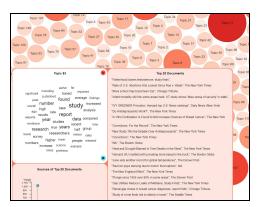
The media hides core values of science behind "data-speak."

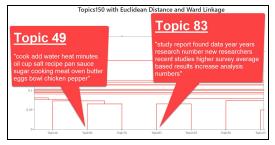
With few exceptions (see KF-5-6), media coverage of science in our Collection21 (28,957 articles in top U.S. newspapers mentioning the "humanities" or "science[s]") rarely brings to the surface the core paradigms and values of science--e.g., the nature of empirical observation, experimentation, validation, and theorization. In our topic model of these articles this seems true even in the case of topics such as #15 on embryo and stem-cell science, and #48 on climate science. Articles on these topics deal with sciences that bear on ethical, political, and social values. But they seldom bring up issues of the value of knowledge and research grounding science itself.

Instead, the core paradigms and values of science tend to be locked up behind a veil of "data-speak." An example is the important topic #83, which has a high proportional weight in our topic model of Collection21. Topic #83 is not a thematic topic but what we call a "meta-topic" representing a kind of speaking. The articles associated with it are all over the map in terms of what they are about (e.g., medical, demographic, social, economic climate, environmental, food and dietary, and other issues). What they have in common is a mode of data-intensive research-speak (words like "study, report, found, data, year, years, research, number, new, researchers, recent, studies, higher, survey, average, based, results," plus lots of numerical figures and descriptors such as "increasing," "decreasing," and so on). We might say that what topic #83 represents is a constant stream of "truthy" scientific procedures,

experiments, tests, and results without the actual truth *value* of that stream ever coming into the light. In this regard, it is humorous that a cluster analysis of our topic model shows that topic #83 lies close not just to other science topics but *cooking recipes*. As it were, data in public discourse is a "recipe" for truth but not the actual cake of truth itself.



Topic #83 "data-speak" viewed in TopicBubbles



<u>Topic #48</u> on cooking recipes near topic #83 in a cluster analysis of the topic model (viewed in <u>DendrogramViewer</u>)

Document collection studied: <u>Collection21</u>: U.S. Top Newspapers, 2000-2018 (articles mentioning humanities or science)

Topic model of this collection: <u>150 topics</u>

Interesting sample topics in the model: <u>#83</u>, <u>#120</u>,

Representative articles: <u>a</u>, <u>b</u>.

Evidentiary documentation for this key finding: WE1S report