Editorial:
Introduction to the special issue on Introducing bibliometrics in applied linguistics

It is healthy and normal for an academic discipline to reflect on its publication conventions and practices, its incentive structures, and so forth. As social scientists, it is also natural for us to want to do so in a manner that is systematic and that employs well-established empirical methods, that is, by engaging in *bibliometrics* (see brief history of bibliometrics in Lei et al., this issue).

Bibliometric research is still relatively new and largely unfamiliar in applied linguistics. Most people I have mentioned this special issue to have looked at me sideways and/or responded with something like "biblio-*what*?" However, there is now a substantial-and-growing body of such work in the field, as evident in Figure 1, which presents bibliometric references in applied linguistics available as of this writing.
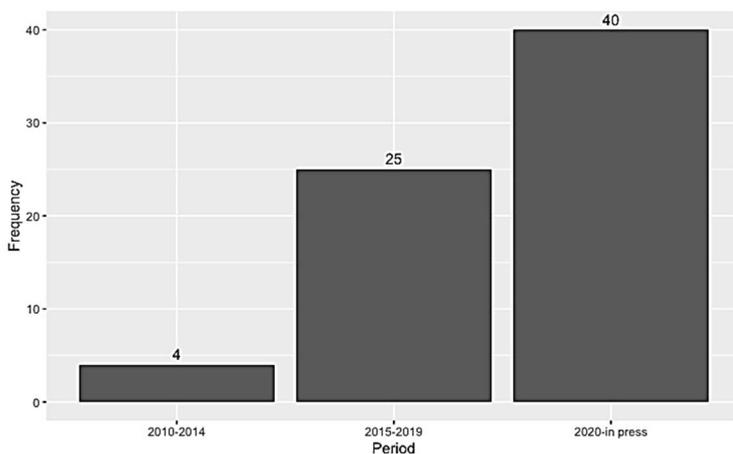

Figure 1 Frequency of outputs employing bibliometric methods in applied linguistics (2010-present, inclusive of this issue; https://lukeplonsky.wordpress.com/bibliometrics/)

The main goal of this issue is to formally introduce bibliometric research into applied linguistics and to thereby establish its place in the field. I also have two secondary goals in putting together this issue. First, the issue seeks to put on display the potential of this approach as a means to help us better understand many of the author- and publication-related patterns and developments in our field. In addition to this substantive goal, as a methodologist with a long-standing interest in secondary and meta-research of which bibliometric research is a sub-type (Chong & Plonsky, in press), I also hope that this collection of studies and the epilogue piece that closes the issue, by Vahid Aryadoust, would put on display the wide range of bibliometric techniques available to scholars interested in this type of approach.

Bibliometric research may seem new or unfamiliar to many of us. However, I see it as a natural extension of at least two closely-related developments that have been taking place in applied linguistics. First is the movement toward methodological reform. Among many other activities that make up this movement (see Gass et al., 2021; Plonsky, 2022), the field has scrutinized many methodological conventions while also introducing a range of new techniques and tools such as Bayesian data analysis and mixed effects modeling (Gries, 2021; Norouzian et al., 2018). Bibliometrics represents, to me, a fine example of another methodological innovation that is now part of the field's toolkit.

Another development that I see bibliometric research aligned with is the move toward research synthesis/meta-analysis and, more generally, synthetic-mindedness (Norris & Ortega, 2006). This latter movement manifests itself not only in research syntheses and meta-analyses, which have proliferated in recent years, but in the increased interest in replication research, open science practices, methodological synthesis, and greater reflection on the ways we carry out, report, disseminate, and use applied linguistics research (Marsden & Plonsky, 2018; Porte & McManus, 2019; Plonsky et al., in press; Sudina, in press). More concretely, bibliometric studies comprise another branch of meta-research (see Ioannidis et al., 2015, for an overview of meta-research across the sciences).

