

# Design 2

Group number: 4

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## Problem 1: Design Critique

### **Who is the intended audience?**

People interested in movie revenues, or films in general. Could also be useful for people who make movies to see in what month revenues are generally higher so they can release their movie in that month or week.

### **What tasks does the visualisation enable?**

- Searching movies
- Slide back and forward in time
- Clicking on the elements to see details on the movie it represents
- Hover over a field to show the name of the movie

### **What data is represented in this visualisation? Be specific.**

The weekly box office revenue and longevity of movies made between 1986 and 2008. The colours also represent a range of the total revenue, higher revenues are shown in a darker color. And information about the films upon clicking the movie element.

### **How is each data type visually encoded?**

Total revenue range in different colours, longevity of a movie in the width of the movie element and the weekly box office revenue in the elements height.

### **How do the visual elements and user interactions support the tasks?**

Sliding the mouse over an element shows the movie name, clicking that element gives the movie details. Movies with high revenues show their names even when the mouse is not on the element while movies with lower revenues do not. The colour of an element could be seen as an indication of the area of that element.

## Why do you like / dislike this visualisation?

We like that the shapes and colours are interesting to look at, however due to the overlapping of multiple data it makes it harder to clearly read. We like the fact that is interactive, but it needs to be because if you would not be able to click on the elements you would have no idea what movie is represented in which element.

Overall we do not find the visualisation clear enough even though it look **aesthetically** quite nice. Up and down is vague, because down looks like loss, but it actually is not. There is no y-axis, even though it looks like there is, the middle being 0 causing confusion about up and down. The absolute height is not a measure for the revenue, only the height of a specific element gives that information, but because it looks like several data are overlapping it can be misinterpreted. This increases the **lie factor**.

In the middle of a year it is not clear what year you are looking at because this data is only given at the beginning or end of a year, it would be better to slide the year with your view window. Another possibly is to show the year under each month.

There is a lot of **data variation** and also a lot of **design variation** which is good. There is also a lot of ink for data, giving this visualisation a good **data-ink ratio**. There is not much **chart junk**, there is only one vertical line to indicate a new year. This could also be left out if the year is clearly shown as previously discussed.

The **data density** is in our opinion quite high, some areas look quite cramped. This could be resolved by making the graph a bit higher, giving low revenue movies more space, however this would make the difference between high- and low-revenue movies look even larger so the lie factor would be increased. So our conclusion on this topic is that there is just a lot of data, not that it is wrongly displayed.

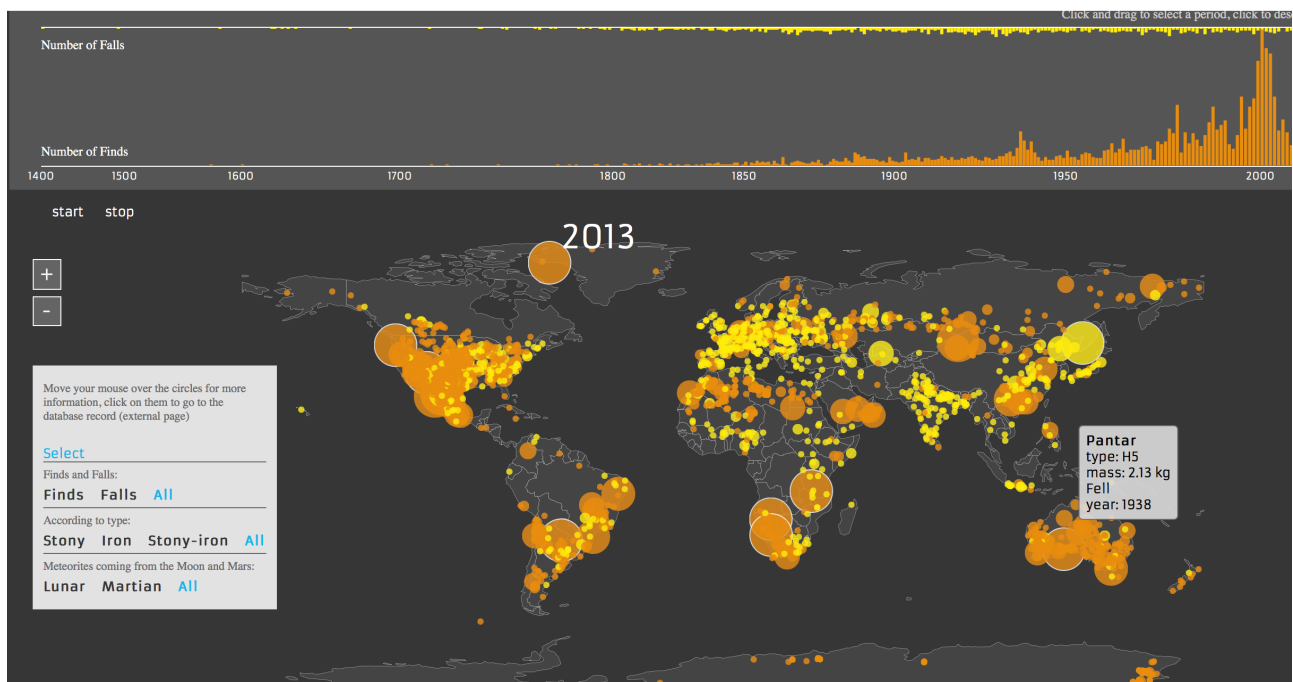
**Layer information** is good, upon hovering/clicking more info is shown. There is a nice colour gradient, the contrast is big enough. White lines around light yellow shows very little contrast, could have chosen an darker palet of colours. a black line surrounds an element when it is selected this gives better contrast. If every line would be black the visualisation would probably look to cramped though. Some **repetition** was used, for example along the x-axis the months are repeated every year.

The data gives the weekly box office revenue, but it is plotted in months. We would find it more logical to plot weekly revenues on a weekly timescale or at least some option where you could see the weeks. We find it a great disadvantage that this visualisation that it is displaying the revenues of a movie, but nowhere the exact revenue is shown. We would like to see this in the box that appears when your mouse is hovering over an element.

**Proximity** is used in this graph based on time; films that are close together have been released in the same period of time.

We do like the interactivity and find this visualisation **playful**. Wether the **goal** is achieved or not is discussable, it like to show the ebb and flow of movie revenues but no exact revenues are given and the flows are not visible at once, the user needs to scroll trough the timeline to clearly see the ebbs and flows. When we did this we saw peaks clearly in the summer and around december. We would like to see this in an overview like the total scheme in the scrolling bar or a zoom function that allows us to zoom out and see a larger piece of the timeline.

## Problem 2: Questions corresponding to the readings



source: <http://visual.ly/macrometeorites?view=true>

The two visual variables we detected in this visualisation are colour and size. The **colour** indicates a type (found/fell) and the **size** actually says something about the size (in fact the mass of the meteorite).

The information we could get out of this graph by means of the tasks of the visualisation:

- The locations where meteorites fall and are being found. The difference between a fall and a find is a fall is defined as a meteorite that has been spotted to fall by someone and a find is when nobody saw it fall but a crater or a meteorite was found.
- More meteorites are found than fell.
- The time in which meteorites are found, also specific time periods can be selected.
- The mass of the meteorite (displayed when hovering over a circle)
- The origin of the meteorite (mars or the moon)
- The composition of a meteorite (stony, iron or both)

Any of the above mentioned characteristics can be used as a filter to find correlation between the different variables.