Helping Language Learners Put Concordance Data in Context: Concordance Cards in The Prime Machine

Stephen Jeaco, Xi’an Jiaotong-Liverpool University, Suzhou, China

ABSTRACT

While corpus tools provide several different ways to display relationships between words within texts and across texts, the main format for viewing concordance data is Key Word in Context (KWIC). In Computer Aided Language Learning, concordance lines in KWIC format may be accessed inside a concordancer or within other software through links to corpus data. Language learners can and do gain useful insights from exploring concordance data in KWIC format, but some kinds of information may be harder to see, some patterning of use may not be so obvious, and reading of complete examples may not be very easy. The Prime Machine was developed for language learners and aims to make corpus data easier to access and interpret. This paper introduces the design of the Cards Tab, which provides an additional way of viewing concordance data. Results from three evaluations with language learners and teachers show positive attitudes towards this display.

KEYWORDS

Concordance Lines, Corpus Tools, Language Learning, Lexical Priming

INTRODUCTION

The tools of corpus linguistics have made it possible over the last few decades for researchers and lexicographers to access vast quantities of examples for specific search terms, and to discover and analyse patterns of language use. For more than 30 years, this usage-based approach to the analysis of language, drawing on corpora of increasing sizes, has had a huge impact on the way in which dictionaries are constructed (Hanks, 2012; Renouf, 2007). Corpora have also been used to explore the nature of language (Hanks, 2013; Hoey, 2005). Archives of transcripts and specially constructed corpora from child language research have been the basis for corpus work on first language acquisition within Usage Based Linguistics (Lieve, Behrens, Speares, & Tomasello, 2003; MacWhinney, 2000). Lists of words and multiword units have been used for the grading and selection of items in second language learning and teaching (Bauer & Nation, 1993; Coxhead, 2000; Durrant, 2009; Simpson-Vlach & Ellis, 2010). Corpora have been a basis for the analysis of lexical and grammatical differences across genres and registers (Biber & Conrad, 2009; Biber, Johansson, Leech, Conrad, & Finegan, 1999; Thompson, 2004), and in translation (Baker, 1993; Hu, 2016; Teubert, 2004). Corpora can also be used to compare patterns in literature or language as a whole or with those of a specific literary author (Fischer-Starcke, 2010; Mahlberg, 2013; Semino & Short, 2004). In the Chinese context, computerized corpus research has also covered a broad range of linguistic fields over the last few decades (Li & Smith, 2015). Work continues in a host of areas including exploring vocabulary for testing (Jin, Guo, Mak, & Wu, 2017) and discipline-specific teaching (M. Zhang, 2013), exploring
China English (Xia, Xia, Zhang, & Nesi, 2016), exploring methods for extracting n-grams (Wei & Li, 2013), tracking changes in Chinese news media (W. Zhang, 2015), and building a system for opinion classification for Western news (Xiong, Xu, & Liang, 2014).

One of the central tools in corpus linguistics has been the concordance line, typically presented as Key Word in Context (KWIC), with each corpus example presented horizontally across the screen with a number of characters (letters) or words visible to the left and right. However, language teachers and language learners alike can find it hard, particularly at first, to understand how KWIC data can be used and interpreted. This paper presents the rationale and implementation of a complementary concordance line display format (Cards) which has been integrated into a new corpus tool (The Prime Machine) specifically designed with language teachers and language learners in mind. Feedback from teachers and students in three evaluations is reported, along with details of ongoing development and future plans.

LITERATURE REVIEW

Key Word in Context

The KWIC display provides a good way for users of a concordancer to explore multiple examples at the same time, with its vertical list of truncated sentences, typically with only a small number of words either side of the search term. Since the display is very compact, it means that a large number of results can be viewed at the same time, providing a degree of “safety” as conclusions about patterns of use are drawn (Mair, 2002). KWIC results can provide a “snapshot” of how lexis is typically used (Johns, 2002), can be seen as focusing on the “central” and “typical” (Hunston, 2002), and can be organised in such a way as to highlight patterns (Gaskell & Cobb, 2004). It has also been suggested that KWIC concordance lines can free learners from getting caught up in the story or message of a text so as to be able to focus on the language (Cobb, 1999; citing a problem raised by Mondria & Wit-de Boer, 1991). Sinclair (1991) suggests this same freedom is important for researchers, as the KWIC view provides access to patterns which are not meaning-bearing, allowing the distinction between the “physical objects” of text in the corpora and their meanings to be clear. Nevertheless, it has also long been established that wider co-text beyond the typical KWIC concordance line display may be required in order to access some information necessary for analysis or interpretation (Hunston, 2002; Sinclair, 1991).

Concordance Lines in CALL

There have been many software packages within the field of Computer Aided Language Learning (CALL) which have been designed to integrate with or incorporate concordance line data. Concordancers are a central tool for Data Driven Learning (DDL) activities, with both standalone packages such as MicroConcord (Scott & Johns, 1993), WordSmith Tools (Scott, 2010), and AntConc (Anthony, 2006), as well as web-based resources such as the Compleat Lexical Tutor (Cobb, 2000), BYU’s online concordancer (Davies, 2008-) and the Sketch Engine’s SKELL language learning site (Kilgarriff, Marcowitz, Smith, & Thomas, 2015) being used for hands on concordancing activities with language learners. Yoon (2011) gives an overview of studies into DDL. In China, studies into the use of corpora for language teaching have been promising at university level (Guan, 2013; He, 2015; Luo & Liao, 2015), and also for younger learners (Yu, Liou, Chang, & Vongpumivitch, 2011). In a recent meta-analysis of DDL research, Boulton and Cobb (2017) found that DDL approaches have been demonstrated to be effective. Their meta-analysis provides clear evidence:
Interactive Learning Between Chinese Students Learning English and English Students Learning Chinese on the Platform of Wiki
www.igi-global.com/article/interactive-learning-between-chinese-students/56328?camid=4v1a

WebCT Design and Users' Perceptions in English for Agriculture
www.igi-global.com/chapter/webct-design-users-perceptions-english/20046?camid=4v1a