The dynamics outside the paper:
User Contributions to Online Dictionaries

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Introduction

Online dictionaries rely increasingly on their users and leverage methods for facilitating user contributions at basically any step of the lexicographic process.

Previous work

- Mostly focused on specific type/dimension of user contribution
  - e.g., Carr (1997), Storrer (1998, 2010), Køhler Simonsen (2005), Fuertes-Olivera (2009), Melchior (2012), Lew (2011, 2013)
- Ambiguous, partly overlapping terms:

(fuzzy) simultaneous feedback
collective free multiple-language
bottom-up lexicography
collaborative-institutional dictionaries
user contribution
collaborative lexicography
institutional internet reference works
lexicographic democracy user involvement
internet reference works
semi-collaborative dictionaries
user participation democratization

http://www.wordle.net/show/wrdl/7124863/User_contributions (02.10.2013)

Research goals and contribution

> **How to effectively plan the user contributions for new and established dictionaries?**

- Comprehensive and systematic classification is still missing
- Mann (2010): analysis of 88 online dictionaries
  - User contributions roughly categorized as **direct** / **indirect contributions** and **exchange with other dictionary users**
  - Little detail given, since outside the scope of the analysis
  - We use this as a basis for our work

> **We propose a novel classification of the different types of user contributions based on many practical examples**

Functional classification

1. Direct user contributions	2. Indirect user contributions	3. Accessory user contributions
• Contributions to **open-collaborative dictionaries** • Contributions to **collaborative-institutional dictionaries** • Contributions to **semi-collaborative dictionaries**	• **Explicit feedback** − form-based feedback − free form feedback • **Implicit feedback** − log file analysis − external user-generated content	• **Exchange between dictionary makers and dictionary users** − unidirectional communication − bidirectional communication • **Exchange among dictionary users**

1. Direct user contributions

Additions, modifications, deletions of dictionary articles (or parts of them) performed by a dictionary user.

Direct user contributions	Indirect user contributions	Accessory user contributions
• Contributions to **open-collaborative dictionaries**	• **Explicit feedback** – form-based feedback – free form feedback	• **Exchange between dictionary makers and dictionary users** – unidirectional communication – bidirectional communication
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• Contributions to **semi-collaborative dictionaries**		

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Contributions to open-collaborative dictionaries

- dictionaries completely built by users without editorial control
- fixed lexicographic instructions vs. structural openness
- dictionary-specific vs. general-purpose user interface (e.g., wiki)

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Contributions to collaborative-institutional dictionaries

- provided by major dictionary publishers
- usually no direct modifications/deletions of existing articles
- collect evidence and suggestions for improving editorial dictionaries
- keep dictionary users interested in the publisher's activities

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Contributions to semi-collaborative dictionaries

- submissions of new entries, donations of word lists
- carefully examined by professional editors
- directly integrated into the dictionary if valid

2. Indirect user contributions

Suggestions, corrections, supplementary material, comments, external content, usage data provided by users as feedback to the dictionary makers.

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Explicit feedback

- suggestions, wishes, error corrections on existing content
- supplementary material (e.g., illustrations, quotations)
- quality judgements
- form-based vs. free form feedback

Feedback forms

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Implicit feedback

- provided by users through their usage of the dictionary
- no explicit user effort
- contribution often not realized
  - *log files, Google Analytics*
  - *favorite articles, word lists*
  - *external user-generated content (e.g., Flickr, Twitter)*

eldit
Elektronisches Lernerwörterbuch Deutsch-Italienisch
Dizionario elettronico per apprendenti Italiano-Tedesco

w♥rdnik

DUDEN

Base lexicale du français

3. Accessory user contributions

Exchange between the dictionary makers and their users or among the users themselves beyond the dictionary content.

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Exchange between dictionary makers and dictionary users

- blogs, newsletters, social networks, etc.
- language games, professional language service
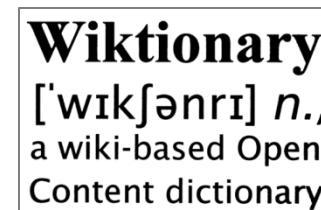- unidirectional communication vs. bidirectional communication

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Exchange among the dictionary users

- forums
- discussion pages
- user comments

Conclusion

New classification of user contributions:

1. Direct user contributions	2. Indirect user contributions	3. Accessory user contributions

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• Contributions to **collaborative-institutional dictionaries**
 	
• Contributions to **semi-collaborative dictionaries**
	• **Explicit feedback**
	  − form-based feedback
	  − free form feedback
	
	• **Implicit feedback**
	  − log file analysis
	  − external user-generated content
		• **Exchange between dictionary makers and dictionary users**
		  − unidirectional communication
		  − bidirectional communication
		
		• **Exchange among dictionary users**

More practical examples in the paper!

