## Digital perspectives on aging issues: A case of the USA

Y-J. GAN, L. LEI. Digital perspectives on aging issues: A case of the USA. Gerontechnology 2014;13(2):199; doi:10.4017/gt.2014.13.02.386.00 Purpose Unlike traditional papers based on theory or statistics, in this paper, we introduce how to observe techno-scientific controversies based on digital tools. We try to represent the complexity of social debates surrounding aging issues in a legible form, such as word clouds. The data are particularly large and easily acquired. Based on preliminary results, we can further our study in specific topics by applying traditional research methods. This case is a good example of the significant influence of new technology, especially in the era of big data. **Method** We applied many digital tools, including some Google applications, in this paper. By applying Google Scraper, we input the URLs of top ten newspapers in the tool. After entering the keywords, such as 'aging and US', we will get the source cloud, from which we can have a graphical view of relative popularity of specific topics in the mainstream media. We search keywords such as 'aging issues' in Google, and then, by the tool of Harvester & text ripper, we can easily get the body of texts. In the different Google engine such as News or Blog, the text will be different2. Based on the text we can further our analysis by tools such as Many eyes to get a comparison of the content we get from different search sources or methods. Word clouds or Tree clouds can also be got quite easily. Results & Discussion In Figure 1, the term 'aging population' is frequently mentioned by almost all of the important newspapers in United States, while 'aging issues' seems not enjoy such a popularity, from which we may infer that American society holds an optimistic attitude towards aging, instead of regarding it as a problem or threat. A normal phenomenon accompanied with the social development was a role preferred. In Figure 2, commercial companies, such as Pfizer, are playing increasingly important roles in eldercare fields, not only in service and product provision, but also in research and policymaking. Last but not least, in Figure 3, terms such as 'heath care', 'retirement age' and 'transportation housing' that have something to do with public issues, receive more attention from the media. The words which are more popular in the blogosphere are always concerned with people's own lives, such as "senior living". All in all, digital tools can provide a novel perspective on the popular discourse of aging.

## References

- Tommaso V. Public Understanding of Science 2012;21(7):796 812; doi:10.1177/0963662510387558
- Gerhart SL. First Monday 2004;9(1); doi:10.5210/fm.v9i1.1111

Keywords: digital methods, information visualization

Address: Institute of Population Research, Peking University, Beijing, China E: ganyujie0912@gmail.com

```
Source cloud - sources for issue "aging population united states (retrieved by Google Scraper)
online.wsj.com
(603) nytimes.com
(579) washingtonpost.com
(478) chron. com
(456)
          usatodav.com
(360)
          chicagotribune.com
(355)
         latimes.com
(346)
         philly.com (242) denverpost.com
Source cloud - sources for issue "aging
         + united states (retrieved by
Google Scraper)
usatoday.com (26) online.wsj.com
(259) nytimes.com (65) latimes.com
(42) washingtonpost.com (19) chicagotribune.com
(35) nydailynews.com
 (651)
               philly.com (9) denverpost.com
(20) chron. com (16)
```

Figure 1. Comparison between people's attitude towards 'aging population' and 'aging



Figure 2. Word cloud of Google News

Your visualization of two tax has has has has had your content of the properties of

deviet cortese Tabor force living chaptains america ready senior living