee **Slip Dress**
<http://tinyurl.com/29mrjh>



NYT Sports @NYTSports · 2007年4月8日

[TS] Sports of The Times: For Leader Board and Fans, Nature's **Cold Shoulder** <http://select.nytimes.com/2007/04/08/sports/golf/08anderson.html>



回复给David Saunders



Richard Cowderoy @RichieTheCat · 2012年7月7日

@DaveySaund from a chap in a battle of britain memorial flight **souvenir bomber jacket** in tan??..



Karin Dalziel @nirak · 2008年3月9日

@dcornwall I have been using a **skinny scarf**, but I hope to make a fancy rainbow strap before the conference.



Four Tipping point through Twitter talked about Cold Shoulder, Skinny Scarf, Slip Dress and Souvenir Bomber Jacket.

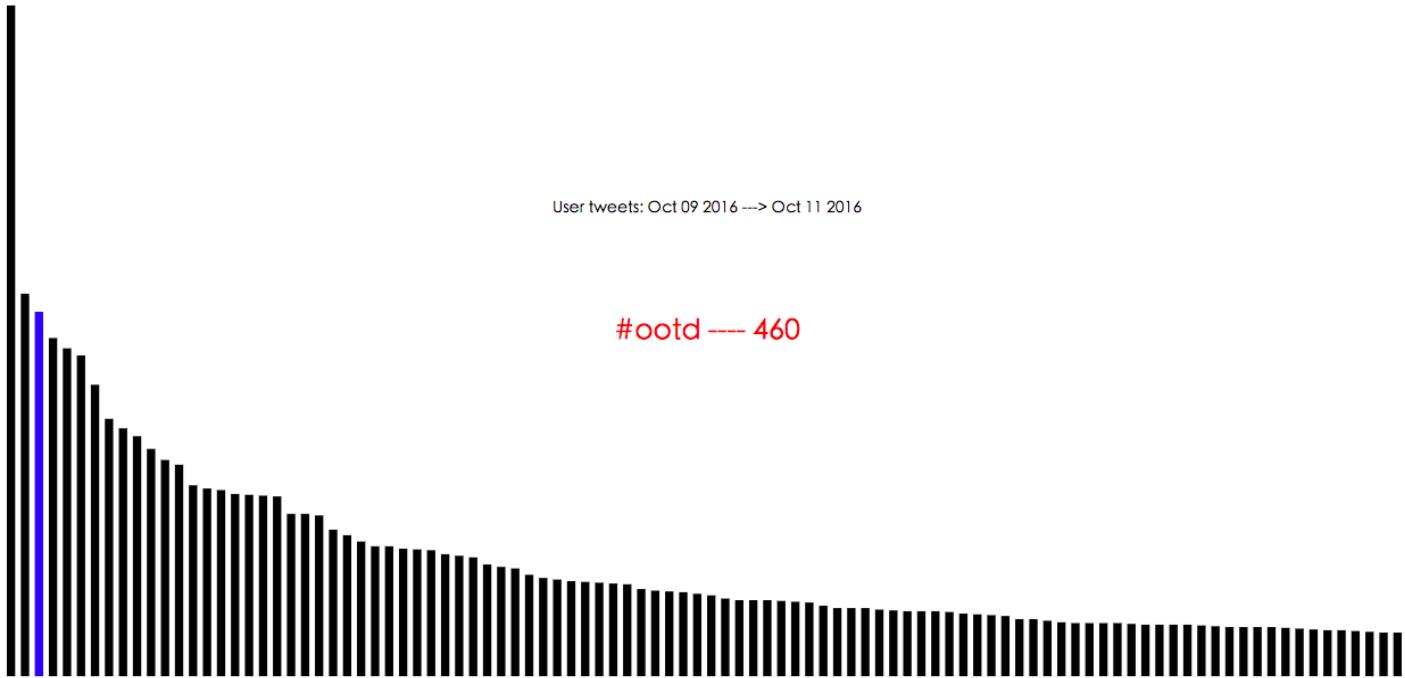
find the most mentioned hashtags. The time range of that data is from October 09 2016 to October 11 2016. Regrettably, the data of the popular hashtags are: beauty, bloggers, ootd ("Outfit of The Day") ... which are not the expected results.

The results could not meet the expectation but then the research started to use hashtag fashion (#fashion) and ootd (#ootd) to do the further searches. However, the research data also could not show the expected results. People did not post their tweets with specific fashion terms or styles, mostly they post with hashtags that are the adjectives describe the styles. Then the next steps were decided to choose a different angle to do the research.

Then the research kept going to use Twitter search for "fashion" to find 20 twitter official accounts of fashion brands and collected the most frequent appeared

hashtags on their posts. Again, the results were not suitable for further research because the hashtags were mostly about the name of their brand or fashion seasons.

Similarly, the research also looked for word frequency for the same 20 brands and tried to find the top popular hashtags mentioned by those accounts. It was still not working for the project and the thesis. Finally, the decision was made to move to Google search, and found data of fashion terms on Google Trends.



Tweets from all users with both hashtag fashion and style (#fashion, #style) to find what hashtags are most mentioned. The hashtag ootd is mentioned 460 times

User tweets: Oct 09 2016 --> Oct 11 2016

Hashtag	Count	Hashtag	Count	Hashtag	Count	Hashtag	Count
fashion	9604	moda	223	unisex	146	followme	87
style	3210	me	220	cute	145	makeup	86
outfit	1549	streetwear	215	wiw	142	import	83
fashionblogger	909	instagram	214	black	135	bboy	83
outfitoftheday	753	girl	214	winter	127	urban	83
blogger	643	instagood	211	today	120	jual	82
lookoftheday	539	menswear	209	leather	118	follow	82
love	521	trend	199	shop	116	snapback	82
streetstyle	505	dress	198	boots	115	topi	82
coordinate	474	mensfashion	190	heels	114	fur	82
fashionista	415	model	190	mensstyle	112	diskon	82
blog	408	shopping	187	denim	104	baseball	81
look	402	wiwt	187	pink	103	outfits	81
ootn	361	fallfashion	182	accessories	103	murmer	80
fashiongram	346	lookbook	182	keren	102	clothes	79
coupon	331	fashionblog	175	vintage	97	stylist	79
fall	304	beauty	174	お洒落さんと繋	96	tagsforlikes	79
selfie	300	コード	172	がりたい	96	inspiration	79
code	284	shoes	170	aw16	96	bloggers	76
clothing	270	lstd	162	dailylook	94	peace	75
ファッション	265	swag	162	murah	94	chic	75
fblogger	248	photography	155	whatiamwearing	93	street	74
autumn	240	beautiful	150	happy	93	grey	74
instafashion	233	styleblogger	148	trends	90	potd	69
		mode	89				

Tweets from all users with both hashtag fashion and ootd

fashion brand

热门 | 最新 | 账号 | 照片 | 视频 | 更多选项▼

CHANEL @CHANEL
'CHANEL is above all a style. Fashion passes, style remains.' Gabrielle Chanel

Vogue Magazine @voguemagazine
The official twitter page of Vogue Magazine.

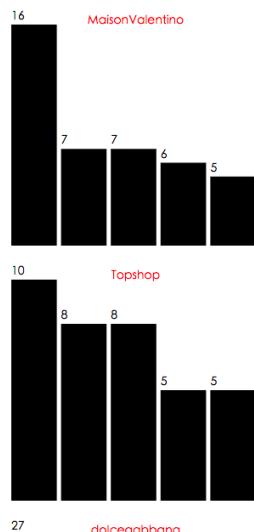
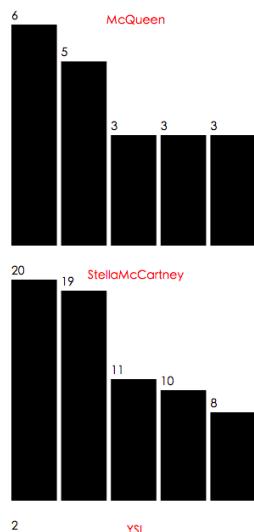
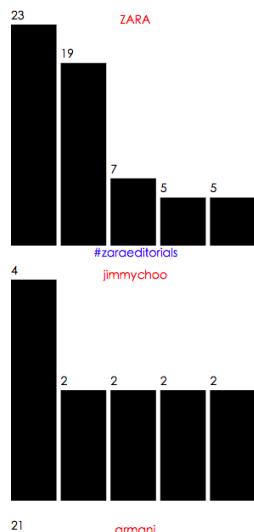
Burberry @Burberry
Shop the show: brb

