INTRODUCTION

Recently, information visualization techniques have been applied in the field of industry, such as journalism, sports, finance, and education, etc. For industry field, the key point of information visualization is to present data in a clearer way to provide an easier understanding. Especially for the press industry, the general readers, unlike experienced experts, are not trained for data analysis. It is a challenge for the general readers to discover patterns or derive insights from the data. To address this issue, narrative visualization was developed.

In our work, we combined a series of visualization techniques including a WebGL based 3D map, a linkage matrix and an annular histogram calculator in a narrative visualization entitled “China’s Property Market Report”. It is a trial to use narrative visualization for a deep journalism report with the real world case. We deployed our work online.

PROJECT DESIGN

In this project, editors collected property market data of 70 Chinese cities, including the monthly housing prices, month-on-month (MoM) index, average household disposable income and annual policies from 2005 to 2016. The project is developed on both PC and mobile platforms, with two different GUI principles (a). A theme picture (c) subtly matching with colour palette (b) was used as cover to attract the readers and introduce the interesting topics of the later pages. Then there are three different views sequentially presenting data: 1) 3D map view, 2) Linkage matrix view, 3) Annular histogram calculator view.

EARLY EVALUATION AND DISCUSSION

The project was published in Caixin Datanews (a Chinese press) in December, 2015[1] and was awarded as 2016 SOPA “Excellence in Digital News” . Judges commented this project as “The sheer amount of data crunching for this project is admirable ... this package uses code but vivid numbers to approach one of the China’s most important economic and social topic, deciphering it from so many lenses that any Chinese resident can both get a comprehensive view and information relevant to him/herself.” Since deployed online, over 4000 users visited this project, and user average stay time is over 7 minutes. At this early stage, we contribute this success to the emphasis on immersive and narrative visualization. In the future we will summarize the general design principles and lessons learned for the data journalism from the proposed application.

ACKNOWLEDGEMENTS

This work is funded by NSFC Key Project No. 61232012 and the National Program on Key Basic Research Project 2015CB352503. Early phase of this work is supported by NSFC No. 61170204, this work is also supported by Caixin Media and PKU-Qihoo Joint Data Visual Analytics Research Centre.

Contact:
vis@pku.edu.cn - xiaoru.yuan@pku.edu.cn
http://vis.pku.edu.cn - xiaoru.yuan@pku.edu.cn

Keywords: Data Journalism, Narrative Visualization, China's Property Market.