

3d Data Visualization of News searched in

Centre Pompidou Library

from March 13th - March 26th

ANALYSIS

This is the raw data given by
Pompidou Centre Library.
Basically it shows 5 different kinds of
data:
They are **SEARCH ID, TIMESTAMP,
DOMAIN, URL AND TITLE**

Raw Data

session_id	timestamp	domain	url	title	
10.6.9.48-PUB-2-INT-239	2017-03-20T08:37:50.000Z	lefigaro.fr	http://www.lefigaro.fr/actualite	Affaire Fillon : Marc Joulaud convoque er	
10.6.8.78-PUB-2-INT-288	2017-03-20T08:52:47.000Z	algerie-focus.com	http://www.algerie-focus.com/	Urgent/ Le PDG de Sonatrach limoge dai	
10.6.5.46-PUB-3-INT-317	2017-03-20T08:58:02.000Z	s1.lemde.fr	http://s1.lemde.fr/medias/web	Group	
10.6.5.46-PUB-3-INT-317	2017-03-20T09:00:50.000Z	lemonde.fr	http://www.lemonde.fr/election	Emmanuel Macron propose le retablisser	
10.6.9.48-PUB-2-INT-239	2017-03-20T09:04:54.000Z	lefigaro.fr	http://www.lefigaro.fr/politique	A l'Elysee	Francois Hollande occu
10.6.20.11-PUB-1-INT-118	2017-03-20T09:08:18.000Z	military.dwnnews.com	http://military.dwnnews.com/ph	20[] -	
10.6.20.11-PUB-1-INT-118	2017-03-20T09:35:15.000Z	military.dwnnews.com	http://military.dwnnews.com/ne	_ -	

Some Facts I found from the Raw Data:

1. The timestamp each day is from 6:00 AM –
17:00PM

2. The seached times on each day from March 17th -
March 22th is generally evenly distributed. However
the number of search time on March 20th is nearly
two times of others

3. Many of the domains visitors used are repetitive.

Thurs, I found out it will be interesting to include the
counts of search times each day, while specifically
emphasize different time on each day to see it's
relationship with the content of news being searched.

Organized Data

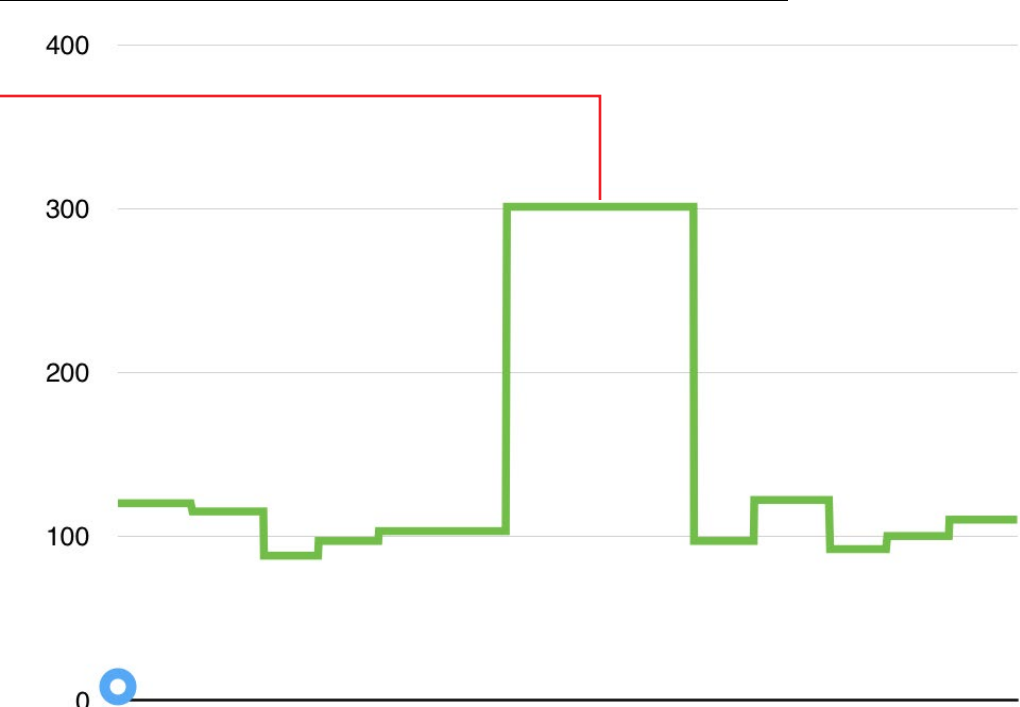
DATE	TIME	domain	title				COUNT
2017-03-13T08:27:30.000Z	8	s1.lemde.fr	Group 13				120
2017-03-13T08:53:47.000Z	8	listindiario.com.do	ORLANDO DICE - El dinero Odebrecht I Listin Diario				120
2017-03-13T08:54:06.000Z	8	listindiario.com	ORLANDO DICE - El dinero Odebrecht I Listin Diario				120
2017-03-13T08:54:12.000Z	8	listindiario.com	ORLANDO DICE - El dinero Odebrecht I Listin Diario				120
2017-03-13T08:54:21.000Z	8	listindiario.com	ORLANDO DICE - El dinero Odebrecht I Listin Diario				120
2017-03-13T08:54:28.000Z	8	listindiario.com	ORLANDO DICE - El dinero Odebrecht I Listin Diario				120
2017-03-13T08:54:31.000Z	8	listindiario.com	ORLANDO DICE - El dinero Odebrecht I Listin Diario				120

I deleted session.id column, url column.

Organized data includes:
DATE, TIME, DOMAIN,TITLE AND COUNTS

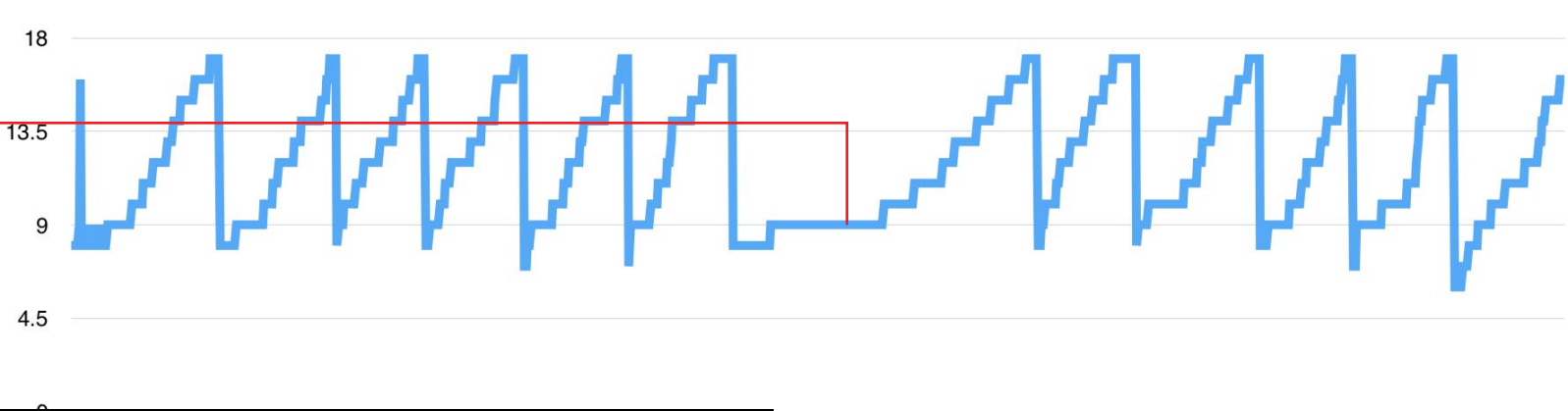
ANALYSIS

MARCH 20TH



COUNTS
DATES

Weekend



TIME
COUNTS

VISUAL INSPIRATION

THE BUILDING'S MOST FAMOUS STRUCTURAL FEATURE IS ITS "INSIDE-OUT" CONSTRUCTION, WHICH EMPHASIZES THE IDEA OF THE CULTURAL CENTER AS A MACHINE AND PLACES THE MECHANICAL SYSTEMS ON THE EXTERIOR, TO KEEP THE INSIDE UNENCUMBERED AND OPEN

