



Reviewed work:

Connected Words: Word Associations and Second Language Vocabulary Acquisition. (2009). Paul Meara. Amsterdam: John Benjamins. Pp. 174. ISBN 978-9027219879 (paperback). \$49.95

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Meara's new volume primarily focuses on how word association data can be used in second language vocabulary acquisition research, particularly in the areas of the development of vocabulary depth, productive vocabulary skills and lexical organization in second language (L2) speakers. His book also serves as a concise summation of research to date involving word associations and second language vocabulary development. Given that Meara has done much work of significance in this area and that the majority of chapters comprise research which he has previously authored or co-authored, this book also doubles as an historical overview of Meara's own research with word associations and second language vocabulary acquisition.

Meara divides his book into eleven chapters under five main sections. Six of the seven chapters in the first three sections stem from papers published between 1978 and 2005. Meara arranges and links these coherently with highly insightful comments on their strengths and weaknesses. This retrospective approach allows Meara to situate his and others' work with word associations within the area of second language vocabulary research and more broadly within the field of second language acquisition itself. It also permits Meara, through hindsight and accumulated expertise, to point out unresolved issues in word association and second language vocabulary research and provide informed suggestions as to how future research might proceed. Several themes recur throughout Meara's book. Somewhat surprisingly, some of these focus more generally on research practices within the field of applied linguistics as opposed to specific

issues in vocabulary research. For example, Meara is critical of the field of applied linguistics, noting that it is “badly inflicted with band-wagon research” (p. ix) with researchers pursuing a hot topic for a couple years then moving on to another area. Meara observes that the people doing research in trendy areas tend to lack the background and long term experience needed to look at more subtle and difficult research questions. He further laments that few people critically examine the methodologies of such research.

Another theme in the book is Meara’s concern that there is an overall lack of quantitative research being done in the field of applied linguistics. This is a somewhat surprising comment given the historical bias to quantitative over qualitative research in the field of second language research, particularly highlighted by Firth and Wagner (1998) and since discussed and debated in numerous articles in response. Meara states that the papers that comprise most of the chapters in his book are “heavily influenced by the work of psycholinguists” (p. xiv) who “use experimental and statistical methods which even now are infrequently used by applied linguists, who seem uncomfortable with quantitative approaches to research” (p. xiv).

Certainly, the work presented in Meara’s volume reflects a psycholinguistic influence, and the use of graph theory—an abstract mathematical approach to the analysis of network structures—to analyze L2 lexicons belies Meara’s quantitative approach. The use of graph theory also reflects another recurring theme in the book, namely Meara’s conviction that vocabulary is a network, “an idea that seems so blindingly obvious” (p. xv).

Section 1 (Early Work) contains two chapters comprised respectively of papers Meara published in 1978 and 1983. He refers to these as “‘classic’ word association studies” (p. xvi). Using these as examples, Meara points out problematic areas of word association research, in particular, methodological questions. Specifically, he notes that the dynamic nature of L2 learners’ vocabularies and their responses in word association tasks is an important methodological question that has generally not been embraced in research up to now.

Section 2 (Associations as Productive Vocabulary) contains two papers (Chapters 3 & 4) from 2000 and 2004 respectively that show how word association data can be used to provide alternative perspectives of certain aspects of vocabulary knowledge. Specifically, Meara focuses on L2 learners’ productive vocabulary, noting the divided views among researchers on the specific relationship between receptive and productive vocabulary.

Meara draws attention to the relative dearth of tools to accurately measure productive vocabulary. He discusses Laufer and Nation’s productive vocabulary tests (1995, 1999) and introduces Lex30, an instrument designed to address issues in productive vocabulary assessment. Lex30 is essentially a word association task. Meara compares and contrasts its strengths and weaknesses with existing controlled productive vocabulary tests (e.g., Laufer & Nation, 1999), free productive vocabulary tests (e.g., Laufer & Nation, 1995) and other methods like spew tests. Meara notes the advantages of Lex30 as a “quick and dirty” productive vocabulary test when used with other tests in a vocabulary test battery and further discusses Lex30 in Section 3, Chapter 9.

One of the key problems in measuring productive vocabulary, as in other areas of language research, is the lack of a common construct definition. Accordingly, Meara notes that tests designed to measure “productive vocabulary” actually contain different constructs and measure entirely different things. Somewhat ironically in light of his comments earlier in the book, Meara suggests that productive vocabulary assessment in the long run “might best be approached through intensive single subject studies rather than through studies of groups of learners in experimental situations” (p. 31).