Yves Saint Laurent @YSL
The official Saint Laurent Twitter page

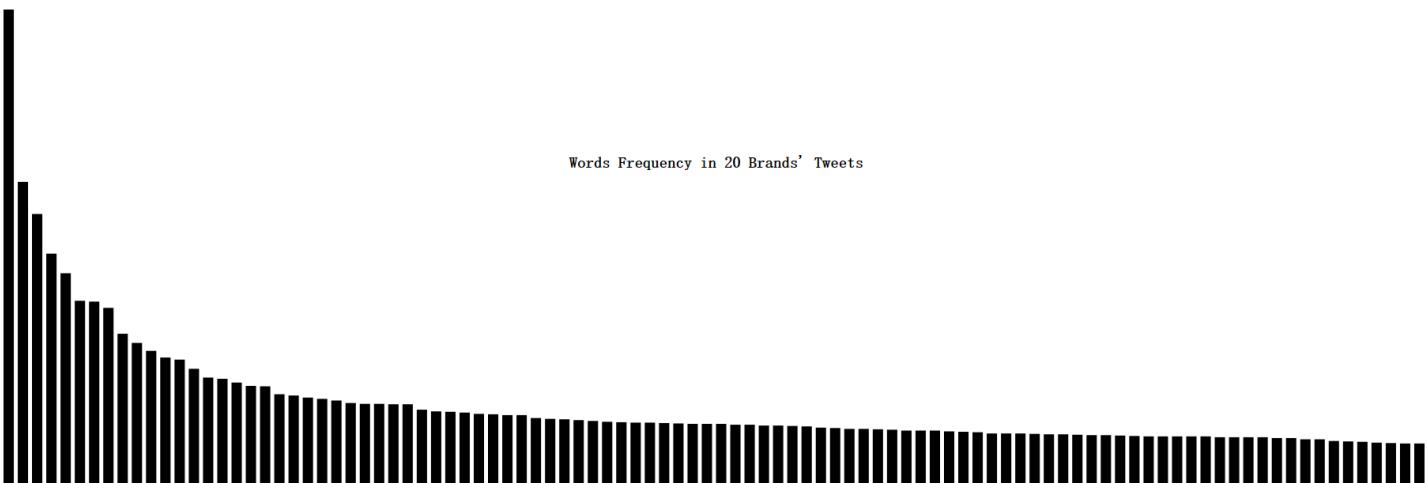
Fashion Brand @FashionBrand
I love #FashionBrands

Dolce & Gabbana @dolcegabbana

Brands tweets: Apr 11 2016 --> Oct 11 2016



Twenty twitter official accounts of fashion brands and the collection of the most frequently appearing hashtags on their posts.

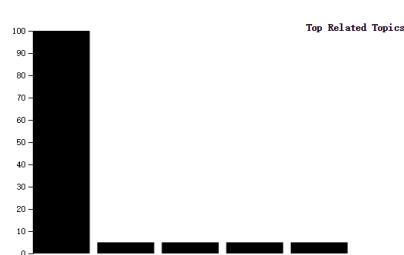
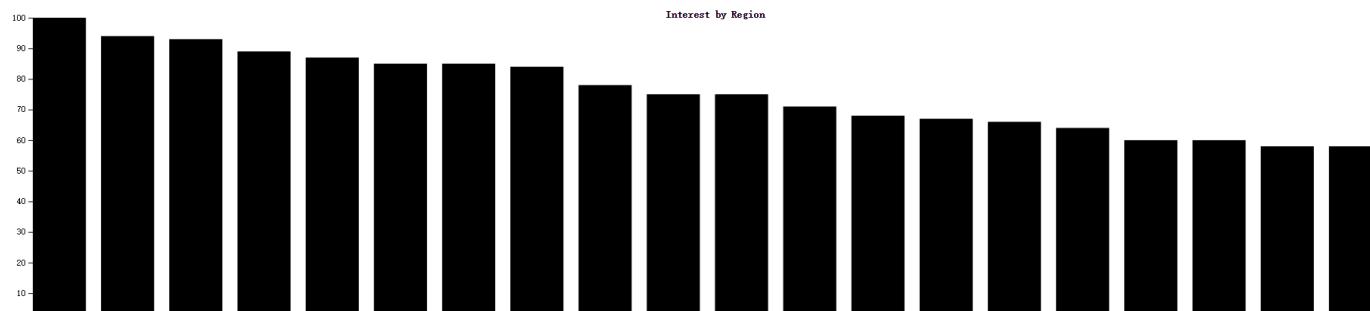
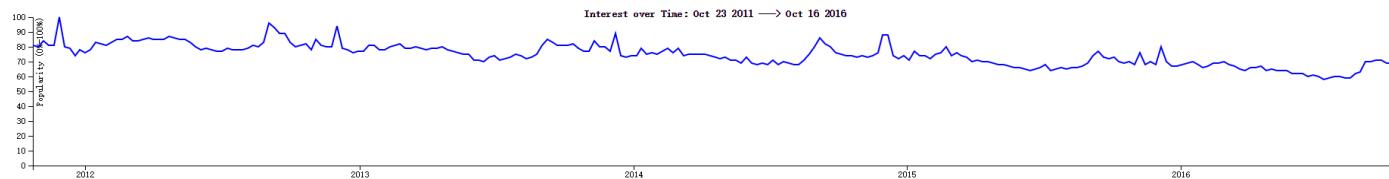


Word	Count	Word	Count	Word	Count	Word	Count
rt	724	#louisvuitton	192	love	142	here	117
collection	647	x	191	#valentino	142	#nyfw	117
show	552	watch	191	perfect	140	way	116
fashion	505	denim	178	we've	140	#guccifw16	115
wearing	439	jacket	174	gown	139	#sunkissed	114
&	437	bag	173	make	138	premiere	114
dress	422	@armani	171	2017	135	cool	114
summer	360	#giorgioarmani	168	i	134	latest	114
@burberry	338	silk	167	backstage	132	printed	114
look	319	season	165	inspired	132	best	112
style	303	#flw	165	#hm	131	red	112
see	298	stella	158	men's	130	#pfw	112
marc	278	'16	156	men's	128	campaign.	112
show.	255	spring	155	day	128	here's	110
jacobs	252	looks	153	print	128	ready	110
discover	243	leather	151	#peterdundas	126	#gucciss17	107
collection.	235	dolce&gabbana	149	I	125	made	107
get	234	last	148	back	124	film	103
fall	215	topshop	147	#metgala	121	london	102
campaign	212	#robertocavallifw16	147	featuring	121	⌚	101
2016	207	featured	146	@marcjacobs	121	issue	99
#robertocavalliss16	204	black	145	#hmmagazine	120	michael	98
embroidered	200	got	144	will	119	looking	97
shop	194	take	144	check	119	today	97

Words frequency in 20 brans' tweets

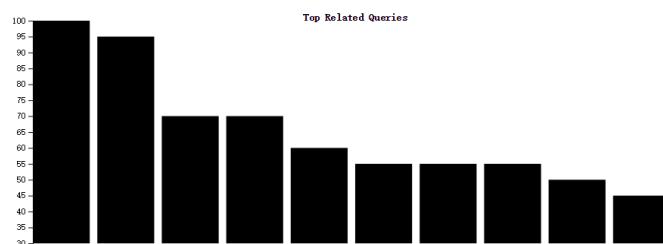
The next process was searching the word "Fashion" from the web page of Google Trends. The data came from worldwide in past 12 months. It could provide data of: Interest over Time, Interest by Region, Top Related Topics and Top Related Queries. This time related words started to appear, but it still could not find best terms. Then the process kept to search phrase "Fashion Trends" and looked the data only in the US. Finally, that progress got the first term: "Flight jacket" which is the top rising related topic of "Fashion Trends."

After the result got the first term, the project combined the data of Google Trends and Twitter to find trends of Flight Jacket. However, the Twitter API only allows downloads of one-week is worth of data. I also did lots of researches of Flight Jacket, and find stories behind it and how culture influences its trends in history. These results could make audiences more interested in the project. Finding more fashion related terms and trying to find stories about them was the next step.