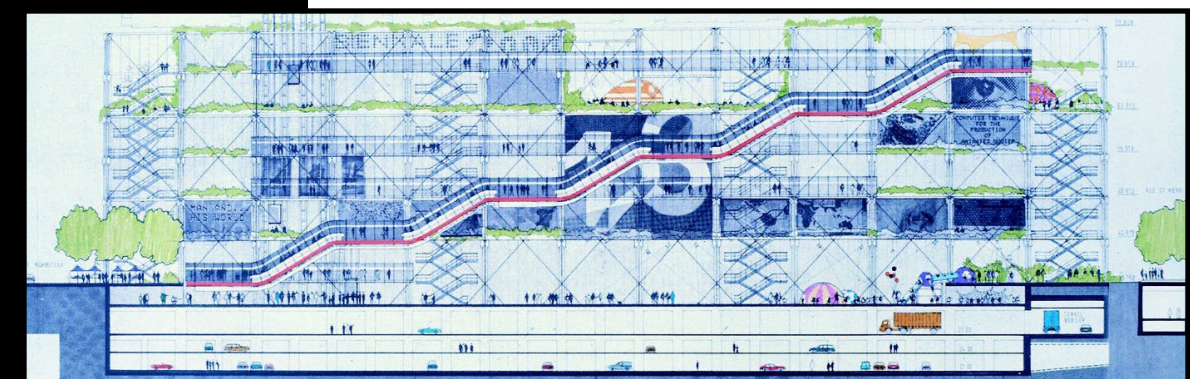
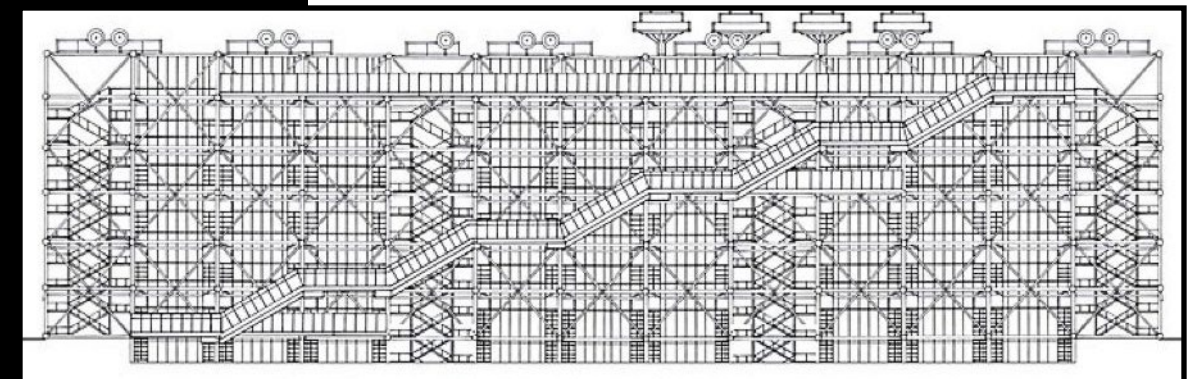
RESEARCH Background information of Bpi

A public reading library, the Bpi is designed for anyone seeking information or training, for personal, professional or academic purposes.

Open until 10 pm every day except Tuesdays, in 2013 the Public Information Library recorded 1 462 779 entrées – a figure that is particularly high for a library, which situates it in the top 10 of the most heavily visited Parisian institutions, along with the Arc de Triomphe and the Tour Montparnasse.

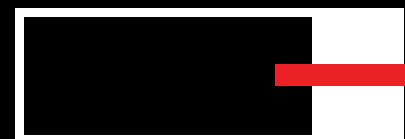
The comparison stops there. The operation of a major public library is not the same as a monument or a tourist site: the returning visitor rate is particularly high and subject to specific kinds of variations, which may be seasonal (the low flows in summer alternate with the crowds during examinations), weekly (the saturation peaks on weekends contrast with the smooth flows on Friday afternoons) and daily (off-peak hours as of 6 pm).

Pompidou Centre a complex building in the Beaubourg area of the 4th arrondissement of Paris, near Les Halles, rue Montorgueil, and the Marais. It was designed in the style of high-tech architecture by the architectural team of Richard Rogers and Renzo Piano, along with Gianfranco Franchini. (wiki)

