Summary

The category of grammatical number is common in natural languages. Attested number systems range from a simple choice between singular and plural forms to more complex number value arrangements involving, for example, dual and trial numbers. Grammatical number has an impact on almost every major part of language organization from morphosyntax through semantics to pragmatic reasoning. Mastering number forms is also a major step in language acquisition. For these reasons, grammatical number can be of great interest to researchers investigating the psychology of language. The present work discusses the findings of studies from several areas of experimental psycholinguistics. The studies include seminal works in each area spanning multiple decades of research and illustrating the major investigation directions. The selection of works is intended to familiarize the reader with the experimental techniques employed to study different aspects of grammatical number processing. The techniques encompass behavioral methods (e.g., number judgments, word recall, lexical decision, picture naming) as well as techniques based on monitoring the brain activity (e.g., EEG, fMRI). In addition to the overview of the literature dedicated to investigating grammatical number processing, the paper offers a brief summary of the typology of grammatical number systems in the world's languages and discusses the most important findings of the research on numerical cognition.