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## Applying FAIR principles in the phonetic sciences

The credibility of research findings in the phonetic sciences, as in any other branch of scientific inquiry, depends critically on the possibility to verify these findings and the methods used to obtain them. A commitment to peer review constitutes a pledge to uphold this principle. However, review procedures vary considerably among journals, both within and between disciplines, as do editorial boards'expectations of reviewers, and reviewers'expectations of the manuscripts and supplementary materials they evaluate. As such the peer-review process does not provide a uniform standard. Similarly, verification of some elements of the methods (e.g., statistical analyses and code/software) may depend on expertise beyond that of many reviewers within a particular discipline.

By applying the FAIR principles (Findable, Accessible, Interoperable and Reusable principles), researchers can ensure that their research data and methods remain available for review as scientific standards evolve and in spite of potentially changing institutional affiliations of contributing researchers. Application of these principles additionally maximizes the value and potential impact of the research contributions, since they can be more readily adopted by others.

In the present project, I assess and build on a recent publication that introduced a novel approach for the normalization and analysis of acoustic-phonetic data collected in investigations of phonetic accommodation —the adaptation of speech production patterns resulting from verbal interaction with other speakers. Effects of phonetic accommodation are often found, they are typically small in magnitude. Normalization may help ensure that these effects are reliably found when present. While code snippets for replication of the statistical analyses were provided, neither the data nor the normalization method were findable or accessible, thus limiting the reusability of the method. Scripts for the normalization process are made available in a Git repository, along with a specification of the prerequisite data/format, and the analytical data upon which the reported finding was based.

The current project is submitted as a demonstration of and as encouragement towards the application of FAIR principles in the phonetic sciences, both in research that is planned or under way, and where possible for already published findings.

## Slot length

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