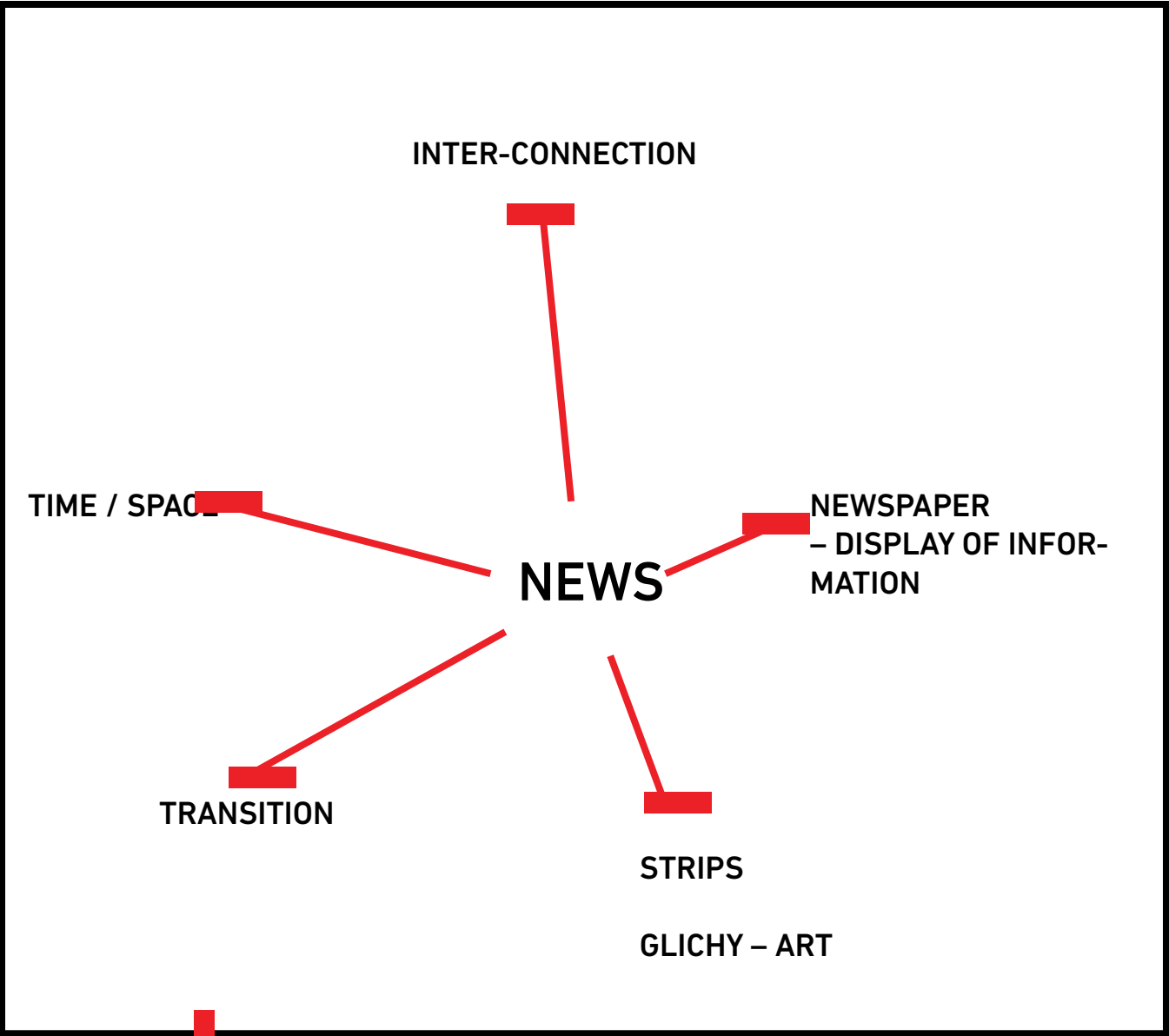
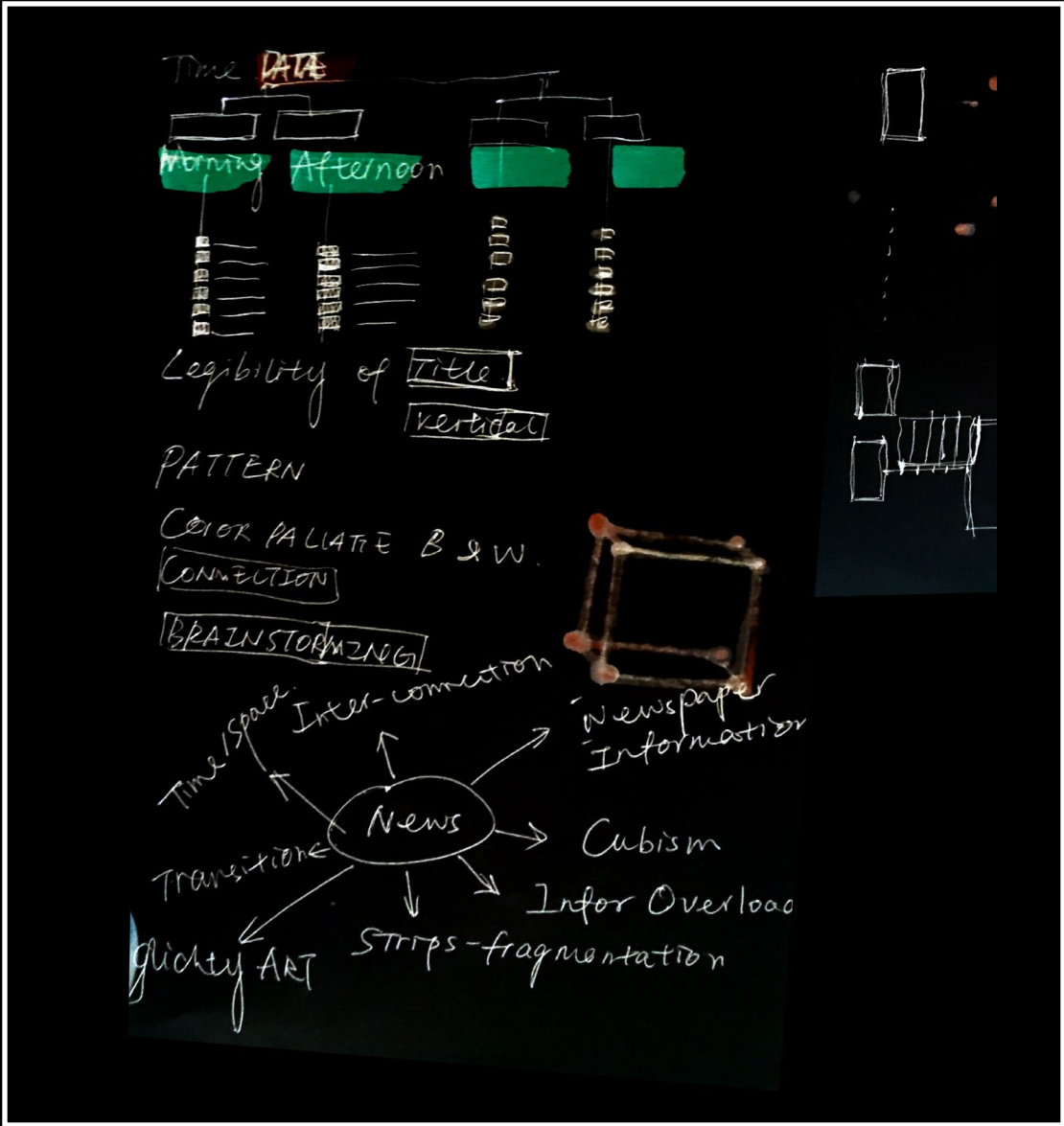