Related Topics: Rising

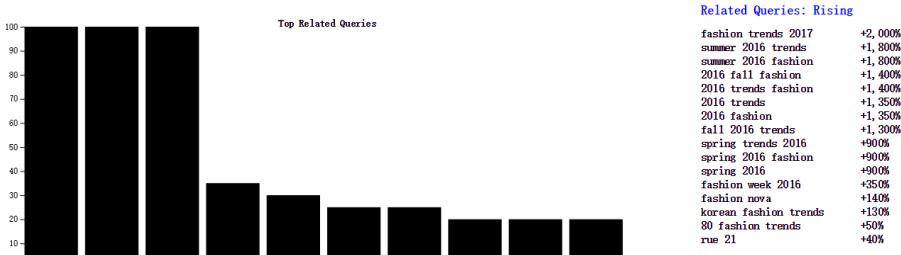
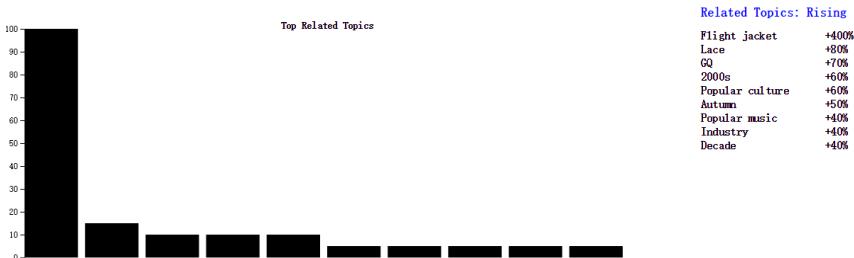
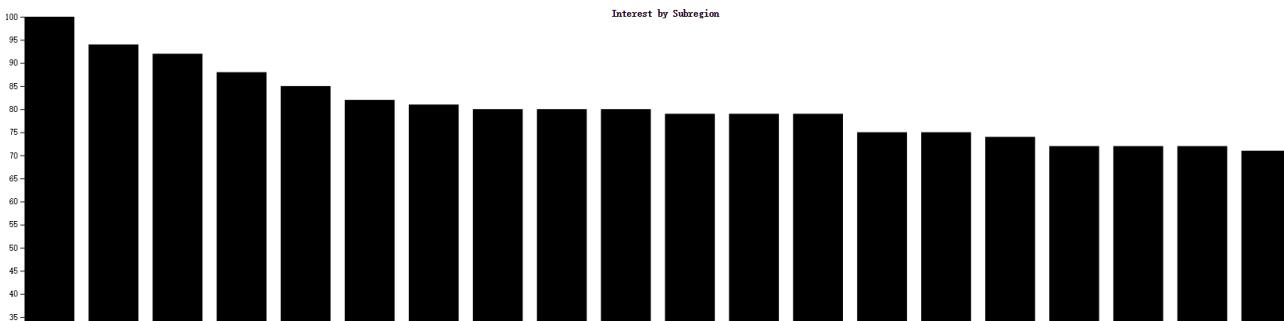
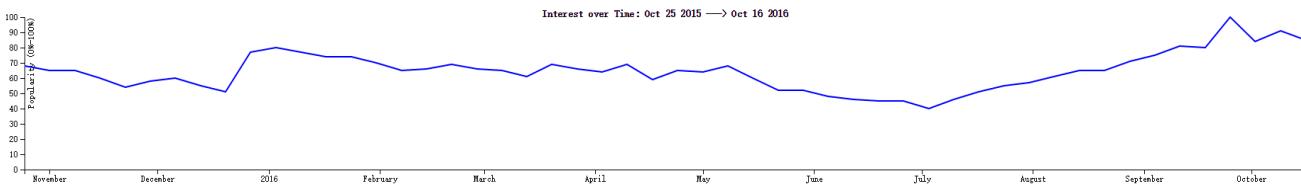
Fashion Killia	Breakout
Fashion King	Breakout
Hijab	+600%
Alliy Fashion	+500%
Fashion To Figure	+400%
Fashion Star	+400%
VE	+180%
Fashion Outlets of Chicago	+150%
1990s	+150%
Sneakers	+140%
Sari	+110%
HATCHESFASHION.COM	+100%
Casual	+90%
Fashion Police	+80%



Related Queries: Rising

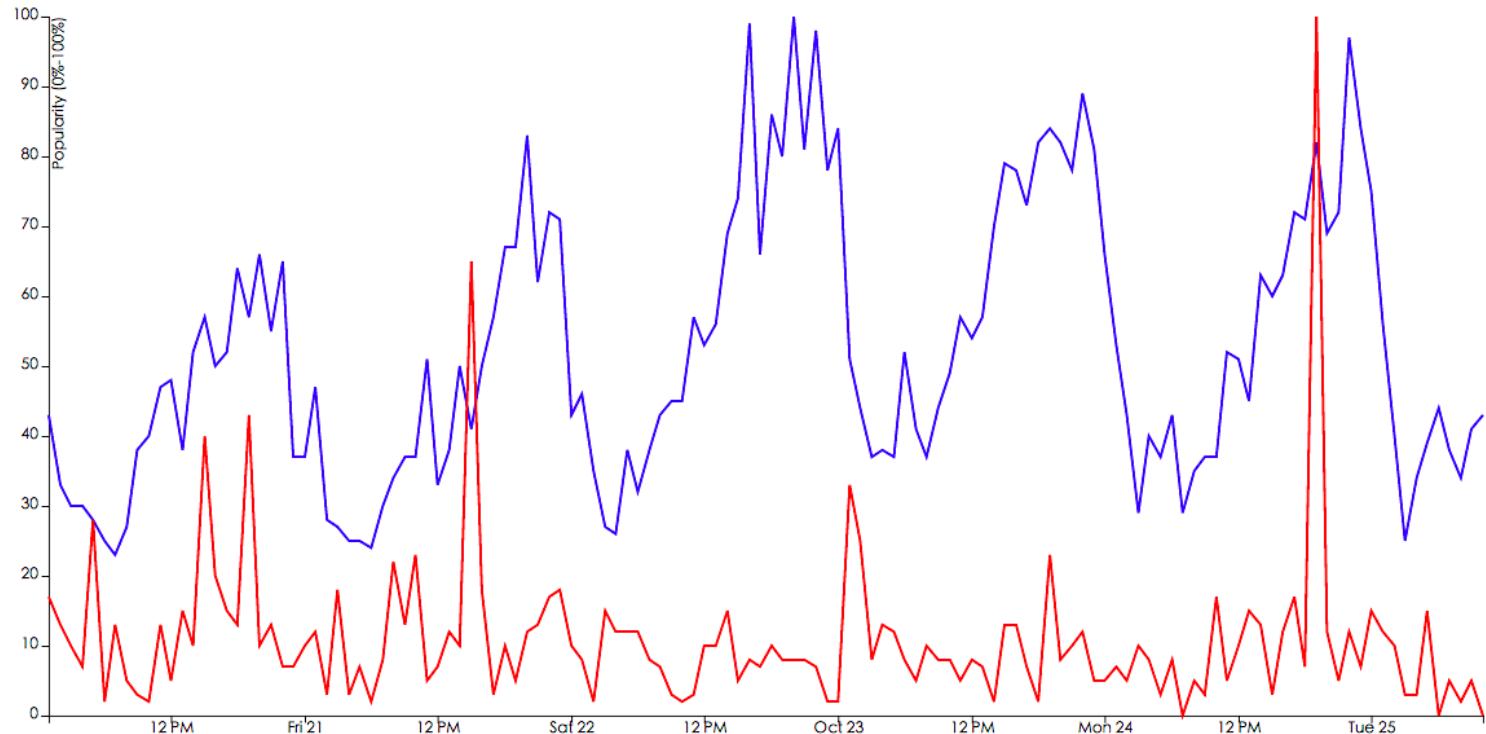
fashion 2015	Breakout
fashion 2016	Breakout
fashion 2014	Breakout
fashion 2013	Breakout
fashion week 2014	Breakout
fashion trends 2014	Breakout
pinterest fashion	Breakout
jabone	Breakout
covet fashion	+5,000%
fashion killia lyrics	+3,750%
fashion or porn	+3,300%
fashion pulis	+2,850%
utsav fashion	+2,050%
kalki fashion	+2,000%
fashion nova	+1,700%
fashion bunker	+1,550%

Searching the word "Fashion" from the web page of Google Trends. The data came from Worldwide in past 12 months.



Searched phrase "Fashion Trends" and looked at the data only in the US. Finally, that got the first term: "Flight jacket" which is the top rising related topic of "Fashion Trends."

Flight Jacket Trend - Google ● Twitter ●



The project combined the data of Google Trends and Twitter to find trends of Flight Jacket

