



AUTHORSHIP & PUBLICATION

What It's All About



PUBLISH or PERISH

Researchers communicate the results of their work through publication, which can be informal or formal, depending on the context.

INFORMAL PUBLICATIONS

- Preliminary results, e.g., those shared at symposia, professional conferences, intra-laboratory meetings, and the like, while the research is still ongoing.
- Press releases and interviews with journalists
- Testimony before non-scientific bodies (e.g., funding agencies)

FORMAL PUBLICATIONS

- Papers for publication in scholarly journals
- Books detailing the research project, its context, and its results at greater length than journal articles permit
- These publications normally take place after research is completed and final results analyzed

AUTHORSHIP

or, Whose Work Is It Anyway?



WHAT IS THE MEANING?

What is authorship and why is it important?

- Authorship places on record who is responsible for research, so that credit may be properly attributed.
- Without author credits on published works, researchers in many fields will find it difficult or impossible to advance.
- Academia considers itself a meritocracy, and authorship is its chief currency of merit.
- DISCUSS: Should there be other means, besides publication, for researchers to establish their *bona fides*? If so, what would they be?

WHO IS AN AUTHOR?

It's more than just putting words in order.

The criteria for who can be listed as a publication's author vary from field to field, but generally, to be credited as an author, one must have:

- been a participant in the development, implementation, and analysis of the research;
- taken part in the actual drafting of the publication; and/or
- approved the draft to be submitted for publication.

Even within different fields, not everyone agrees about how many of these boxes a person must be able to check before he or she can expect to be listed as an author. (In some, having performed the actual *writing* doesn't qualify by itself—see GHOST AUTHORSHIP, slide 13.)

SOME KEY AUTHORSHIP ROLES

- **FIRST AUTHOR:** The first author named in the list of authors that heads the publication. Often, although not always accurately, perceived by peers and the public as the person chiefly responsible for the findings presented therein.
- **LAST AUTHOR:** In some fields, the last name on the list is also given special prestige for some reason.
- **CORRESPONDING AUTHOR:** In multi-author scenarios, it's customary for one author to be the point of contact with the potential publisher(s). The corresponding author is ultimately responsible for the content of the paper if and when published.
- **KEY GRIP:** This is not an authorship role, I just thought this slide would look more balanced with four bullets on it.

POTENTIAL POINTS OF CONTENTION

or, Some Animals Are More Equal than Others

- At some institutions, the laboratory director expects author credit on all publications emerging from his or her laboratory, regardless of actual involvement. (Hence the “approved final publication” clause in the previous list of criteria.) NOTE: Some journals frown on this practice. See HONORARY AUTHORSHIP on slide 12.)
- Priority order: Should people who were only involved in data collection be listed, and if so, do they come higher or lower on the list than people who, for example, participated in the analysis but collected no data themselves? There are no universal guidelines for this.
- DISCUSS: Is *everyone* who was involved with a research project an author? That could get very unwieldy indeed in today’s Big Science.
- DISCUSS: Should there be harder rules for these matters than currently exist in most disciplines?

DISCIPLINE SPOTLIGHT: HISTORY

Authorship in the field of history is generally pretty straightforward. Historians don't customarily work in large groups like, e.g., particle physicists or pharmacologists.

- Generally speaking, author credits on historical publications are reserved for the person or persons who did the actual writing. Other direct contributors, such as cartographers, are also credited on the author page, but not as authors per se.
- Indirect contributors such as other researchers whose publications have been used as sources, will be cited in notes and listed in the appended bibliography.
- In some sub-disciplines, such as historical geography, people who worked on supporting data (e.g., GIS tabulation) will be credited in the Acknowledgements.

There are few hard-and-fast rules for these things in the humanities.

PUBLICATION

Makes the (Academic) World Go 'Round



THE PARTS LIST

Things every publication should contain

A research publication should contain the following sections:

- ABSTRACT—A brief summary of the publication, so readers can determine quickly whether the article is of interest to them. In modern Internet parlance, the TLDR section.
- METHOD—A description of how the research was carried out. This should be as detailed as necessary so that other researchers can try to duplicate the results.
- RESULTS—An explanation of what the research yielded. No analysis should be present here; it's meant to be a summary of what was found, not what it meant.
- DISCUSSION—An evaluation of the results' significance. *This* is the place to discuss what the results meant, and whether they agreed with the researchers' expectations.
- METADATA—Notes, bibliography, and acknowledgements.