CONCEPT DEVELOPMENT

COLOR PALATTE



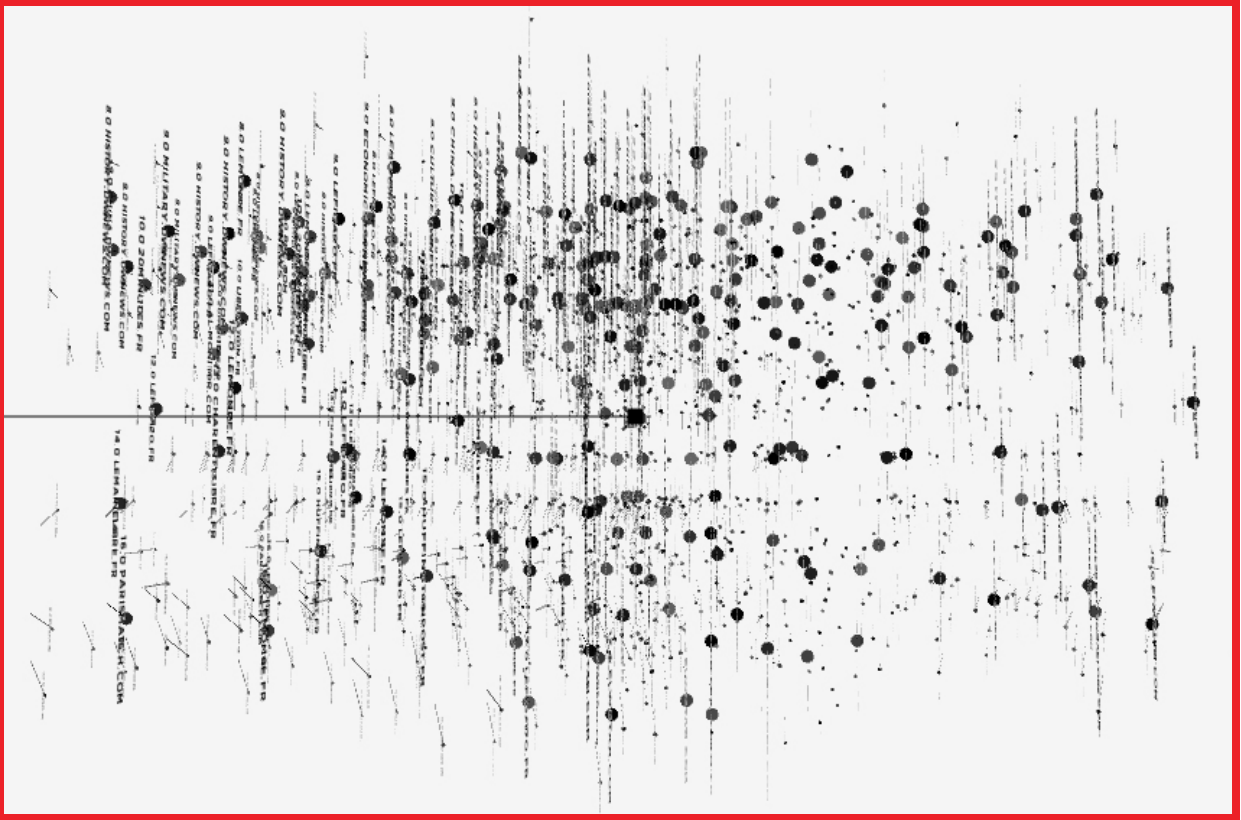
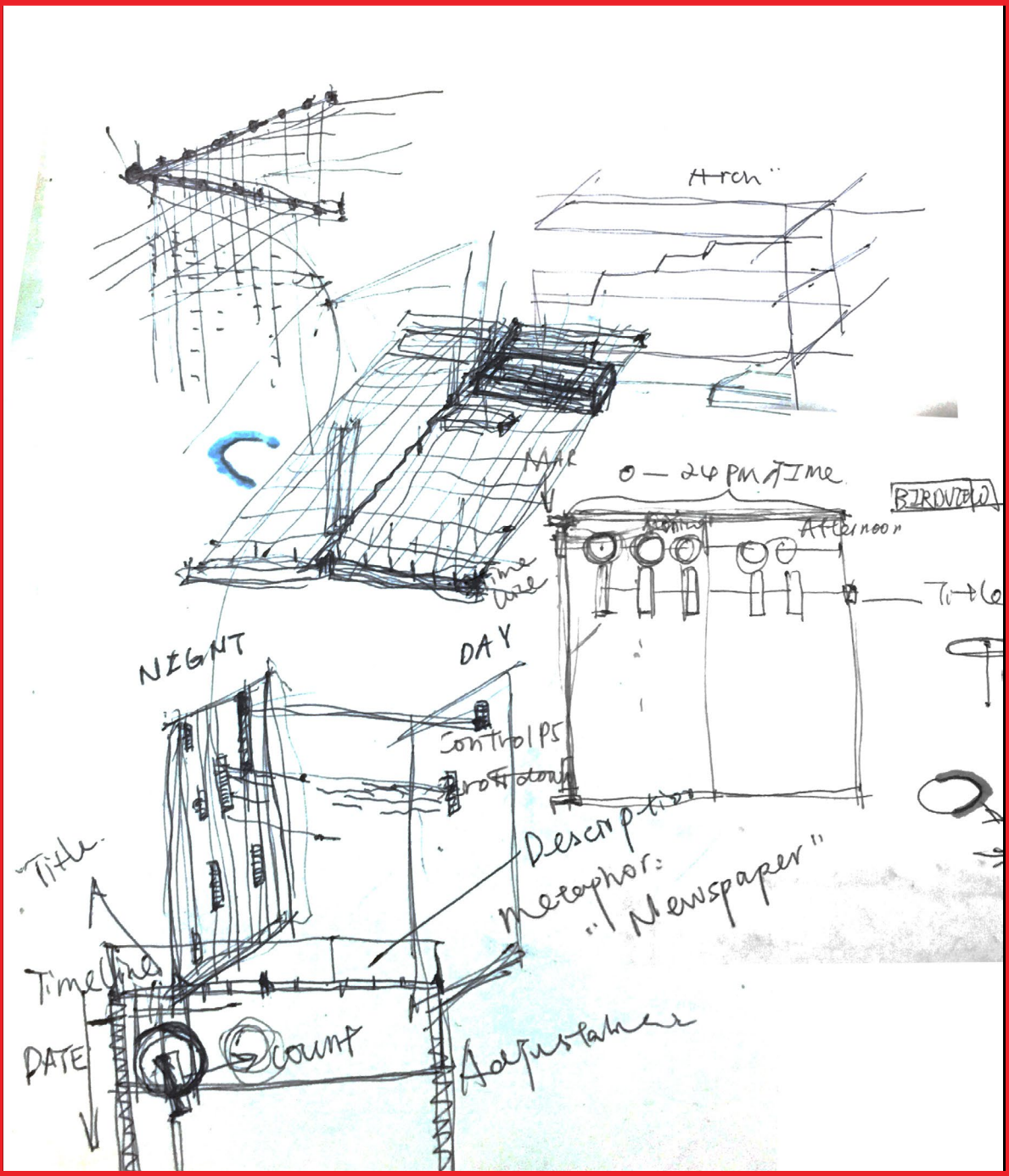
SKETCH | BRAINSTORMING

