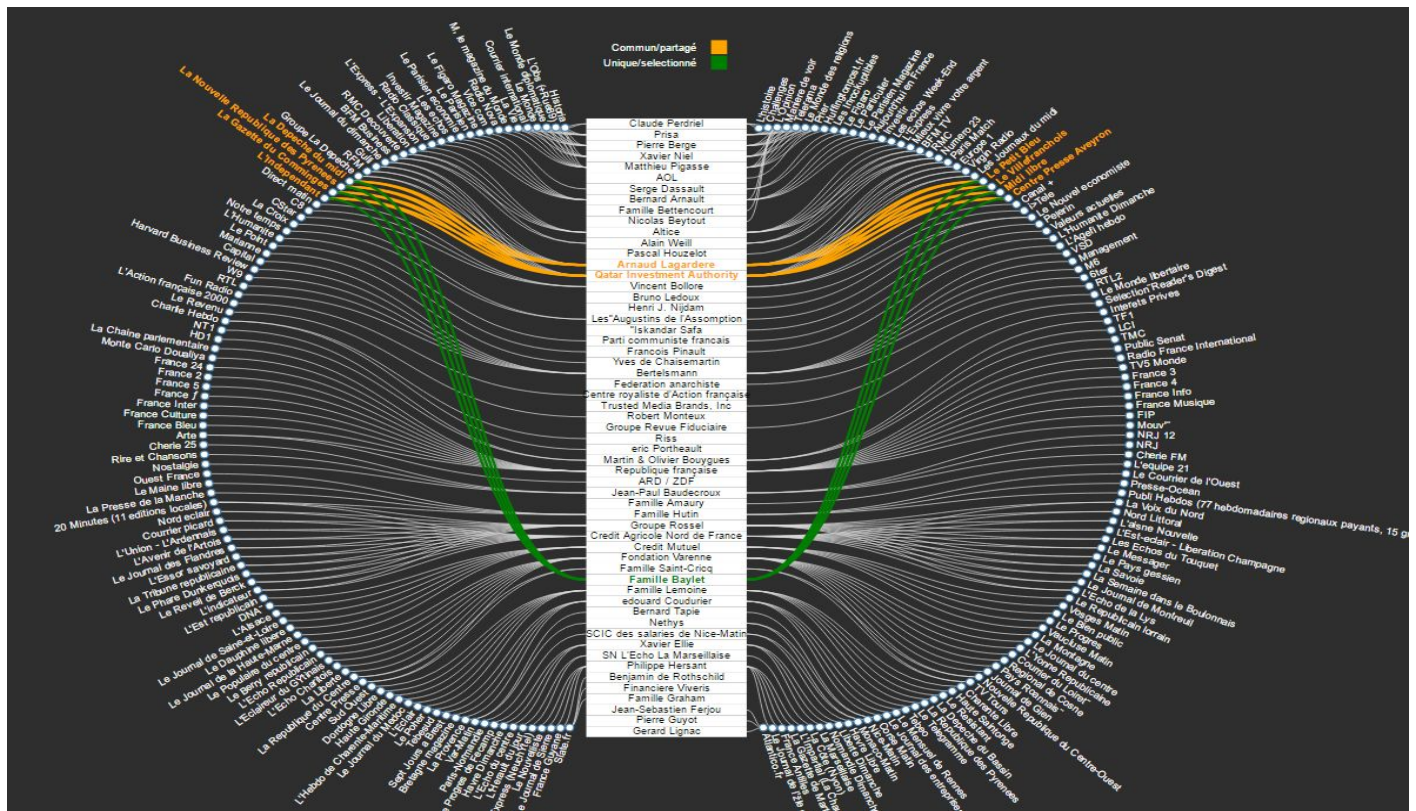


Visualization of the influence of the media according to their shareholder

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ABSTRACT

In this article, we propose a visualization about the French medias and the influence of their shareholders. We establish the multiple and non trivial links between them.

Through complex data, between shareholders and medias, we explain the realization of our proposition. We examine the French's medias ownership. We can see that almost all the largest media firms are owned by the government or by private families. It seems that government ownership is more important in broadcasting than in the printed media. With so many medias, there is multiples way to represents the links between nodes.

