People Hear the Title First: A Mixed-Method Study of the Cultural Place of Science Fiction Across Media, Genres, and Decades

Dr. Eric S. Rabkin

Arthur F. Thurnau Professor Professor of English Language and Literature Professor of Art and Design University of Michigan

Titles of novels, short stories, films, and video games across all genres (Science Fiction, Romance, Westerns, and so on) are generally short, succinct to the point of being cryptic, yet at the same time they are often both the first point of contact for the consumer--reader, viewer, listener, or player--and also the kernel that lodges itself in people's minds before, during, and after consuming the titled work. As such, titles play a vital role in media consumption experiences. Aside from simply recruiting people's attention, titles can convey and label the content of the media product they represent and, by their at least subliminal persistence during the extended consumption experience, titles influence that experience. In subtle ways, reading *Gatsby* would be different from reading *The Great Gatsby* or one of several alternative titles Fitzgerald seriously entertained such as Trimalchio in West Egg. Assuming that texts, films, and games are not produced in a contextual vacuum but rather mark products within complex cultural systems of production and consumption, we expect titles to follow (after the fact), track (coeval with the fact), or even lead (before the fact) cultural dynamics noticed through other lenses (such as news media reports of prominent activities, such as war). Because of its wide cultural diffusion (in most entertainment media, in industrial design, in city planning, and so on), Science Fiction provides a superb field for cultural analysis. To understand the differences among works of Science Fiction in different media and to study the status of Science Fiction titles as markers of cultural dynamics, we employ an innovative approach to performing data mining on titles from several different media. We conduct cross-sectional as well as longitudinal (across several decades dating back to the 1930s where possible) frequency analysis of title words of Science Fiction novels, short stories, films, and video games to detect textual patterns that correlate with mediumspecific consumption experiences and cultural dynamics. In addition to using publicly available databases (ISFDB for novels and short stories, IMDB for movies, and GiantBomb for video games), we also use our custom built GEP (Genre Evolution Project) database of short stories published in American Science Fiction magazines (1923-2000). For the GEP database, we have coded thousands of short stories along many dimensions of content and style which allows us to identify much more detailed patterns of textual and cultural correlations than would title-analysis alone. The GEP database provides a well-defined snapshot of the overall textual production in Science Fiction short stories. In the present study, we extend results obtained from analyzing GEP data and results obtained by title analysis across media by linking both sets of observations and demonstrating that the more and less detailed approaches reinforce each other. A main methodological conclusion is that our minimalist approach to textual data mining of titles is sufficient for the detection of patterns that correlate with (follow, track, or lead) actual cultural dynamics.

Eric S. Rabkin, English Language & Literature and Art & Design Rainer Hilscher, Epidemiology, University of Michigan



Center for the Study of Complex Systems