Participation and Power through Algorithmic Imaginaries

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Abstract

One form of participation in algorithmic ecosystems is in and through the algorithmic imaginaries that co-create how the technical objects of those ecosystems are perceived and received. Recognizing the role of these imaginaries in governing algorithmic ecosystems might expand the number and varied situatedness of active participants in the construction and governance of algorithmic ecosystems.

Author Keywords

imaginaries; participation; platforms

ACM Classification Keywords

K.4.1 Computers and Society: Public Policy Issues.

Introduction

Participation in algorithmic ecosystems includes not only the production of the "particular line[s] of code as such" [5] or the performances to be made "algorithmically recognizable" [4] or the formal mechanism of oversight over lines of code and the data inputs and outputs but also the various articulations of the code for and in algorithmic imaginaries. Bucher defines an algorithmic imaginary as "the way in which people imagine, perceive and experience algorithms and what these imaginations make possible" [2]. These various cultural algorithmic imaginaries might be

created through and constituted in those utterances and practices that produce ways of seeing and then acting in algorithmic ecosystems.

The web search ecosystem, for instance, enlists participants into various scripts [1, 6]. These scripts, or roles, implicate participation in the construction of the purported "objective" objective of "relevance" pursued by search engine producers [9], the content producers and search engine optimizers' "efforts to face the algorithm" [4], and social relations constructing the perceived and effective authority [7] and varied practices [8] of web search. People taking on any of those roles are influenced by, and influence others with, different search imaginaries.

Spaces for Participation

While there has been some work looking at how participant users, diffuse across time and space, perceive with imaginaries and then act in, for, or against algorithmic ecosystems [2, 3], the co-productions of those perceptions and the consequences of those practices are open to further study.

While the power and responsibility held by the owners or producers of algorithmic ecosystems is immense, the myriad users speaking to, within, or about the systems often have actually realized but often underappreciated and, to themselves, often unrecognized control over the initial inputs and eventual outputs of the systems. This is not to shift responsibility for the performance of these vast systems of control to the user, but to acknowledge possible spaces for action, or participation, for users.

Different and overlapping cultural imaginaries inform the extent and manner of participation practices (and even non-user participation) within algorithmic ecosystems and the sociotechnical object is changed through the cultural relations and in delayed and diffracted response to articulated and unarticulated changes to the technical object itself.

Stakes of Participation

The stakes in the algorithmic ecosystems are constituted in the algorithmic imaginaries just as the stakes of the algorithmic imaginaries co-construct the stakes of the algorithmic ecosystems. The importance of the algorithmic ecosystems is ever dependent on the power and trust granted to them explicitly and implicitly through our cultural imaginaries which ground the practice and policies of the algorithmic activity. The algorithmic imaginaries are made and modified in the public sphere while the algorithmic ecosystems increasingly constitute the public sphere. As Sundin et al. wrote, of the Google web search algorithmic ecosystem, "Google is an actor constantly involved in re-making social relations at the same time as the social relations also construct the authority of Google" [7].

Conclusion

These cultural imaginaries also contribute to the construction of the social license for the operation of corporate algorithmic ecosystems and in the construction of moral license justifying worker participation within the workplaces that produce them [10]. The cultural imaginaries of algorithmic ecosystems are an apt site of study for and site of participation in, and even over, algorithmic ecosystems.

References

1. Madeleine Akrich. 1992. The de-scription of technical objects. In *Shaping technology/building society, studies in socio technical change*, edited by WE Bijker and J. Law (Eds.). MIT Press, Cambridge, MA, 205-224

2. Tiana Bucher. 2017. The algorithmic imaginary: exploring the ordinary affects of Facebook algorithms. *Information, Communication & Society*, 20(1), 30-44.

3. Angèle Christin. 2017. Algorithms in practice: Comparing web journalism and criminal justice. *Big Data & Society*, 4(2), 2053951717718855.

4. Tarleton Gillespie. 2017. Algorithmically recognizable: Santorum's Google problem, and Google's Santorum problem. *Information, Communication & Society*, 20(1), 63-80.

5. Lucas D. Introna. 2016. Algorithms, governance, and governmentality: On governing academic writing. *Science, Technology, & Human Values* 41.1: 17-49.

6. Deirdre K. Mulligan and Daniel S. Griffin. 2018. Rescripting Search to Respect the Right to Truth. *2 GEO. L. TECH. REV.*: 557-584

7. Olof Sundin, Jutta Haider, Cecilia Andersson, Hanna Carlsson, and Sara Kjellberg. 2017. The search-ification of everyday life and the mundane-ification of search. *Journal of Documentation* 73, no. 2: 224-243.

8. Francesca Tripodi. 2018. Searching for Alternative Facts: Analyzing Scriptural Inference in Conservative News Practices. Retrieved September 28, 2018 from https://datasociety.net/output/searching-for-alternative-facts/

9. Elizabeth Van Couvering. 2007. Is relevance relevant? Market, science, and war: Discourses of search engine quality. *Journal of Computer-Mediated Communication*, 12(3), 866-887.

10. Sally Wheeler. 2015. Global production, CSR and human rights: the courts of public opinion and the social licence to operate. *The International Journal of Human Rights*, 19(6), 757-778.