Keywords: Visualization, node, link, Shareholders, Media, D3js, ConceptMap

1 INTRODUCTION

In modern societies and economies, the availability of information is central to better decision making by consumers, and investors. Much of that information is provided by the media, including newspapers, television, and radio, which collects information and make it available to the public. A crucial question, then, is how the media should be optimally organized. Are newspapers or television channels stated or privately owned? In this paper, we show a visualization that simplifies a previous visualization proposed by “le monde diplomatique” and show which shareholder possess what media, through which group.

2 RELATED WORK

Several works have been done on this subject, mainly static drawing. It is also worth to note that the work is done by journalists. One of the main difficulties remains the gathering of convincing and usable data. It is stated in many of the related Works that there is no centralized sources. The data need to be verified for each group and each media, which takes time, and is not without errors. But the data the journalists referred to and the one we use have been verified many times through recents updates.

2.1 Le monde Diplomatique

Marie Beyer & Jérémie Fabre, July 2016 [1]

One of the first visualizations that popped after searching, is a static picture created for the website << www.monde-diplomatique.fr >>. This visualization is recent and complete with regular updates. A definitive model, which we often come back to check our results. Also from a visualization' point of view, it delivers most of the

information contained in the dataset. But the legibility takes a hit. The use of logo for the media add a direct course of reading, that we think, make the information of the links less relevant. A reader might just see the shareholder and the media, without caring too much on all the information given by the links. Also we can notice the lack of interactivity that should help guiding the reader towards the message intended by the visualization.

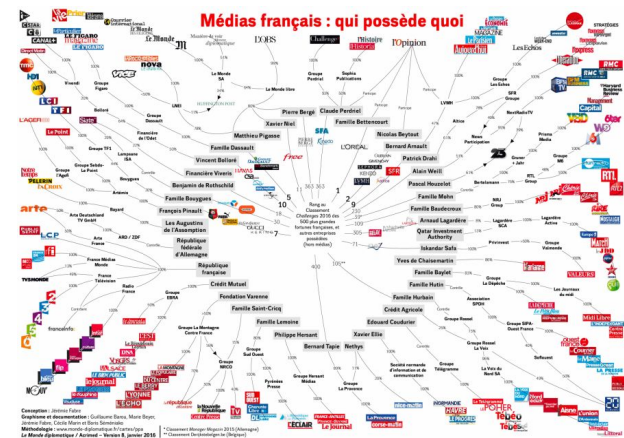


Figure1: French's medias: who own what?

2.2 Les moutons enrégés

This visualization is really similar to the one from << www.monde-diplomatique.fr >>.

Here the visualization focus on the importance of the shareholders by giving them a shape and a size.

The links are simplified however, we notice a lot of crossing. The addition of a detailed legend is also a good idea since there are shapes with different meaning. It seems also that less informations was used compared to previous static visualization, making this visualization less complete.

But the target here, was clearly the shareholders's power on the media.