DON'TS and DON'TS

There are a lot of don'ts in this business.

- HONORARY AUTHORSHIP—The inclusion of people in the list of authors who are in fact not, based on whatever criteria are customary in the field, authors.
- GHOST AUTHORSHIP—The strange converse of honorary authorship: publications which are presented as if they were written by inarticulate entities, such as laboratories or corporations.
- SALAMI PUBLICATION—Preserving old data by liberally salting and hanging in a dry place. No. Sorry. This is publishing results that should have been concentrated in one paper as several smaller papers instead, usually to pad one's publication count.
- DUPLICATE PUBLICATION—Publishing a document that's already been published again, without mentioning that you've published it before. Also, its less intuitively problematic piecemeal cousin, self-plagiarism.
- PREMATURE PUBLICITY—Announcing results to the public before they have been properly reviewed for publication.

HONORARY AUTHORSHIP

It's not just a nice gesture.

Honorary authors may include:

- Department chairs;
- Laboratory heads;
- Persons who provided funding, materials, or equipment;
- Persons influential to the career of one or more authors, but not actually involved in the project being described; and
- Well-known figures in the field (to boost credibility).

Honorary authors dilute the credit for research accomplishments and undermine readers' ability to tell who was responsible for what, as well as potentially unfairly conveying prestige on those who have not earned it.

In an effort to inhibit this practice, some journals now request that publications specify each author's contributions, either for the editors' information, or so that readers can judge for themselves whether all involved truly merit author credit.

GHOST AUTHORSHIP

Papers don't just spontaneously appear.

The converse of honorary authorship: rather than listing authors who did not contribute, these publications fail to mention significant contributors, and may list no authors at all.

In the most egregious instances, a paper may be ghostwritten *and* credit one or more honorary authors at the same time, usually by claiming to have been written by a prominent authority who really played little part in the work.

Ghostwritten publications, especially those with spurious “guest” author credits, often obscure their true sources in order to avoid the credibility problems that come with, e.g., corporate sponsorship, or to suggest a level of prestige or authority its real author(s) don't possess.

DISCUSS: Should journals accept papers whose provenance isn't sufficiently documented?

SALAMI and DUPLICATE PUBLICATION

or, Padding Your Stats

- Researchers sometimes split up their results into multiple parts and publish them separately. This gives the appearance of a deeper publication history. However, it can also present an incomplete picture of a given research project to readers who haven't seen all the pieces, and given how arduous and time-consuming the peer review process is, it wastes a lot of time and energy.
- Sometimes, a project's results can be so complicated that multiple publication really is required. This is down to the authors' judgment to determine, but the default should be to err on the side of fewer pieces.
- Publishing the same document more than once has many of the same drawbacks as salami publication, plus it distorts any statistical analysis of a topic's publication history that may be done by subsequent researchers.

SELF-PLAGIARISM

The Illogical Sin

Self-plagiarism is like duplicate publication, but subtler, since it involves copying *parts* of one's own previous work and re-presenting them (without citation) in documents which otherwise contain new information.

This can cause publications which use automated plagiarism vetting software to flag the submission as plagiarized on the basis of sentence matching, even though it's really the same author's work recycled. It may also lead to the same problems as salami and duplicate publication, in that it skews statistical meta-analyses of publications on particular topics, and it tends to make the author seem more prolific than is really the case.

- DISCUSS: Is recycling one's own work dishonesty or efficiency?
- DISCUSS: Does the usefulness of meta-analyses ("studies of studies") outweigh the flaws that may be hidden in their data sets?

PREMATURE PUBLICITY

“Publication by press conference”

- Some researchers or institutions choose to announce findings before they have undergone proper review—often in a bid to establish priority for eventual patent purposes.
- The University of Utah’s notorious “cold fusion” press conference of 1989 is modern science’s most famous example, both of the practice itself, and of why you shouldn’t do it.
- Never assume you can’t possibly be wrong.



Martin Fleischmann, left, and Stanley Pons, at their infamous 1989 press conference. *Frame capture from an off-air recording of CBS coverage*



THANKS FOR COMING

have a safe trip home