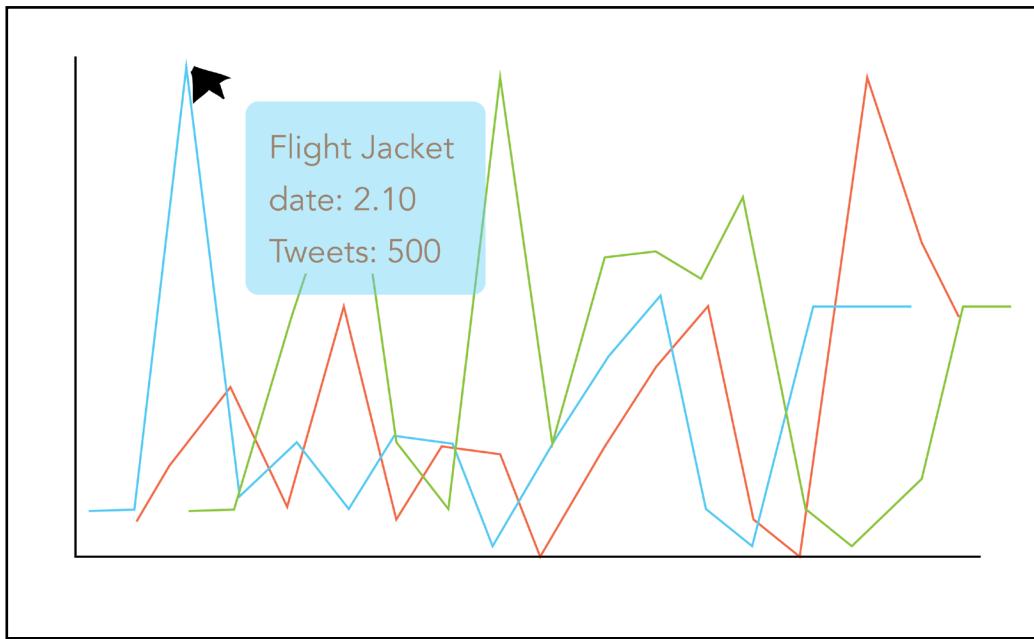
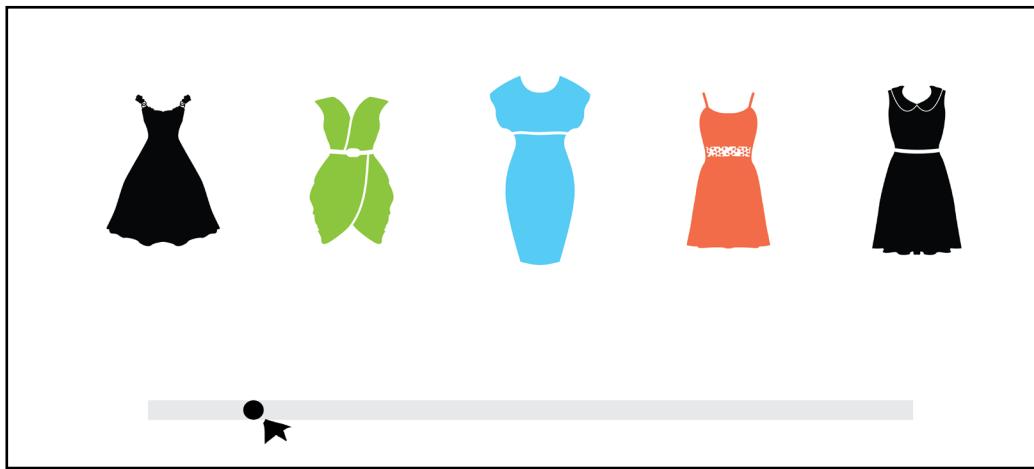
Results

As the overall objective for this thesis, the results should show what factors influence fashion buzz, and make a comparison between how fashion trends spread into the public historically on social media. Based on those ideas, the results started to become clearer, and a sketch was made with three different parts: The Stories, History of Flight/Bomber Jacket and Spreading of the Fashion Buzz.

The data research leads to the fashion style of "Bomber/Flight jacket" which is one of the most trending styles recently. According to this result, the research started on the stories or history of this particular style. Bomber Jacket – also called Flight Jacket – was created in WWII as a uniform for military pilots "and given the Army-Navy specification number A-2". (Moore, 2011) This jacket was designed to keep pilots warm during the war. As time went on, different cultural and historical reasons changed the style of Flight Jacket and also influenced who wears this style.

From the sketch of those three parts, the plan was to use the fashion style icons to show a timeline of one style's history (Flight/Bomber Jacket) before the social media era; the story was sketched by a interactive line graph which could show the stories behind several fashion terms when the mouse hovers over each line; and the last part was the bubble maps which could show changes in the trends over time.

After sketching out the ideas of the project after many attempts, the next steps become clearer and could move further into the details of the project.



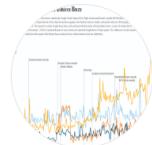


Visualizing Fashion Buzz

the stories behind trends

The project is based on the research of thesis Visualizing Fashion Buzz, and it is looking through the news stories behind several fashion styles to find some of the fashion trends. It also relate with new rising fashion styles and to do more studies about how does those fashion styles could refer the whole fashion industry. The studies of fashion, Twitter buzz and social network visualization could find the results of how does trends happening in social media.

The data is based on researches of fashion and collecting the data from Twitter and Google. The point of this study is to find the roles of the social media in fashion trends, and also to find the culture influence behind all these trends and show transformation of the trends through Twitter buzz.



The Stories Behind Trends
It shows history of one specific fashion styles, it compares with the trending of that style in social media;

[View details »](#)



Spreading of the Buzz - The U.S.
It illustrates the news stories behind several fashion styles;

[View details »](#)



Spreading of the Buzz - Japan
It is about spreading of the fashion buzz.

[View details »](#)

An MFA Thesis
by Xinxie Yu

The College of Arts, Media and Design
In Partial Fulfillment of the Requirements for the Degree of
Master of Fine Arts in Information Design and Visualization
Northeastern University
Boston, Massachusetts
May, 2017

The index/home page for the thesis project:

https://xiaoyunver.github.io/twitter_trend/

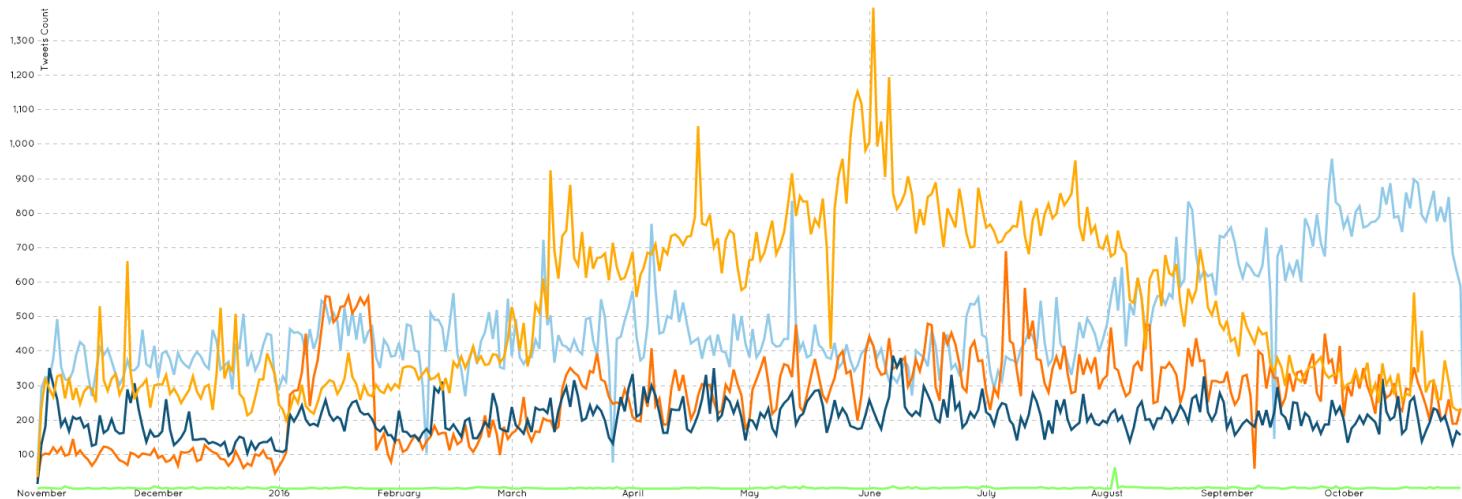
The Stories

The next decision of the project used fashion terms which are founded in the Google fashion trends report: "Fashion Trends 2016: Google Data Shows What Shoppers Want". Then it also used the same format to select several terms in Google Trends. The five terms were: Flight Jacket (and Bomber Jacket), Off-The-Shoulder, Culottes, Rompers (and Playsuit) and Jumper Shorts. This project could illustrate how those fashion terms appear in the fashion trends in Twitter. Another element of that project was to see the stories behind each term, which could help to analyze the data of fashion buzz. This time the research involved Google News data, and combined with the Twitter trends of those fashion terms in past 12 months (from October 31, 2015 to November 1, 2016). It selected 4 significant peaks for each trend, and searched Google News under the time of those peaks.

This project allows interaction by hovering the mouse over to see the specific time and the number of tweets for each point in the line graph and by clicking the peak time drop-down box, a user can also check the news related to those 4 significant peaks.

The most interesting outcome for this version of the project is the trend of Jumper Shorts. It only has one huge peak on the graph, which means the most effective spreading time of that trend is only in that specific day. The project chose to find tweets of that day instead of searching for news. After selecting the tweets for that day, a user can see that the reason for that dramatic peak "Hello Magazine" official account posted an outfit of Prince George who wore Jumper Shorts. That tweet had 1,168 retweets in total. Those results provide some ideas to go further on the research.