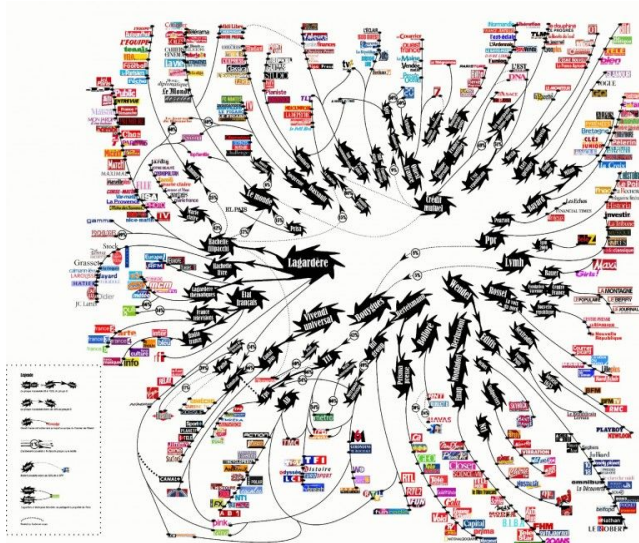


Figure2: Carte du parti de la presse et de l'argent

2.3 LenouvelObs

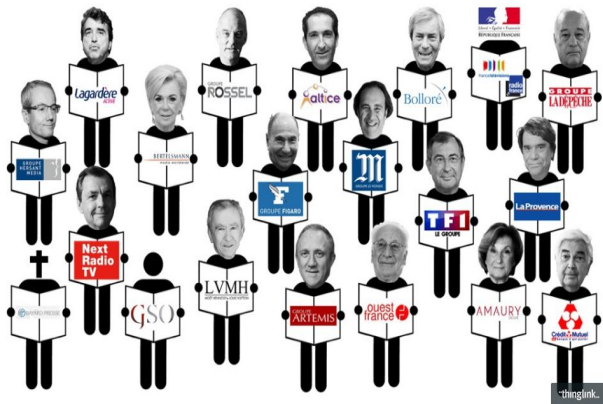


Figure3:

This visualization just show the main powerful shareholders in the french media landscape. Here, the interactivity is a key point since there is no information until the mouse hover on a character. Compared to the other visualization, the use of an image for the head of the characters gives a better information on who is the shareholder. Visually, there is no information of the links between the shareholders. And the information is shown in a big text that takes a large place in the visualization.

3 PROJECT DESCRIPTION

We want to rethink the existing visualizations and address some of the key points that we think should be changed. We choose to build a visualization with the library d3js, which is free, and compatible with every actual internet browser.

3.1 Data Manipulation

Beforehand, the data we got is a excel file, that need some changes. It was from << www.monde-diplomatique.fr >>.

3.2 What we want to read from the data

At first, we agreed on the fact that showing the percentage of possession between shareholders and medias were our base of work. So we worked with a type of visualization called Sankey [5]. A sankey diagram consist of visualizing the magnitude of flow between nodes in a network. The thickness of each link encodes the amount of flow from source to target, in our case the level of percentage change this thickness.

However, we quickly realized that it was too limited, and the approach consisting on a focus on the link between shareholders and the media was much more interesting.

So the data needed to give us such information towards shareholders and media and everything worth looking and relevant to our visualization, between them. Such information are contained in the columns << 3e etage NOM;3e etage %;2e etage NOM;2e etage %;1er etage NOM;1er etage %>>.

3.2.1 Possessor approach

We want a visualization that focus on the links between a media and a shareholders. But we also want to show the indirect-links between the shareholders themselves. In this way, we can show multiple information in multiple ways. We can clearly show that a lot of media are shared by multiples shareholders.

By approaching the visualization from a shareholder point of view, we decided to ignore the question of group.

3.3 Explanation of the visualisation

The visualization that we propose is more oriented towards the legibility rather than the exhaustivity. Where the related works such as the ones from << www.monde-diplomatique.fr >> primarily show all the steps of possession between the main shareholder and the final media. We decided to blend the media and group of media all together.

4 DISCUSSION

While this visualization shows quickly and efficiently which shareholder possess what media, shared by which shareholder and with a certain percentage, we could argue that another code of color, might give a better idea of the importance of a media and thus shows why certain private families tend to possess this kind of medias rather than an other. Also the interactivity of dragging, zooming and coloring the links is really just a first layer of interactivity, but well welcomed that is enough to show the superiority of using a library like d3js over a simple image png. We can also argue that one of the limit of this <<conceptMap>>-like visualization would be the links between the many inner-nodes and the outer-nodes. Indeed, with a large set of nodes like our database, we quickly see a visualization that can not fit in a normal screen and need, for convenience and ease, a focus interaction. But the real problem come from the use of links. with so many links, it is near impossible to try to give more sense to the links than just <<one is linked to the other>>. Trying to change the thickness of the link will just make the visualization heavier and harder to understand at first sight.

5 CONCLUSION

In this paper, we examine ownership patterns of television and newspaper. We find that media firms have ownership structures with large controlling shareholders. These shareholders are either governments or big families. The many visualizations already available show just that but the visibility, legibility and exhaustivity cannot be

achieved at the same time. So one must be abandoned in order for the other to rises.

Through the many prototypes, we were able to identify the many concepts involved to make a visualization that show with ease the french's media ownerships. Beginning with a sankey, then coming back to a simple interactive graph before testing the bipartite <<conceptMap>> graph. Our final proposition answers the following questions :

- who are the related shareholders?
- what media a related to which shareholder?
- How many shareholders for one media?

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