

```
library(dplyr)
```

```
r-ladies_global %>%  
  filter(from = 'Taipei', travel_to = 'Berlin')
```



R-Ladies Taipei

DATA VISUALIZATION

R-LADIES BERLIN X R-LADIES TAIPEI MIA

The Agenda



first

About me

Intro about Me,
R-Ladies



second

Before you start

Sanddance, When
you just start your
vizualize trip,
knowing some
tools that helps you
get a quick view



third

Ask questions

See your
dataset in a
different way



last

ggplot2

How to use it, and
start your practice
today!

1. About me

Intro about Me, R-Ladies.

<https://rladiestaipai.github.io/R-Ladies-Taipei/>



Hello!

I am Mia Chang (張懷文).

- Data Consultant
- Lecturer
- Member of [R-Ladies Taipei](#)
- Co-founder of [Azure Taiwan Community](#)
- Microsoft Most Valuable Professionals (MVP) 2017
- mia5419@gmail.com

R-Ladies Taipei



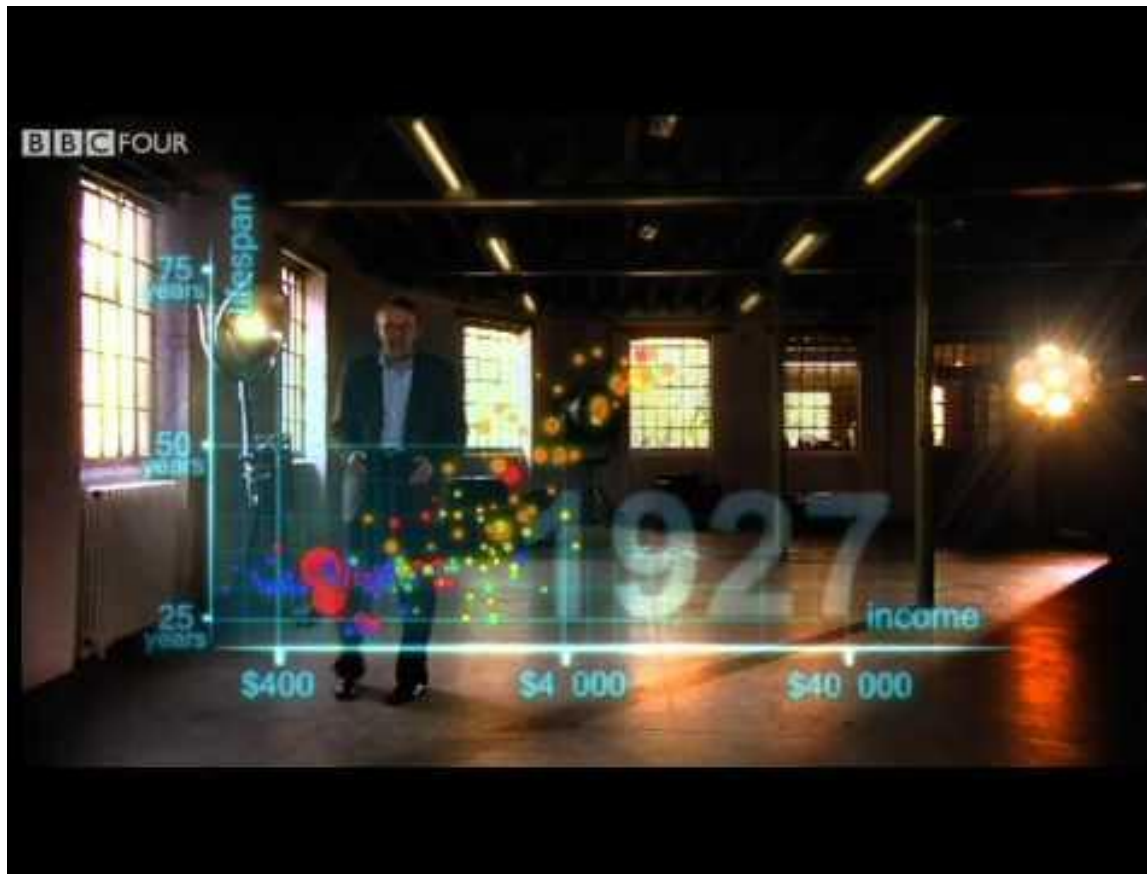
- Founded in 2014
- every month in Taipei,
- Our history: goo.gl/HbHNeP



R-Ladies Taipei, together with PyLadies and Girls in Tech Taiwan, teaches Taiwan President Tsai how to code in the event of “Hour of Code 2016” held by Microsoft Taipei.