All in one



Flight Jacket + Bomber Jacket



Related News [2016-03-09 ▾]

-  [Justin Bieber 'Purpose' Tour Merch Exclusive First Look](#)
Complex - Mar 9, 2016
There are also a few outerwear pieces to round it all out—a coaches jacket, denim jacket, bomber jacket, and a camo jacket. "We wanted to obviously continue ..."
-  [Danielle Minogue attends the Jean Paul Gaultier Target launch at ...](#)
Daily Mail - Mar 9, 2016
The Jump to the Beat singer dazzled in a lace bomber jacket from her own Petites range at the Royal Exhibition Building on Wednesday night. Scroll down for ...
-  [Time To Find Your Perfect Spring Jacket](#)
Grazia - Mar 9, 2016

Off-The-Shoulder



Related News [2016-01-04, 2016-01-24 ▾]

-  [Poldark's Heida Reed looks ravishing at National TV Awards 2016](#)
Daily Mail - Jan 20, 2016
Poldark's Heida Reed looks ravishing in tight off-the-shoulder gown as she's joined by hunky co-star Aidan Turner at NTAs... before missing out on Best New ...
-  [Amy Schumer's Golden Globes Dress Is Positively Ladylike](#)
Huffington Post - Jan 10, 2016
... for Best Comedy Film and Best Actress in a Comedy for her film "Trainwreck," turned heads in a black-and-white, off-the-shoulder Prabal Gurung gown.
-  [Selena Gomez puts on an elegant display at InStyle Golden Globes](#)
Daily Mail - Jan 11, 2016

Culottes



Related News [2015-11-03 ▾]



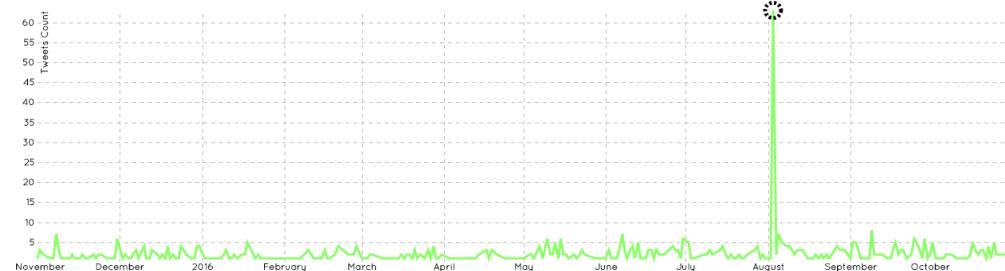
Rompers + Playsuit



Related News [2015-11-23 ▾]



Jumper Shorts



Related News [2016-08-03 ▾]



Take style tips from Prince George this #WinItWednesday. RT & follow us to #win the @Pepa_Company jumper & shorts
4:40 AM - 3 Aug 2016

First visualization of "The Stories"

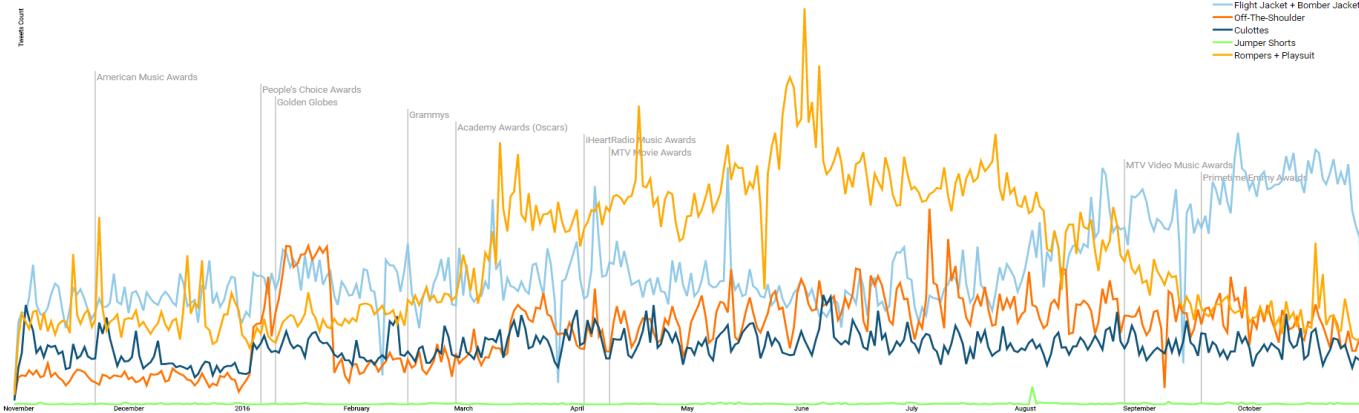
The last visualization, still needed to be improved in some of the details and the results behind the visualization needed to be identified. Then the processes kept moving to focus on analyzing the reasons behind each peak of the five fashion terms, and finding what is "Tipping Point" behind each peak based on the news.

After collecting the word frequency through the news of each peak, the result led to who is/are the leader of the fashion in Twitter. Mostly, the news of those five fashion terms were all related to some celebrities. The fashion leader is the major trigger of fashion trends.

News influence people's communication of fashion, and the news are all about celebrities and where or when they wore that fashion style. Celebrities cause the buzz in twitter and create the fashion trends, which then diffuse into the public.

The Stories Behind Trends

This project illustrate five fashion terms which selected by Google Trends Report 2016: Flight Jacket (and Bomber Jacket), Off-The-Shoulder, Culottes, Rompers (and Playsuit) and Jumper Shorts of how does those terms appear in the fashion trends in Twitter, and another element of that project is to see the stories of each terms. The research involved Google News data, and combined with the trends of those fashion terms in past 12 months (from October 31, 2015 to November 1, 2016). It selected 4 peaks of each trends, and searched Google News of those peaks. The collection of words frequency in those news could show the impact of the fashion buzz mostly are from fashion leaders (such as celebrities).



Flight Jacket + Bomber Jacket

Related News 2016-03-09

- Justin Bieber 'Purpose' Tour Merch Exclusive First Look**
Complex - Mar 9, 2016
There are also a few outerwear pieces to round it all out—a coaches jacket, denim jacket, bomber jacket, and a camo jacket. "We wanted to obviously continue ..."
- Dannii Minogue attends the Jean Paul Gaultier Target launch at ...**
Daily Mail - Mar 9, 2016
The Jump to the Beat singer dazzled in a lace bomber jacket from her own Petites range at the Royal Exhibition Building on Wednesday night. Scroll down for ...
- Time To Find Your Perfect Spring Jacket**
Grazia - Mar 9, 2016
When it comes to choosing an investment piece for the new season, we'd love to tell you that finding SS16's prettiest spring dress (shop our handy edit, if you ...)

she ψήφο μινογκε κένταλι Best

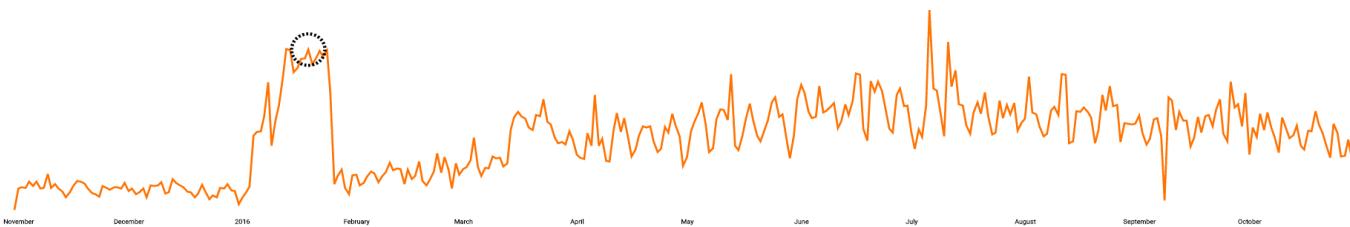
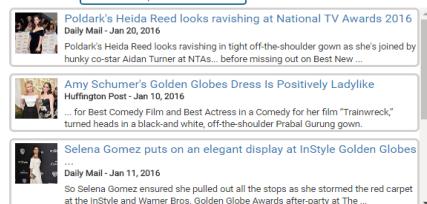


Five terms appear in the fashion trends and the stories behind each terms.

https://xiaoyunver.github.io/twitter_trend/one_yaer/index.html

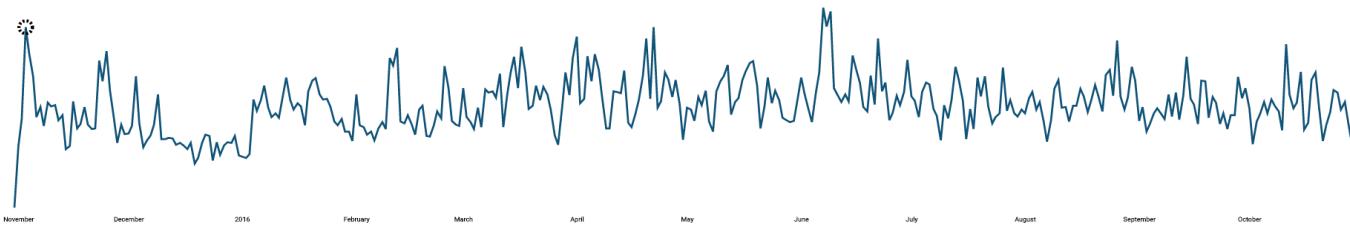
Off-The-Shoulder

Related News [2016-01-04, 2016-01-24]