Section 3 (Word Association Networks) is the core section of the book. In this section, Meara makes his case for lexical organization as a network (Chapter 5) and explores how word association data can be used to examine the development of vocabulary depth (Chapter 6). Meara uses graph theory to present the mental lexicon as a system of points (nodes) connected together by lines (arcs). This approach contrasts with traditional models which see the mental lexicon as a collection of individual words and meanings. Meara reiterates that L2 word association data might provide answers to the problem of how to operationalize the construct of vocabulary depth and that the lack of an accurate measure of vocabulary depth remains a major barrier in the development of theories about lexical development.

In Chapter 6, Meara argues that testing vocabulary breadth and depth is a flawed endeavor that looks too closely at learners’ knowledge of individual words without giving consideration to “vocabulary size” (i.e., a network of connections between words). He argues that vocabulary depth should be assessed by the properties of a network of words as opposed to focusing on individual words. Meara reiterates that the L2 lexicon is not as structured as the L1 lexicon, and therefore, using a network model of vocabulary, the connections between words should be less complex in the L2 lexicon. Accordingly, Meara argues that word association data is the best way to investigate these ideas. However, Meara also points out that most methodologies in word association research require participants to produce associations, which generates extremely varied data that is difficult to work with.

In Chapter 6, Meara also discusses V_Links, a tool developed to measure lexical organization for English. Meara notes that the preliminary results of trialing V_Links showed that there is not a direct correlation between vocabulary size and vocabulary organization. Meara provides possible explanations for this lack of correlation, including the idea that unstructured or loosely structured lexicons can only grow to a limit below a critical size threshold and can only grow further after they are restructured (p. 82). This idea seems linked to what Meara says, “that it is possible that receptive vocabulary grows in spurts, and that productive vocabulary grows in the consolidation periods between these spurts” (p. 30). These comments are in line with Meara’s view of vocabulary as a network or system, and an interesting direction to pursue might be to find connections between L2 vocabulary development in terms of Meara’s network and recent work in Chaos-complexity Theory (see Larsen-Freeman, 2002) and Dynamic Systems Theory (De Bot, 2008) which both posit ideas on the ways that parts of a system are linked in a non-linear fashion and are in a constant state of flux.

In Chapter 7 Meara looks at the plausibility of using simulators as a way to test the effectiveness of research instruments before they are widely used in real experiments. For all the exciting possibilities afforded by simulators, Meara also notes the reality that few researchers have the

requisite computational skills to critically examine the implications of a simulation model. Again, Meara laments the number of one-off studies in SLA research, which he says help perpetuate the casual attitude towards theory if not the general lack of theoretical frameworks in SLA research.

Section 4 has only one chapter (Chapter 8), which is an annotated bibliography of, in Meara's words, "all the main studies of L2 word association that I am aware of" (p. 97). It is indeed most likely the largest such bibliography in existence, and read chronologically according to dates of publication of the works listed, provides a fascinating historical overview of the development of research in this area.

Early on, Meara calls for the need to use computers in language research, and discusses several computer based testing instruments in subsequent chapters. Section 5, Software applications, contains manuals for three software applications which Meara has developed as part of his ongoing work with word associations. Chapter 9 contains a detailed yet easy to read manual for Lex30, which was described in Section 2. Chapter 10 contains a manual for V_Six, which is a development of the V_Links programs that Meara describes in Section 3. Chapter 11 has a manual for WA_Sorter, which is a small utility program that sorts and counts word association data and presents it in a standard format. These are all internet-based and do not require downloading of any software. Meara includes a link so that readers can find the latest versions of all three programs online.

Even though much of the material in Meara's book has been published before, much word association research has, as Meara notes, been overlooked or remains undiscovered. Meara does a service to the field with this accessible overview of key issues in word association research. To concur with Paul Nation's endorsement which appears on the back cover, Meara's book is a "must read" for all researchers and students of second language vocabulary acquisition.

References

- De Bot, K. (2008). Introduction: Second language development as a dynamic process. *The Modern Language Journal*, 92, 166–178.
- Larsen-Freeman, D. (2002). Language acquisition and language use from a chaos/complexity theory perspective. In C. Kramsch (Ed.), *Language acquisition and language socialization* (pp. 33–46). London: Continuum.
- Firth, A., & Wagner, J. (1998). SLA property: No trespassing! *The Modern Language Journal*, 82, 91–94.
- Laufer, B. & Nation, I.S.P. (1995). Vocabulary size and use: lexical richness in L2 written production. *Applied Linguistics*, 16, 307–322.
- Laufer, B. & Nation, I.S.P. (1999). A vocabulary size test of controlled productive ability. *Language Testing*, 16, 33–51.

About the Reviewer

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