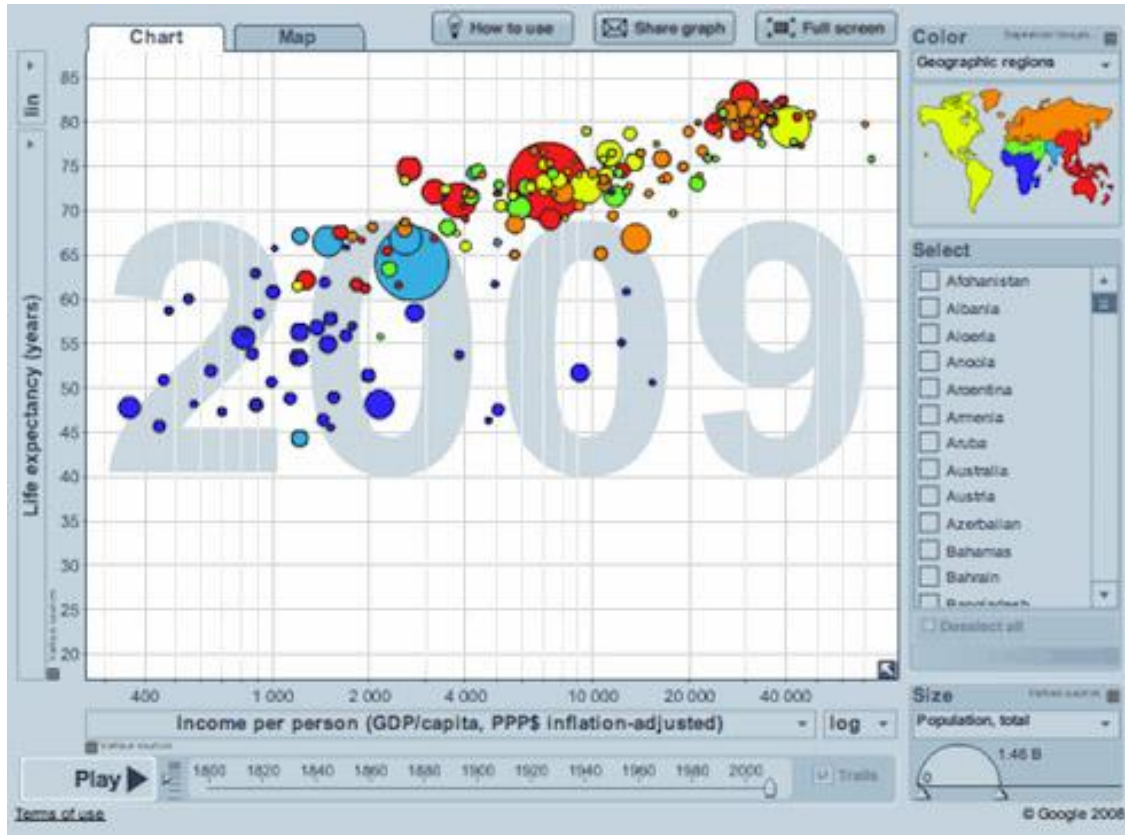
2. Before you start

Sanddance, When you just start your visualize trip,
knowing some tools that helps you get a quick view



FILMED FEBRUARY 2006 AT TED2006
[HANS ROSLING: THE BEST STATS YOU'VE EVER SEEN](#)

✖ WHAT IS AESTHETIC MAPPING



Sanddance

Have some pictures about your data and different chart

<https://sanddance.azurewebsites.net/beachPartyApp/BeachPartyApp.html>

3.

Ask Questions,

See your dataset in a different way

Three Key Analytics Questions



Some examples,

<https://hackpad.com/HackNTU-R-report-pQRRFd2Cn3A>

4.

Hi ggplot2,

How to use it, and start your practice today!

Visit Dataset

<http://docs.ggplot2.org/current/>

Documents

<https://www.rstudio.com/wp-content/uploads/2015/03/ggplot2-cheatsheet.pdf>

□ THE GRAMMAR OF GGPLOT

aesthetic mappings

data

geom

```
qplot(x = cty, y = hwy, color = cyl, data = mpg, geom = "point")
```

Creates a complete plot with given data, geom, and mappings. Supplies many useful defaults.

```
ggplot(data = mpg, aes(x = cty, y = hwy))
```

Begins a plot that you finish by adding layers to. No defaults, but provides more control than `qplot()`.

data

```
ggplot(mpg, aes(hwy, cty)) +  
  geom_point(aes(color = cyl)) +  
  geom_smooth(method = "lm") +  
  coord_cartesian() +  
  scale_color_gradient() +  
  theme_bw()
```

add layers,
elements with +

layer = geom +
default stat +
layer specific
mappings

additional
elements

BASIC VISUALIZATION CLASS 3

- ✖ COLOR,
- ✖ FILL SCALES,
- ✖ SHAPE SCALES,
- ✖ FACING
- ✖ [MORE](#)