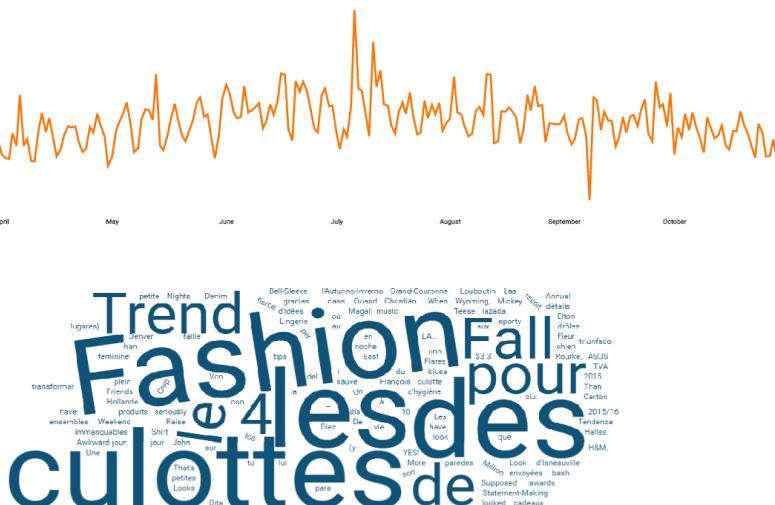
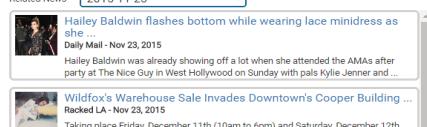
Culottes

Related News [2015-11-03]



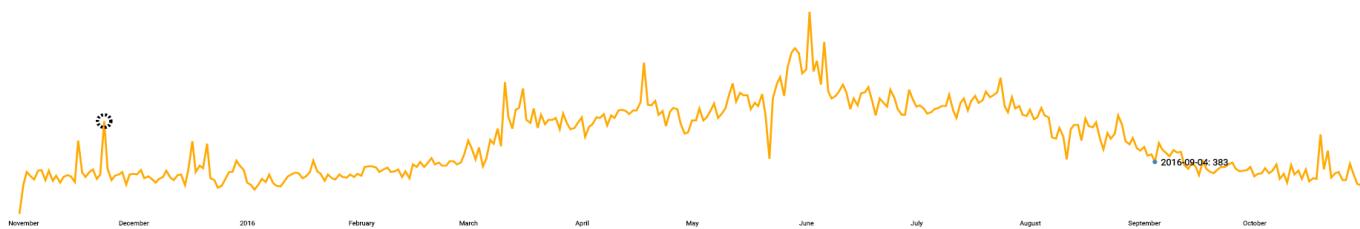
Rompers + Playsuit

Related News [2015-11-23]



Rompers + Playsuit

Related News 2015-11-23



Jumper Shorts



Related News 2016-08-03

HELLO! HELLO! @hellogmag
Take style tips from Prince George this #WinWednesday. RT & follow us to #win the @Pepa_Company jumper & shorts 4:40 AM - 3 Aug 2016
4,158 406

An MFA Thesis
by Xinhe Yu
The College of Arts, Media and Design
In Partial Fulfillment of the Requirements for the Degree of
Master of Fine Arts in Information Design and Visualization
Northeastern University
Boston, Massachusetts
May, 2017

History of Flight/Bomber Jacket

Before the technology era or before Twitter was created, information could not spread as fast as today. How people find fashion trends and how do that trends change? Does there have any stories could show the fashion trends before? The history of Flight/Bomber Jacket is an example to show clearly the trending of the fashion in the past.

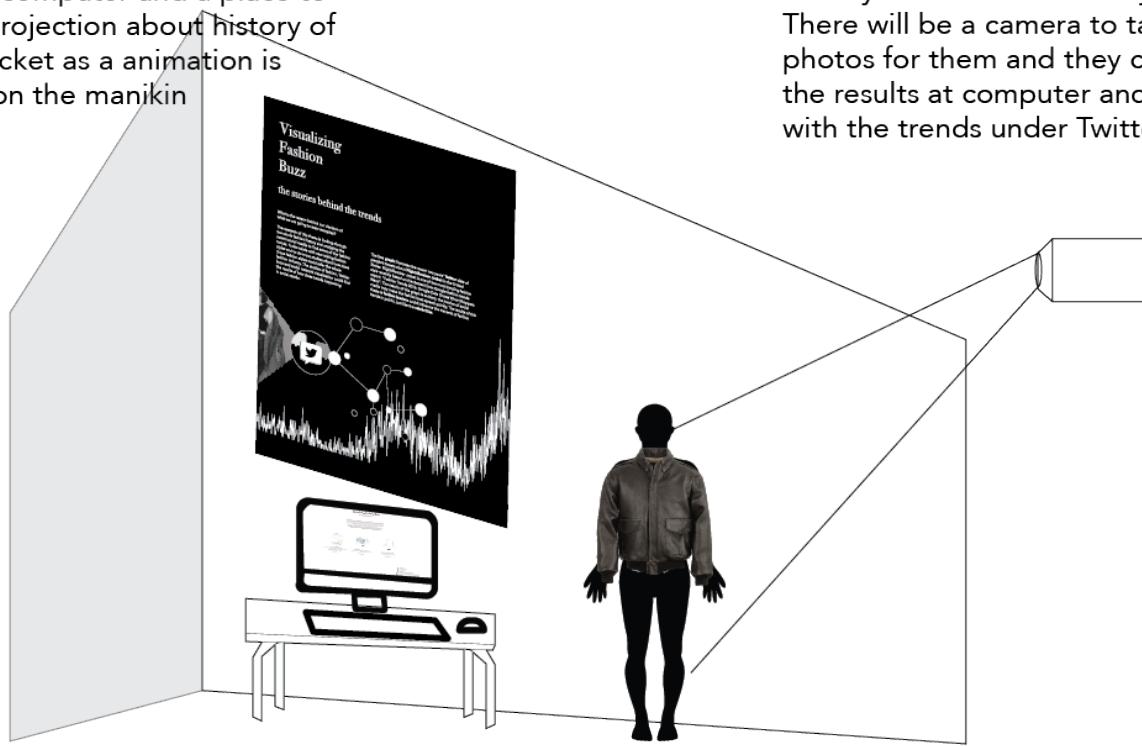
During World War Two, Flight Jacket was a military cloth which worn by pilots. In order to kept pilots warm in the high altitude, the textiles and clothing materials of Flight Jacket used leather, fur, waterproofed nylon, etc. Then, it added the pocket at the sleeve of the jacket and also had a pen slots. (Babcock, 2016) All those features make Flight/Bomber Jacket become itself. Following with the war, Flight Jacket landed in Japan and also influenced by the Japanese culture. In Japan, the Flight Jacket used Velcro insignia patch to decorate, (Brick, 1988) and also used hand-stitch make their own embroidery Jacket (they

call it: Sukajan or souvenir jacket). ("World War II", 2016) Around 1960s, Flight Jacket used by the British skinheads as their representation. In 20th century, due to the movie and celebrities' propagation, Flight Jacket kept trending into public without any gender or cultural limitations. (Cruz, 2016) It is a really nice functional jacket and it can keep people warm as well. For better to use on civilian lives, the clothing materials changed to lightweight sometimes. (Brick, 1988)

In the early 1900s, another jacket started to become popular: Varsity/Baseball Jacket. It was worn by High school and college students and it has embroidered letters on their schools or baseball teams on that jacket. Today, some of the designers combined Varsity/Baseball Jacket with old style Flight/Bomber Jacket together and making a new kind of Flight/Bomber Jacket. That new jacket style makes a lot of celebrities and fashionistas are interested in it recently. (Lee, 2015)

The visualization of this section is a slide show through projector. It projected the history of the Flight/Bomber Jacket in chronological order onto a human body or a manikin. When slides changed, people can easily look at the style changes of Flight/Bomber Jacket and how did they trend in history. The stories of the Flight/Bomber Jacket's history based on article of "A Brief History of the Bomber Jacket" wrote by Gregory Babcock. It showed the specific styles of Flight/Bomber Jacket trending in different time period and sometimes involve in different culture.

My exhibition will set three things:
a poster, a computer and a place to
show the projection about history of
Bomber Jacket as a animation is
projected on the manikin



Audience could participate into this
activity or I could show it by manikin.
There will be a camera to take the
photos for them and they could see
the results at computer and compare
with the trends under Twitter buzz

The projection slides show the history of
the changes for Flight/Bomber Jacket
(the layout sketch and whole series)

[http://www.complex.com/style/2015/03/
a-history-of-the-bomber-jacket/](http://www.complex.com/style/2015/03/a-history-of-the-bomber-jacket/)

1940S:

THE A-2 AND
B-15 SET A
STANDARD.

