Dear New York Times Team,

I have had an opportunity to look at the Netflix Rental Patterns Interactive Visualisation (http://www.nytimes.com/interactive/2010/01/10/nyregion/20100110-netflix-map.html) in NY Times and I find it a very interesting, useful, informative and engaging tool. The demographic choice of movies is composed very nicely. The tool is user friendly, allowing one to observe neighborhood patterns with ease. The details on demand of the choices of a particular zip code on a mouse hover gives a good composition of the popular movie list, highlighting preferences of the people in the region. The category based sliding bar at the top is a helpful navigation tool that allows you to switch between two movies and further do the comparison of the movie patterns. In spite of these usable tools, I feel that the graphic can be made more interactive and engaging with a few major and minor improvements.

Firstly, the selection of the rental pattern of a zip code is handy but incomplete. It gives an impression of missing regions around the metropolitans, although they can be located by dragging the map. This is non intuitive to the novice users. I recommend that a note or pointer should be given regarding the same. Also, there is an inconsistency between the resized dragged map and the thumbnail of the highlighted city as shown in Figure 1. I suggest you to give an appropriate version of the map in the highlighted thumbnail and also an appropriate title for the thumbnail (example for New York: NY and neighborhood). You can also accomplish more consistency by showing thumbnail of the region that covers the extended map of the city and a sliding window over the thumbnail. The sliding window shows the small version of the region in the current map.

Secondly, a selection tool that allows to select a target area will be a boon to the users for comparing patterns over collective neighborhoods. A mouse hover on the selected area should provide the top rentals of the grouped region. In addition to that, a mouse hover on the thumbnail/city should also give the popular rental list in the city thereby keeping the users engaging.

Thirdly, my recommendation for easy navigation for comparing the position of the movies in a neighborhood is to provide click-able links in the details on demand list as shown in Figure 2. Currently, the use case for comparing two known movies is to select a movie, observe the neighborhood pattern, click the alphabetical list category, slide to the alphabet of the second movie and compare the current neighborhood pattern with the memorized one. This is very inconvenient and cumbersome. I strongly suggest the designers to provide click-able movie links instead of a list when mouse hovered on the region. Also, an expand link can be provided that allows the interested viewers to see the complete list of top 50 rental movies in that region.

Finally, a missing thing in the visualization is that there is no information about the anomaly patterns or the common choices of the cities except those mentioned in the title. It can be very engaging for the users if this is provided as the description for every combination (movie and city) as shown in the sub category description in http://www.nytimes.com/interactive/2009/07/31/business/20080801-metrics-graphic.html?ref=multimedia.
Further, some **usability interaction improvements** to increase the effectiveness of the tool are to be made: use **search box for zip codes** so that the users need not know the location of the area in the map they are looking for; use a **three-color scheme** to represent the variation in the popularity. I feel the intention of a one long color variation is not met as it is hard to distinguish between 25\textsuperscript{th} and 50\textsuperscript{th} position by the color. The color scheme should assign the first ten positions to a color, the next 15 to the second color and the last 25 positions to the third one; **current state preservation**: loss of the current selection happens when there is a switch between categories (meta score, alphabetical, and most rented), it is a good navigation practice to always preserve the selected information, therefore suggesting you to change the slide bar position accordingly instead of changing the selected preference; a **cool navigation tip** for the slide bar for the category (alphabetical) can have **A-Z categories subscripted under the slide bar**, this gives an easy link to select a movie; a **score range** under the slide bar can be used for the **meta score** and **rented** categories; **rating** can be added as an additional category. This is more informative as users tend to follow other users choices.

Figure 1: Inconsistency of the images: Dragged area of the map and the highlighted thumbnail.
Figure 2: Easy Navigation tip – Have click-able links in the details on demand information. Underlined means that they can be click-able. Also shows the Expand link to see the complete popular list.

I hope that these insights and improvements will curtail to an improvement of the visualization tool.

Sincerely,

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