In contrast to other types of meta-research (see Chong & Plonsky, in press, for an overview of different types of synthetic research in applied linguistics), however, bibliometric studies are generally concerned with variables that deal with publication practices, patterns, conventions. For instance, some of the variables of interest in the present issue, with examples, include:

- authorship and collaboration, including, for example, number of authors; single vs. co-authorship; collaboration across countries/regions;
- types of data/analyses: quantitative, qualitative, mixed;
- substantive domains addressed such as, for example, listening, assessment, vocabulary, interaction, pronunciation (e.g., Demir & Kartal, 2022);

- journal, author, and field-wide impact: citation and co-citation patterns, journal/article impact factors (e.g., impact factor, h-index, Altmetrics), links to other disciplines;
- perceptions of journal quality and prestige;
- regional representation: authors, editorial board members.

Another distinguishing feature of bibliometrics is the sourcing of data. In addition to the hand-coding of different features found in primary studies (e.g., Bylund et al., in press), researchers engaging in bibliometrics collect data from a range of other sources. These include, among others:
- academic/scholarly databases (e.g., Web of Science, Google Scholar);
- journal websites;
- surveys of academics;
- corpus-based analyses of articles-as-text (see Plonsky et al., 2023);

Neither the lists above nor this brief set of example analyses/findings is meant to be exhaustive. The range of topics and techniques in previous works and those found in this issue – summarized eloquently in Aryadoust's closing piece – comprise just a sample of what is possible.

The seven empirical studies in this issue, in fact, are all prime examples of some of the many possible topis and techniques that can be found and employed in bibliometric research. Amini Farsani and Jamali hand-coded for authorship patterns and methodological orientations (i.e., quantitative, qualitative, mixed) in a sample of 3,992 studies. The authors also considered patterns of collaboration across regions (see related concerns in Xu et al.; this volume, Bylund et al., in press; Plonsky, 2023) and in relation to the methodological approaches undertaken. Xu, Zhuang, Blair, Kim, Li, Thorson Hernández, and Plonsky, the empirical study that follows, examines a range of authorship characteristics as well as article features as predictors of perceived journal quality and prestige. Building on early forays into bibliometric techniques being combined with more traditional synthetic methods (e.g., Al-Hoorie & Vitta, 2019), this study also uses a unique and compelling combination of hand coding, publicly available journal metrics, and survey data to shed light on some of the forces at play that conspire to influence our views of different journals and their corresponding citation patterns. The focus in Lei, Deng, and Liu is, by contrast, on one particular substantive domain: L2 listening. The authors consider a range of variables (co-citation patterns, influential authors) related to L2 listening research, spanning over seven decades. This study also highlights the use of one particular software designed for bibliometric research, VOSviewer (van Eck & Waltman, 2010; for another example of this software being used in applied linguistics, see

Gass et al., 2022). The next study in this special issue, by Riazi, Ghanbar, Mareft, and Fazel, explores publication patterns in a single, highly influential journal: *TESOL Quarterly*. Among other concerns, the authors lay out patterns across several time periods related to contexts, methods, and theoretical orientations. This type of bibliometric study can be especially useful both as a means to comprehend the history/development of a field but also to better understand the culture of a given journal. Subsequently, Chen takes on perhaps the broadest scope of all: the entire field of second language acquisition (SLA), and beyond. This study employs bibliometric data such as citation counts to consider the "intellectual flows" of knowledge taking place between SLA and other disciplines. The penultimate empirical study, by Paul Meara, explores (co-)citation patterns within two samples (or corpora) of studies of vocabulary research. Meara, it should be noted, is one of the pioneers of bibliometric research in applied linguistics; this issue and the work that led up to it would likely not exist if not for his influence and efforts in this domain. Hyland and Jiang present the final empirical study, which addresses the notion of interaction in written discourse. As in other studies in this issue, the authors treat their sample of 918 studies as a corpus, which is fitting and consistent with their approach and methods.

In light of the vast range of techniques exemplified in this issue, I encourage all those reading this to reflect on other types of questions and data sources that can be answered about the norms and conventions in academic publishing (again, see Aryadoust, this issue, for suggestions). As applied linguists who are highly trained in analyzing text-as-data, I believe we are uniquely positioned to contribute to this domain of research, both within and beyond our own field. To quote the song, *Into the Great Wide Open*, by the popular American singer Tom Petty, "the future [of bibliometrics in applied linguistics] is wide open." I very much look forward to future applications of bibliometrics as a path to better understanding our field and the means by which we generate new knowledge.

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