Evolving norms: How team science affects authorship

de Vreese, C.

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Evolving Norms: How Team Science Affects Authorship

Scientific endeavors, insights, and products may emerge from many different settings: from long-term individual research, from serendipity at a conference, and from organized (lab-based) group efforts, just to mention a few. How do these differences translate into authorship in final publication?

The observation has been made, in the *JMCQ* Forum and elsewhere, that the communication field is moving toward more "co-production" and less single-author pieces. This is the result of many converging developments: labs and research groups as organizing principles, grants enabling teams to work jointly on a topic, funding incentives in certain areas, bigger questions being addressed with more elaborate research designs, interdisciplinary pushes, and the specialization of, for example, data analysis and visualization of results. In this essay, I will address some of these developments, but first clearly state that it is important to have this dialogue and I welcome the *JMCQ* initiative to collect different experiences and perspectives to move the dialogue further. Second, let me declare myself in agreement with Kerr (in this Forum).

His call for transparency and fairness is legitimate and important. At the same time, it is also important to reflect on why we have this dialogue.

Let me comment on some of the factors that have led to the increase in multiauthored pieces in communication science.

One set of reasons stems from intellectual curiosity, serendipity, and the quest to address questions in a bigger perspective, for example, comparatively. Scholars have a long tradition of connecting in comparing phenomena across time or across countries. The comparative turn in communication science (Blumler & Gurevitch, 1995) has sparked both smaller and larger team projects with resultant publication lists. Hallin and Mancini's (2004) seminal work is the result of comparative thinking, great scholarly synergy, and the combination of insights that collectively go beyond that of an individual. Taking three recent examples, we can see how such efforts have also allowed for the pooling of resources so that smaller ideas could be scaled up to large, comparative content analyses (e.g., de Vreese, Esser, & Hopmann, 2018), joint social media and survey data collection (e.g., Vaccari, Chadwick, & O'Loughlin, 2015), or running more elaborate experiments (e.g., Hameleers et al., 2018).

A second set of reasons stems from the push toward interdisciplinary collaboration. To understand, for example, the current role, operations, and impact of platforms in the news sector, it makes a lot of sense to combine insights from communication science with that of data science, legal scholarship, public administration, and business. Manuscripts emerging from such projects will typically include multiple authors and be reflective of such team science.

A third set of reasons stems from universities' or science foundations' push toward focus on larger questions. This typically involves grant opportunities that will allow for one or more (senior) scholars to recruit a team of (more junior) scholars to work jointly on a project. The European Research Council (ERC) is pushing such team science with its flagship grant scheme (for junior, medior, and senior scholars) and publications reflect these efforts (e.g., Domahidi, Breuer, Kowert, Festl, & Qandt, 2016).

A fourth set of reasons stems what may be dubbed "professionalization." Implicitly, we consider a well-rounded scholar one who is on top of the literature and is able to write a grant application, design a study, coordinate data collection, manage data, execute analyses, develop tables and figures, and write eloquently. Our toolbox in terms of, for example, data analysis is, however, expanding and becoming more specialized. Substantively our field is organizing it in smaller and more specialized subfields. This can lead to a sensible division of labor, where some team members take the lead in grant acquisitions, others in design, yet others in analysis and where writing, rewriting, and editing are a joint process. Such specialization and division of labor are also conducive to longer author lists.

For each of these developments, we can have a discussion about the scope and desirability of the development, but I happen to believe that most of these have allowed us to address bigger questions, get at these questions from more perspectives, and encourage both specialization and critical thinking within research teams. What is crucial to the discussion is that authorship is not merely about writing. Authorship is the outcome of a contribution to a research process. It should reflect a work division, a workflow, and it acknowledges credits beyond the act of writing. Authorship can stem from having an early idea (and getting it funded), from data analysis and presentation, and from actual writing.

Does this mean that team science and multiple authored pieces is the only way forward. No! There is plenty of space for different traditions and modes of working. What it does mean, however, is to have an open dialogue about these changes, how it affects our research processes, and ultimately our author lists. This dialogue must be open and cognizant of power relationships (e.g., institutional, between senior and junior scholars, between different groups and disciplines). It must involve editors and scholars serving on tenure review and hiring committees to established a shared understanding of this. We can learn a lot from other fields and emerging practices in our own in terms of how we give credit to larger and more modest contributions to the different phases in the research process (see also Kerr's essay). At the end of the day, authorship should be inclusive, transparent, and reflective of actual contributions to a research process, which is oftentimes a team effort.

Claes de Vreese
University of Amsterdam

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Author Biographies

Robert L. Kerr (PhD) is Edith Kinney Gaylord Presidential Professor at the University of Oklahoma. He teaches media law and media history in the College of Journalism and Mass Communication. His books include *The Corporate Free-Speech Movement: Cognitive Feudalism and The Endangered Marketplace of Ideas* and *How Postmodernism Explains Football*.

Claes de Vreese (PhD) is a professor and chair of political communication at ASCoR, University of Amsterdam. More information about research, interest, and teaching can be found at claes-devreese.wordpress.com.

Robert A. Logan (PhD) a member of the senior staff of the U.S. National Library of Medicine and is a professor emeritus at the University of Missouri-Columbia School of Journalism. Dr. Logan is the co-editor of: Robert A. Logan and Elliot R. Siegel. (2017). Health Literacy: New Directions in Research, Theory, and Practice. (Amsterdam: IOS Press) and currently is co-editing a second book about health literacy research and practice.

Linda Steiner (PhD) is a professor in the College of Journalism at the University of Maryland and the editor of *Journalism & Communication Monographs*; she was an associate editor of *JMCQ*. She has published over 100 book chapters and refereed journal articles, and has co-authored or co-edited eight books.

Geraldine S. Pearson (PhD, PMH-CNS, FAAN) is currently editor-in-chief of the *Journal of the American Psychiatric Nurses Association* (JAPNA). She is an associate professor in the Department of Psychiatry at the University of Connecticut School of Medicine. She is a trustee of COPE and currently the cochairperson. She has written extensively on psychiatric issues involving children and adolescents.

Charon A. Pierson (PhD, GNP, FAAN, FAANP) was the editor-in-chief and executive editor of the *Journal of the American Association of Nurse Practitioners (JAANP)* from January 2000 to June 2018. She is now the editor emeritus for *JAANP* and serves as the COPE liaison. She has consulted, presented, and published extensively on issues related to ethics in writing and publication. She was elected to COPE in 2012 and is serving her second term as the Secretary of the Trustee Board and the Council. She has also served on or chaired several COPE committees: Education, Finance, Membership, Strategy, and Governance.