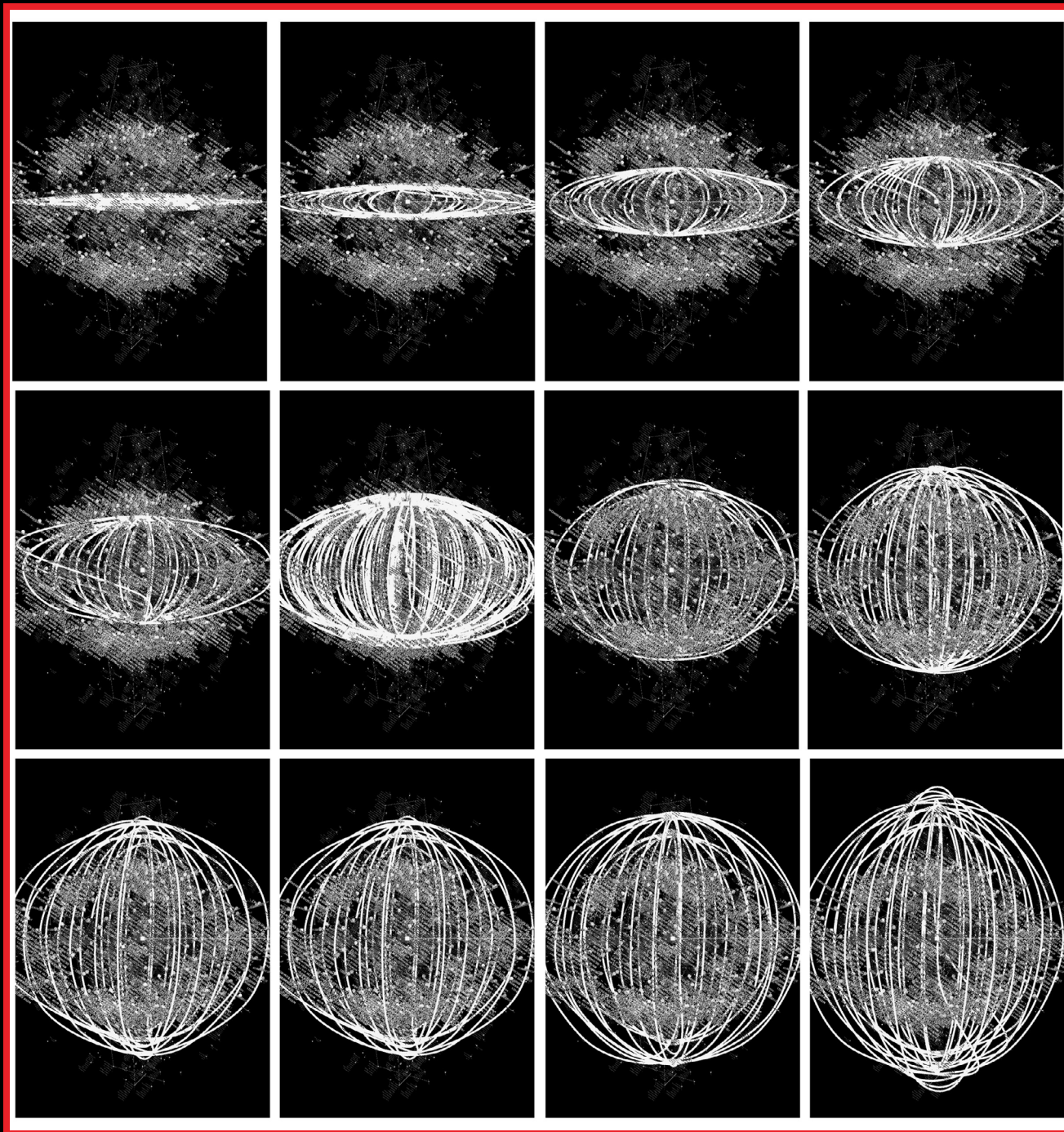


POMPIDOU CENTRE | ACHITEC-
TURE
TIMELINE | CLOCKHANDS
"INSIDE - OUT" STRUCTURE

VISUAL DEVELOPMENT

SKETCH | EXPERIMENT WITH DIFFERENT FORMS





ALGORITHM for Position

THE POSTION OF EACH POINT

X – AXIS :

$(i\% \text{sqrt}(\text{numRows}+1)) * \text{unit} * \sin(i\% \text{sqrt}(\text{numRows}+1))$

Y – AXIS :

$(i\% \text{sqrt}(\text{numRows}+1)) * \text{unit} * \cos(i\% \text{sqrt}(\text{numRows}+1))$

Z– AXIS :

depends on Time (from 6AM - 9PM)

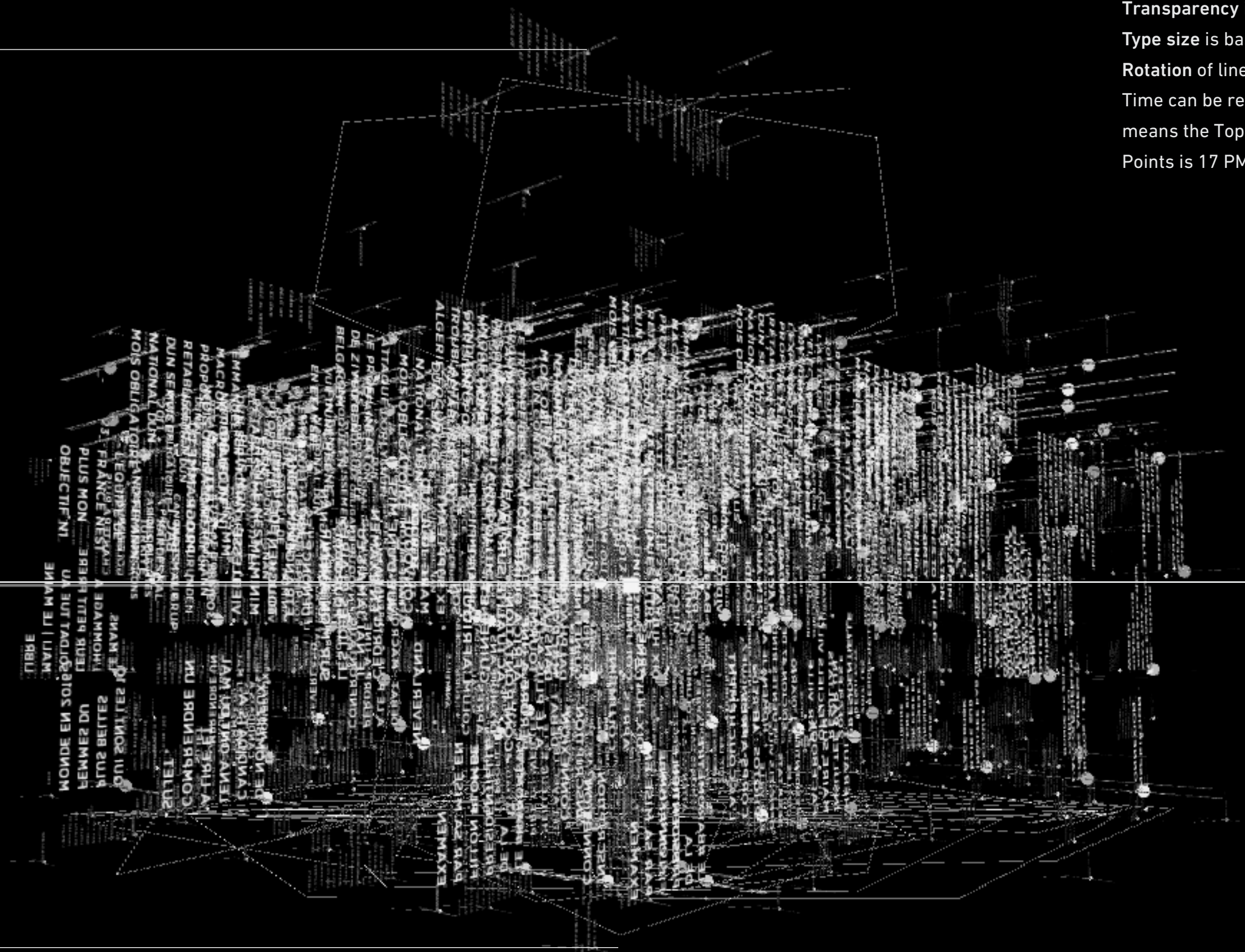
6 AM



12 PM



5 PM



Above the middle timeline means Morning
Below the middle timeline means Afternoon
Transparency is based on **NUMBER OF COUNTS**
Type size is based on **NUMBER OF COUNTS**
Rotation of lines is based on Time
Time can be read Vertically on side view, which
means the Top points is 6 AM and the Bottom
Points is 17 PM