World War II



1940S:

THE A-2 AND
B-15 SET A
STANDARD.

World War II



LATE '60S-'80S:

THE BOMBER
JACKET GOES
THROUGH A
REBELLIOUS
PHASE.

English punks and
skinheads



LATE '60S-'80S:

THE BOMBER
JACKET GOES
THROUGH A
REBELLIOUS
PHASE.

Japanese
souvenir jackets:
Vietnam War and
Korean War



1949-1950:

ENTER THE
MA-1.

The Cold War



MID-1950S:

BOMBERS
ENTER PUBLIC
SERVICE.

Following the
Korean War; after
the Vietnam War



1980S:

THE BOMBER
JACKET GOES
HOLLYWOOD.

Tom Cruise
wearing the A-2
bomber jacket in
the 1986 film Top
Gun



NOW:

THE BOMBER
JACKET IS
RESURGENCE.

Kanye West's
confederate flag
adorned "Yeezus"
Alpha Industries
bomber



Spreading of the Fashion Buzz

The next part of this thesis project created a disease map (or bubble map) to show the cultural impact of fashion trends in different countries or regions and how did the propagation of the trends shows into the map. Is the social media increase the spread of the fashion trends?

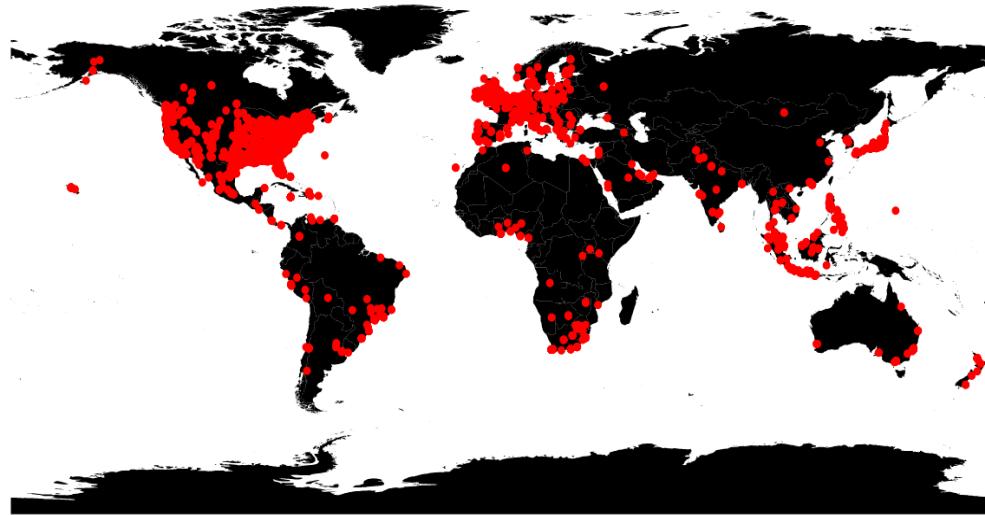
The first progress of this project was to create a world map and show the tweets of Flight/Bomber Jacket in recent one year. The movement of the dots meant how does the Twitter buzz spread into public. The interaction of the map showed the development of the buzz and also illustrated which are the major countries were affected by social media buzz.

According to the effect of Flight/Bomber Jacket through the research and history, the project was moving to focus on only the United States and Japan, because Flight/Bomber Jacket was created in United States and one of the most culture influence of Flight/Bomber Jacket is

Japanese culture. The maps show recent two years' data of people's tweets about Flight/Bomber Jacket and also list the number of the tweets in 4 major cities. The users of this project could interact with this map and check dynamic effects of how does trends spread into whole counties.

The results of those maps are evident, the involve of social media truly makes fashion buzz spread quickly, especially in major cities. Even Twitter users in Japan mostly tweet in Japanese, the dataset is based on English, the spreading of the buzz also could be shown in this map dramatically.

Bomber Jacket + Flight Jacket



Start

November December 2016 February March April May June July August September October November

The interaction world map shows the tweets of Flight/Bomber Jacket in recent one year

Spreading of the Buzz

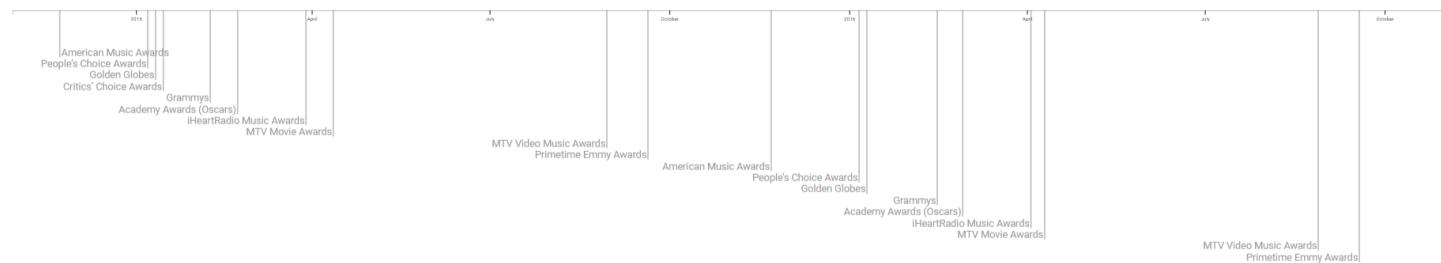
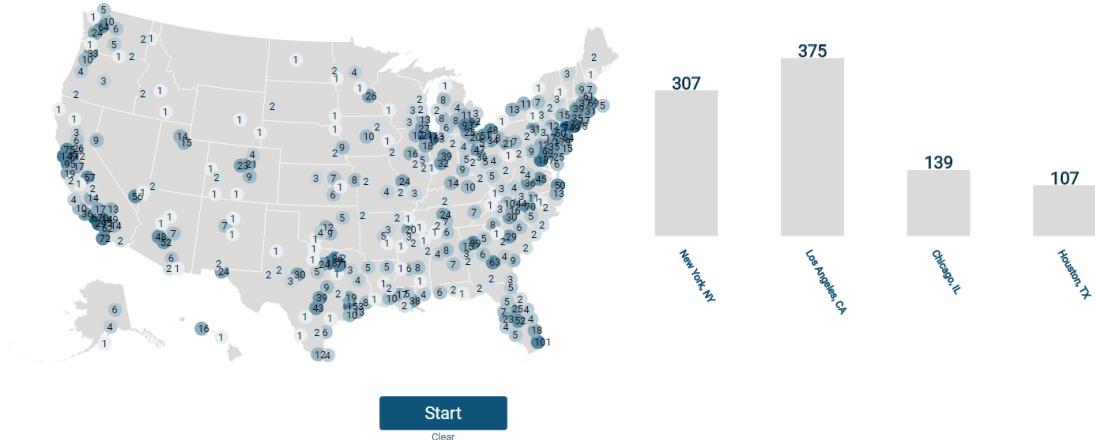
The U.S. Map

This project creates a bubble map to show the cultural impact of fashion trends in different countries or regions and how the propagation of the trends shows into the map. According to the effect of Flight/Bomber Jacket through the research and history, the project was moving to focus on only the United States and Japan. The maps show the recent two years' data of people's tweets about flight/Bomber Jacket and also list the number of the tweets in 4 major cities. The interaction of this map is by click the "Start" button and see dynamic effects of how trends spread into whole counties.

The results of those maps are evident, the involve of social media truly make the fashion buzz spread quickly, especially in major cities. Even Twitter users in Japan mostly tweet in Japanese, the data is based on English, the spreading of the buzz also could display in this map easily.

Scroll Down

Bomber Jacket + Flight Jacket



The interaction the U.S. map shows the tweets of Flight/Bomber Jacket in recent two years.