Manual shape values

0	□	6	▽	12	▣	18	◆	24	▲
1	○	7	⊠	13	⊗	19	●	25	▼
2	△	8	✱	14	◻	20	●	*	✱
3	+	9	◇	15	■	21	●	.	.
4	×	10	⊕	16	●	22	■	o	○
5	◇	11	⊗	17	▲	23	◆	o	○

LET'S TALK ABOUT DATA VISUALIZATION

✖ LONG FORMAT VS WIDE FORMAT

WIDE FORMAT (X)

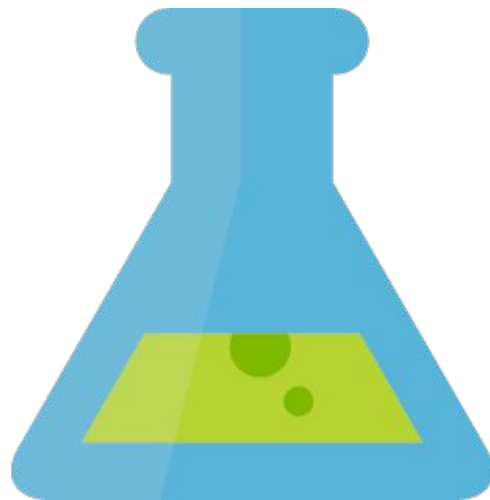
IDNumbers	Name	Class1	Class2
001	Rose	1	0
002	Jack	0	1

LONG FORMAT (V)

IDNumbers	Name	Class	Is Survived
001	Rose	1	1
002	Jack	2	0

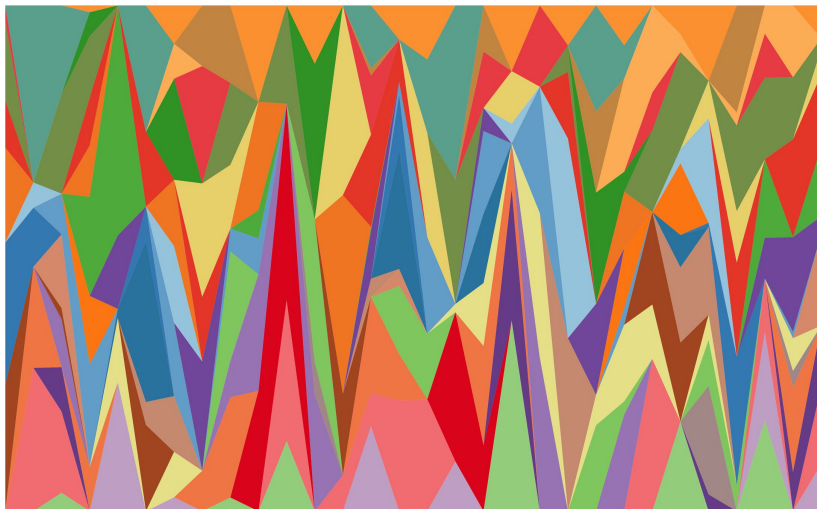
Visualization in `ggplot2`

Let's Demo!



RESOURCE SHARING

THE R GRAPH GALLERY – GGPLOT2



RECAP TODAY & RESOURCE SHARING

MEETUP

[HTTPS://WWW.MEETUP.COM/R-LADIES-TAIPEI/](https://www.meetup.com/R-Ladies-Taipei/)

[HTTPS://WWW.MEETUP.COM/AZURE-TAIWAN/](https://www.meetup.com/Azure-Taiwan/)

ONLINE COURSE

[HTTPS://WWW.DATACAMP.COM/COURSES?LEARN=DATA_VISUALIZATION](https://www.datacamp.com/courses?learn=data_visualization)

TED

[HTTPS://WWW.TED.COM/TOPICS/VISUALIZATIONS](https://www.ted.com/topics/visualizations)

CODE GUILD

[HTTPS://GOOGLE.GITHUB.IO/STYLEGUIDE/RGUIDE.XML](https://google.github.io/styleguide/Rguide.xml)

FACEBOOK PAGE

[HTTPS://WWW.FACEBOOK.COM/TERADATA/](https://www.facebook.com/teradata/)

[HTTPS://WWW.FACEBOOK.COM/GRAPHICSPEAK/](https://www.facebook.com/graphicspeak/)

[HTTPS://WWW.FACEBOOK.COM/KAGGLE/](https://www.facebook.com/kaggle/)

[HTTPS://WWW.FACEBOOK.COM/RBLOGGERS/](https://www.facebook.com/rbloggers/)

[HTTPS://WWW.FACEBOOK.COM/VISUALNEWS/](https://www.facebook.com/visualnews/)

Thanks for your listening!

Look forward to your visit to R-Ladies Taipei! Also Azure Taiwan!





Bye!

I am Mia Chang (張懷文)

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