Thank you for your attention!

Questions?

Literature

Carr, M. (1997). Internet Dictionaries and Lexicography. *International Journal of Lexicography*, 10(3), pp. 209–230.

Fuertes-Olivera, P.A. (2009). The Function Theory of Lexicography and Electronic Dictionaries: WIKTIONARY as a Prototype of Collective Free Multiple-Language Internet Lexicography. In H. Bergenholtz, S. Nielsen & S. Tarp (eds) *Lexicography at a Crossroads: Dictionaries and Encyclopedias Today, Lexicographical Tools Tomorrow*. Bern: Peter Lang, pp. 99–134.

Køhler Simonsen, H. (2005). User Involvement in Corporate LSP Intranet Lexicography. In H. Gottlieb, J.E. Mogensen & A. Zettersten (eds.) *Symposium on Lexicography XI. Proceedings of the Eleventh International Symposium on Lexicography May 2-4, 2002, at the University of Copenhagen*. Tübingen: Niemeyer, pp. 489–510.

Lew, R. (2011). Online dictionaries of English. In P.A. Fuertes-Olivera & H. Bergenholtz (eds.) *e-Lexicography: The Internet, Digital Initiatives and Lexicography*. London/New York: Continuum, pp. 230–250.

Lew, R. (2013). User-generated content (UGC) in English online dictionaries. In A. Abel & A. Klosa (eds.) *Ihr Beitrag bitte! – Der Nutzerbeitrag im Wörterbuchprozess* (OPAL – Online publizierte Arbeiten zur Linguistik). Mannheim: Institut für Deutsche Sprache, pp. 9–30.

Mann, M. (2010). Internet-Wörterbücher am Ende der „Nullerjahre": Der Stand der Dinge. Eine vergleichende Untersuchung beliebter Angebote hinsichtlich formaler Kriterien. In R.H. Gouws, U. Heid, St.J. Schierholz, W. Schweickard & H.E. Wiegand (eds.) *Lexicographica 26*. Berlin/New York: de Gruyter, pp. 19–46.

Melchior, L. (2012). Halbkollaborativität und Inline-Lexikographie. Ansätze und Überlegungen zu Wörterbuchredaktion und Wörterbuchforschung am Beispiel LEO Deutsch-Italienisch. In R.H. Gouws, U. Heid, St.J. Schierholz, W. Schweickard & H.E. Wiegand (eds.) *Lexicographica 28*. Berlin/New York: de Gruyter, pp. 337–372.

Melchior, L. (2013). Ansätze zu einer halbkollaborativen Lexikographie. In A. Abel & A. Klosa (eds.) *Ihr Beitrag bitte! – Der Nutzerbeitrag im Wörterbuchprozess* (OPAL – Online publizierte Arbeiten zur Linguistik). Mannheim: Institut für Deutsche Sprache, pp. 31–52.

Storrer, A. (1998). Hypermedia-Wörterbücher: Perspektiven für eine neue Generation elektronischer Wörterbücher. In H. E. Wiegand (ed.) *Wörterbücher in der Diskussion III*. Tübingen: Niemeyer, pp. 107–135.

Storrer, A. (2010). Deutsche Internet-Wörterbücher: Ein Überblick. In R. H. Gouws, U. Heid, St. J. Schierholz, W. Schweickard & H. E. Wiegand (eds.) Lexicographica 27, Berlin/New York: de Gruyter, pp. 155–164.

Dictionaries

Algemeen Nederlands Woordenboek. http://anw.inl.nl

Bab.la. http://bab.la

Base lexicale du français (BLF). http://ilt.kuleuven.be/blf

canoonet. http://www.canoo.net

dict.cc. http://www.dict.cc

Duden online (DO). http://www.duden.de

Elektronisches Lernerwörterbuch Deutsch–Italienisch (ELDIT). http://www.eurac.edu/eldit

Glosbe. http://glosbe.com

LEO. http://dict.leo.org

Macmillan Open Dictionary. http://www.macmillandictionary.com/open-dictionary

Merriam-Webster Open Dictionary. http://nws.merriam-webster.com/opendictionary

OmegaWiki. http://www.omegawiki.org

OpenThesaurus. http://www.openthesaurus.de

Oxford English Dictionary (OED). http://www.oed.com

Szenesprachenwiki. http://szenesprachenwiki.de

TechDictionary. http://www.techdictionary.com

Urban Dictionary. http://www.urbandictionary.com

Wikipedia. http://www.wikipedia.org

Wiktionary. http://www.wiktionary.org

Wordnik. http://www.wordnik.com

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