https://xiaoyunver.github.io/twitter_trend/twitter/USA&Japan/usa.html



Scroll Down

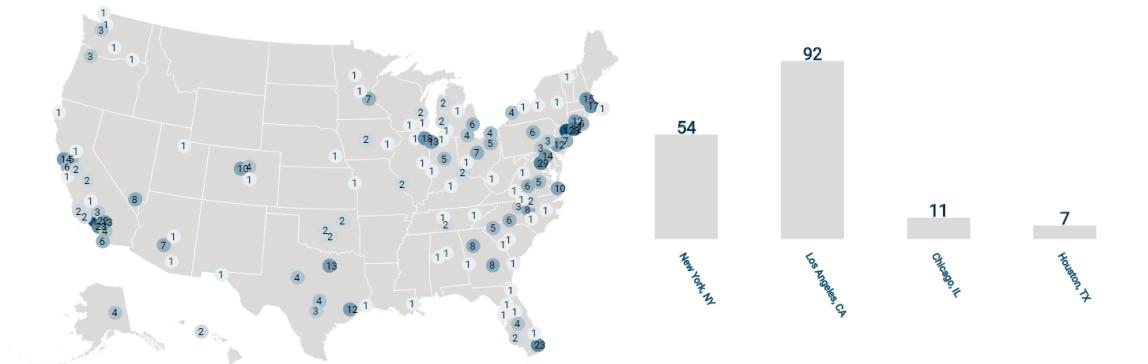
Spreading of the Buzz

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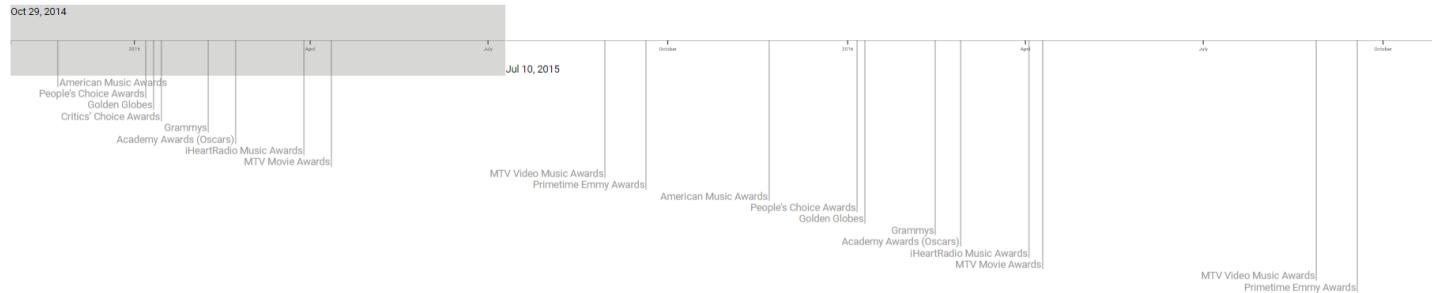
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Bomber Jacket + Flight Jacket



Start

Clear



The interaction the U.S. map by click
"Start" button.

[https://xiaoyunver.github.io/twitter_trend/
twitter/USA&Japan/usa.html](https://xiaoyunver.github.io/twitter_trend/twitter/USA&Japan/usa.html)

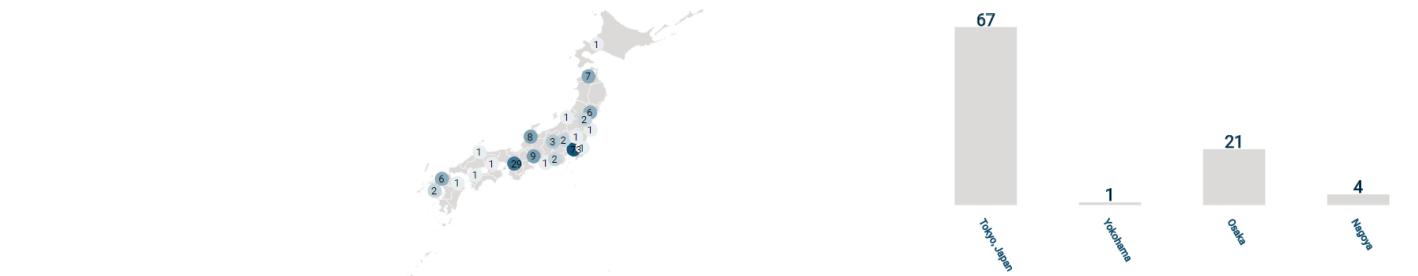
Spreading of the Buzz

Japan Map

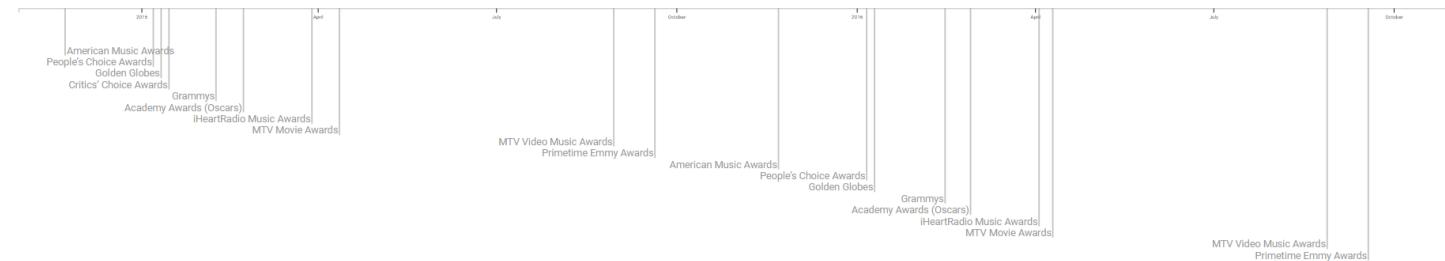
This project creates a bubble map to show the cultural impact of fashion trends in different countries or regions and how the propagation of the trends shows into the map. According to the effect of Flight/Bomber Jacket through the research and history, the project was moving to focus on only the United States and Japan. The maps show the recent two years' data of people's tweets about flight/Bomber Jacket and also list the number of the tweets in 4 major cities. The interaction of this map is by click the "Start" button and see dynamic effects of how trends spread into whole counties. The results of those maps are evident, the involve of social media truly make the fashion buzz spread quickly, especially in major cities. Even Twitter users in Japan mostly tweet in Japanese, the data is based on English, the spreading of the buzz also could display in this map easily.

[Scroll Down](#)

Bomber Jacket + Flight Jacket



[Start](#)
Clear



The interaction Japanese map shows the tweets of Flight/Bomber Jacket in recent two years.

https://xiaoyunver.github.io/twitter_trend/twitter/USA&Japan/japan.html

Discussion

Social media truly influences the Fashion industry and the effect is going to develop along with growing number of social media users. From fashion history, public was influenced by the influential leaders, such as the story of Hillary Clinton's black dress. When she wore that long sleeve with cold-shoulder black dress to her first official White House event as the character of first lady, that style was quickly spreading into public and made a huge widespread, even that style is not new to the public. (Kidwell, n.d.) Recently, Kendall Jenner and Gigi Hadid are the best examples of leading the fashion world because of their influence of the fashion area is in social media. Before, actresses were mostly considered as fashion leaders in the fashion world, however, fashion designers figured out that Jenner and Hadid's numbers of social media followers and likes could better influence the public buzz. Every time they published their looks online, that looks will become the trends. The photos of their tweets follow the rules of "The Stickiness Factor" which

makes public could better to remember and even review their fashion styles. (Carr, 2016) Similarly, Kanye West as a world famous celebrity, what did he wear will always sold out. After he wore the Bomber Jacket, he "increased sales of Alpha Industries Bomber Jackets by 30%." (Sawyer, 2016) Those people who leading the spread of fashion is called the fashion leader, "The fashion leader often transmits a particular look by first adopting it and then communicating it to others." (DeLong, n.d.) Due to the convenience of social media, fashion leaders could influence the transmissions of fashion trends in public, just like the celebrities in the project part one.



KANYE WEST

@kanyewest

Follow



Bosses



RETWEETS LIKES
8,261 33,768



9:01 AM - 13 Feb 2016

612 8.3K 34K

One “Bomber Jacket” post from Kanye West in Twitter causes a huge numbers of likes and retweets.

<https://twitter.com/kanyewest>

Before social media appeared, fashion leaders were also the tipping point of fashion trends. However, the media is not as fast as we could do now. Fashion leader only could create more "The Stickiness Factors" to make public remember their trends. For example, Christian Dior's Lady Dior bag was named because of Lady Diana, Princess of Wales. "As the most photographed woman in the world, the bag was highly photographed on the arm of one of the world's most beloved woman of all time." She carried this bag showed up in many different events and also be photographed, that is how trends happened in the past. ("Lady Dior Handbag," 2015)

Fashion buzz could quickly spread in social media, and also spread on a large scale. Social media is a tool that helps people to get more information quickly which also helps fashion buzz transmits into world. It also helps to expand cultural influence and make fashion trending synchronize in each of the nation. People do not need to travel in long distance, they could just easily get the information of fashion in all over the world through social media. For example, we could see the French style in Japan street, and also could see the Chinese culture influence the dress style of New York Fashion bloggers. The spreads of fashion trends is as fast and broad as viral in Twitter, when the tipping point was created, the trends will quickly spread into whole nation.

According to the researches and progress of this thesis, fashion leaders are the people who created the tipping point in Twitter buzz; and after the trending started, based on the characteristic of rapid spread of social media information, the buzz will become epidemic quickly. From all those studies, the Twitter buzz in fashion area could be influenced by any other cultures in a really quick way, and fashion leaders are the messengers to spread trends.

Fashion is one of the most important area that affected by social media buzz, could other industries applicable to those conclusions, such as food and music? For the future works of this thesis could deeply research the relations between fashion and other industries and to figure out is the social media the best platform to make the trends and spread the buzz, or not. The results will help both businesses and public as a tool to analyze the information world.



Lady Diana with her Dior's Lady Dior bag.

<http://www.portero.com/blog/lady-dior-handbag/>

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