In Data We Trust: The Limits of Algorithmic Culture

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Social television analytics tracks television viewers' comments about and interaction with television content on social networking sites, forming data sets that complement television ratings. The promise of social television analytics is that engagement can be quantified and used to supplement traditional, exposure-based metrics; the rise of social television analytics has pushed the television industry to value its audiences not only as impressions but as active viewers. Social television and other forms of digital media provide more granular data about audience behavior, including engagements, than traditional television. Since there are many different companies collecting and providing metrics on social television, not to mention the first-party data available directly from social networking sites like Twitter, television producers and advertisers have a lot of data at their fingertips, all of which comes from different algorithms. Thus, the growing field of social television analytics provides a case study in the importance of understanding methodology when studying algorithmic culture. In particular, industry powerhouse Nielsen currently releases Social Content Ratings (SCR); given their prominence, their algorithm must come under some scrutiny. Nielsen's ties to traditional television means that this algorithm functions in self-serving ways for Nielsen and could misrepresent viewer interactions with television content on social media.

Nielsen Social offers different services in its tool, including ratings, 24/7 tracking, and brand affinity reports. However, only select data from the Social Content Ratings is available for public view; the rest is reserved for industry professionals. Nielsen Social's partially public-facing Social Content Ratings are limited since the algorithm captures social conversation surrounding live broadcasts, thus privileging engagement with live television. With further institutionalization, Nielsen's Social Content Ratings could exert significant power as currency in the television marketplace. Therefore, the inherent limitations within the algorithm of Nielsen Social Content Ratings exemplify an industry attempt to mold an audience for its own purposes, as Nielsen attempts to maintain control over the television industry and its audience as viewer behavior and industry practices evolve.

Due to its history of tracking traditional television, Nielsen favors live television, and Nielsen Social manipulates data to serve its own purposes by collecting data in ways that favor live interaction. Nielsen currently gathers its Social Content Ratings by aggregating all the Twitter, Facebook, and Instagram posts and interactions about a particular television program during its broadcast and both three hours before and after its broadcast; the raw numbers are then aggregated to create rankings of all programs.[1]

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[1] See
http://www.nielsensocial.com/methodology-matters-a-key-to-social-tv-measurement-is-in-the-det
ails/ for an explanation of the original ratings including Twitter and Facebook and

Nielsen publically releases a Weekly Top 10 most social broadcasts report, with sports broadcasts separated out from series and specials, which are considered one category for these public rankings.[2] An understanding of the algorithm that drives this report is paramount to understanding the data that Nielsen releases to the public and that academics can use. Since the algorithm captures social conversation around linear television airings, it excludes program conversation delayed more than three hours after broadcast, which could over represent programs with heavy live viewership and under represent those more frequently time shifted, meaning that, in many ways, these Social Content Ratings are just as problematic as Nielsen's traditional television ratings.

While many algorithms used by the media industries are kept proprietary, in instances where companies divulge information about their methodology, it is crucial to understand exactly how they measure data and what the ramifications of its use are. The case of Nielsen Social is a case of an institutionalized company (Nielsen) with strong influence over the television industry stepping into the newer space of social television analytics. Nielsen, thus, is invested in convincing television networks and advertisers that they should use its data; both parties still value live viewing, so Nielsen's ratings emphasize this. In this way, Nielsen seeks to maintain the power it has over the television marketplace, despite shifting audience interaction with television content, and audiences and fans are at a disadvantage since their evolving practices of viewing and interacting with television content are not equally counted by the algorithm. As with the limitations of Nielsen's panel sampling methodology for its traditional television ratings, scholars analyzing social television should note the inherent limitations of the algorithms measuring social television ratings. Since this paper has only considered the time frame surrounding data capture for Nielsen Social Content Ratings, further analysis of data collection, including key words and conversation surrounding organic and paid posts, is necessary, alongside considerations of the methodologies of other social television analytics companies.

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http://www.nielsen.com/us/en/press-room/2018/instagram-measurement-now-available-in-nielsen-social-content-ratings.html for the explanation of the newer inclusion of Instagram
[2] See http://www.nielsensocial.com/socialcontentratings/weekly/