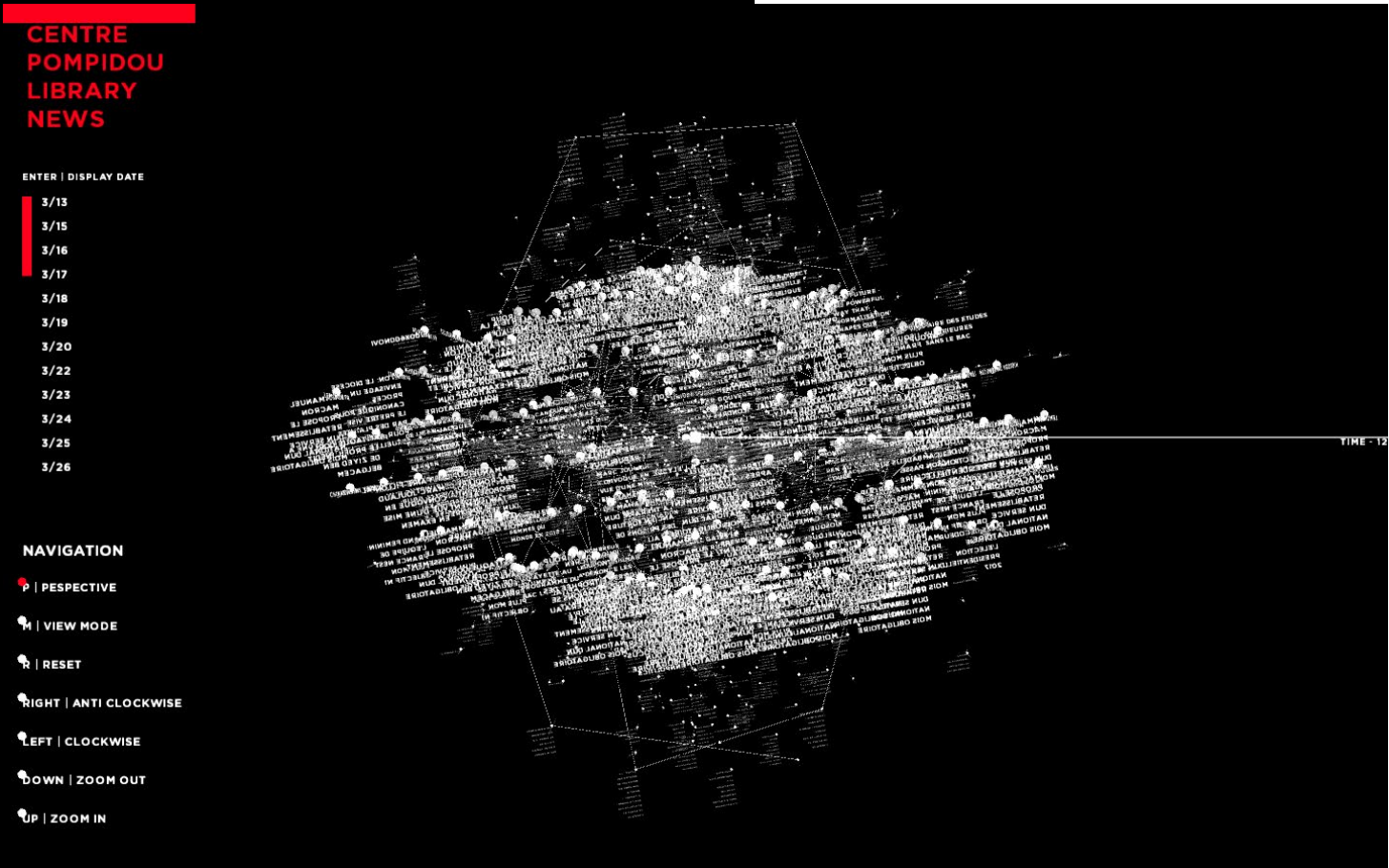
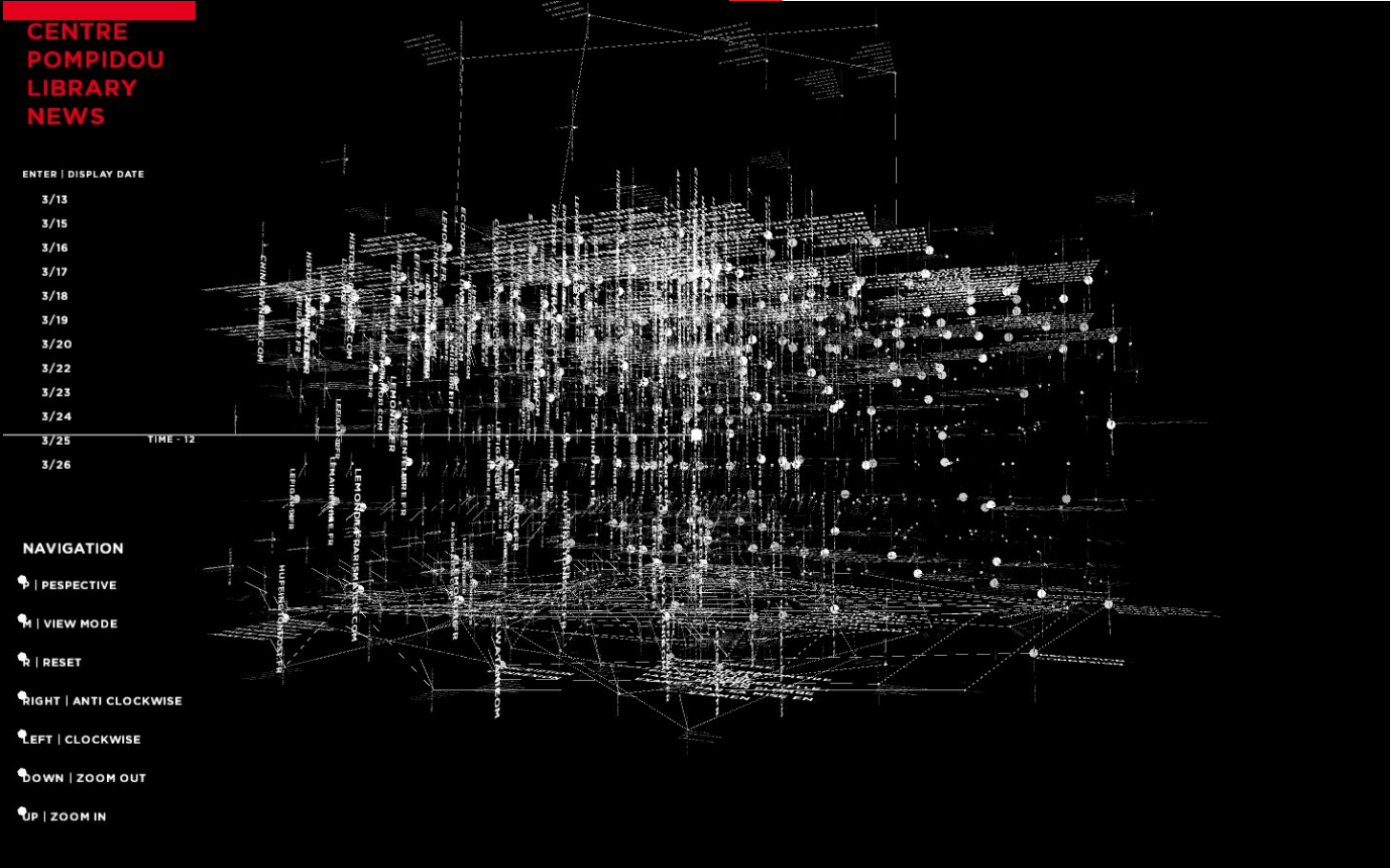
DATA VISUALIZATION

Perspective I | SIDE VIEW OF DATA STRUCTURE

PRESS key 'P' to view different perspective

TOP view gives can view the information more clear while SIDE view can view the distribution of time more clear.

Perspective II | TOP VIEW OF DATA STRUCTURE



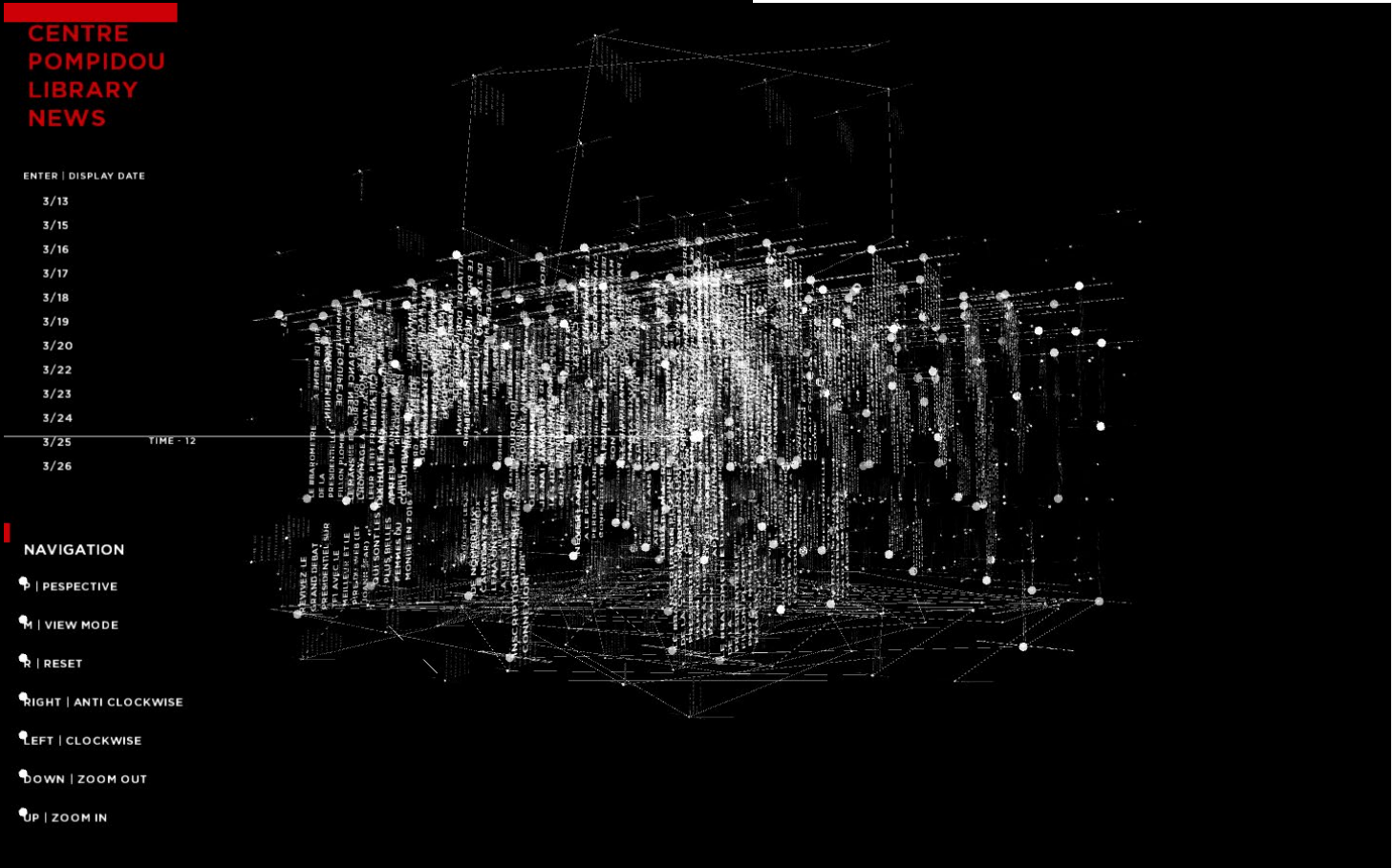
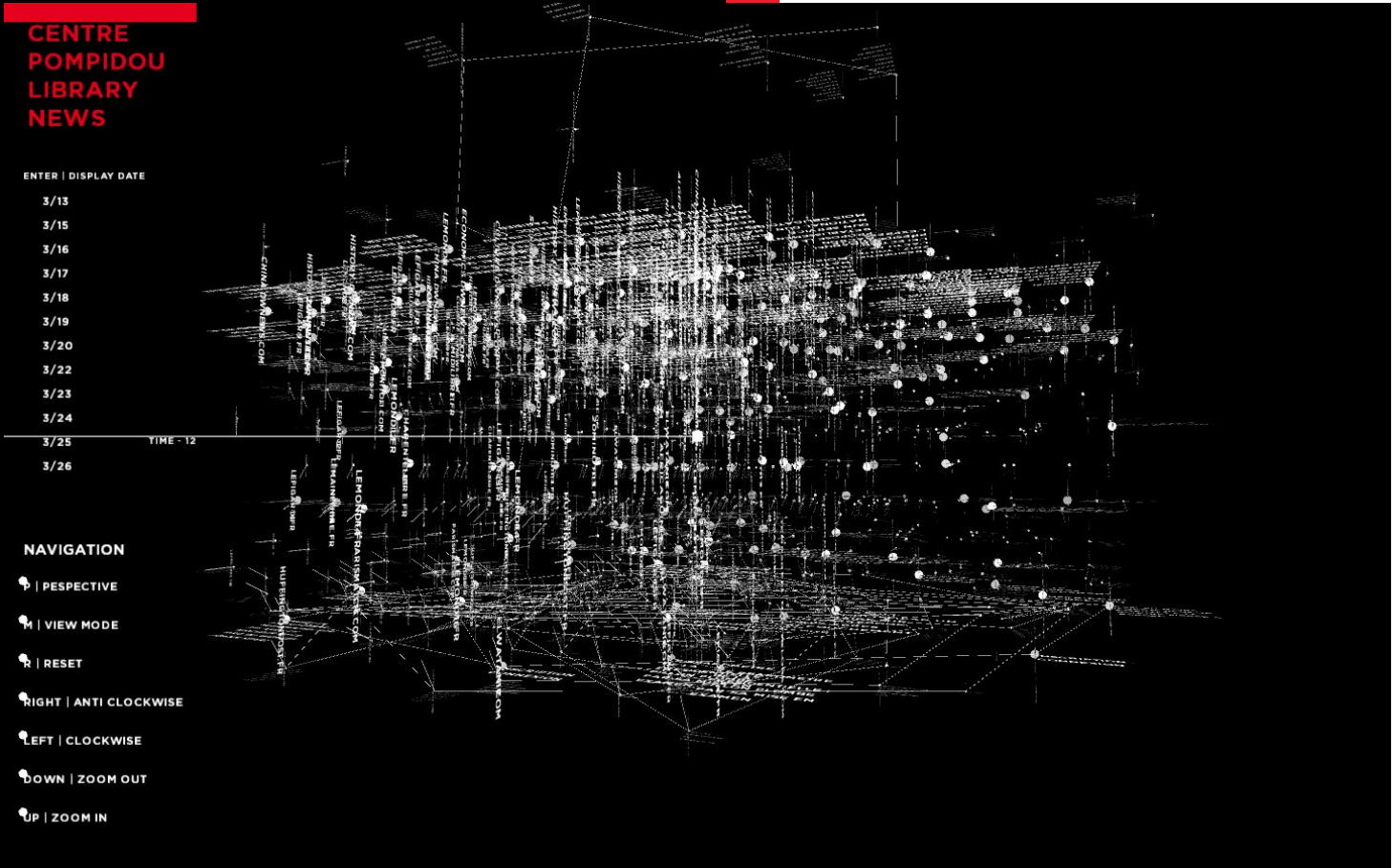
DATA VISUALIZATION

Each Perspective have two Modes

Mode I | to view Domain Information

PRESS key 'M' to view Mode

Mode II | to view Title information



DATA VISUALIZATION

close-up to see details. each point has a clock hands the rotation is based on 'TIME'.

PRESS Arrow Key to navigate
ZOOM IN | ZOOM OUT
Rotating | CLOCKWISE | ANTI CLOCKWISE



DATA VISUALIZATION

TO VIEW THE DISTRIBUTION ON DIFFERENT DATE

PRESS ENTER key to see the animation of displaying different forms that generated by data on the same date.

Mouse Click to stop the animation.

PRESS ENTER AGAIN for exiting display Mode

LIBRARY NEWS

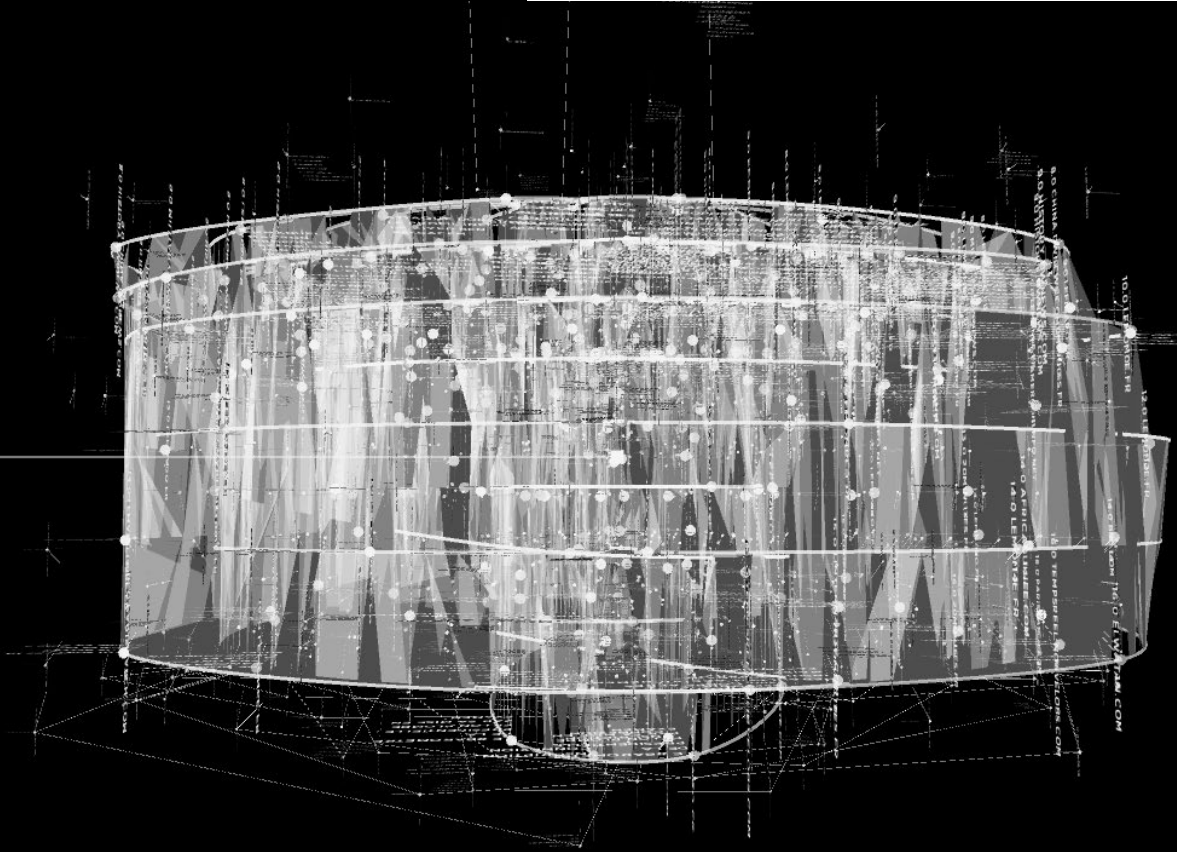
ENTER | DISPLAY DATE

3/13
3/15
3/16
3/17
3/18
3/19
3/20
3/22
3/23
3/24
3/25
3/26

TIME - 12

NAVIGATION

- P | PERSPECTIVE
- M | VIEW MODE
- R | RESET
- RIGHT | ANTI CLOCKWISE
- LEFT | CLOCKWISE
- DOWN | ZOOM OUT



LIBRARY NEWS

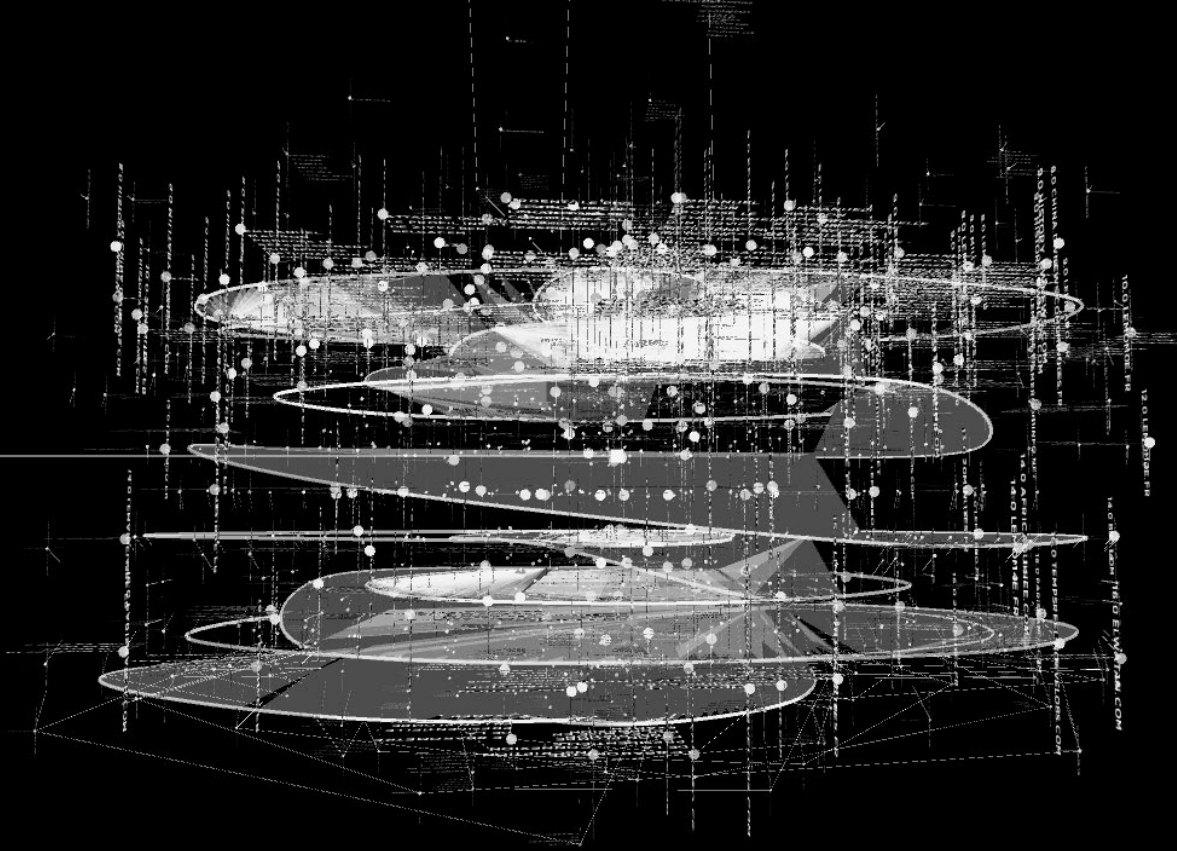
ENTER | DISPLAY DATE

3/13
3/15
3/16
3/17
3/18
3/19
3/20
3/22
3/23
3/24
3/25
3/26

TIME - 12

NAVIGATION

- P | PERSPECTIVE
- M | VIEW MODE
- R | RESET
- RIGHT | ANTI CLOCKWISE
- LEFT | CLOCKWISE
- DOWN | ZOOM OUT



DATA VISUALIZATION

NAVIGATION BAR DESIGN

The red slide bar is responding to different action.

- Press P for different Perspective
- Press R for reset to original view
- Press Arrow key for navigate
- Press Enter to view distrubition of search on different dates
- PRESS ENTER key to see the animation of displaying differ-ent forms that generated by data on the same date.

Mouse Click to stop the animation.

PRESS ENTER AGAIN for exiting display Mode

