

Lieve Macken



Department of Translation, Interpreting and Communication
Faculty of Arts and Philosophy
Ghent University
Groot-Brittanniëlaan 45
B-9000, Ghent
Belgium

email: lieve.macken@ugent.be

URL: <http://www.lt3.ugent.be/en/people/lieve-macken/>

Born: June 17, 1968—Belgium

Nationality: Belgian

Current position

Assistant professor, Department of Translation, Interpreting and Communication, Faculty of Arts and Philosophy, Ghent University

Areas of specialization

Machine Translation, Post-editing, Computer-Assisted Translation, Parallel Corpora, Terminology Extraction, Localisation, Text-To-Speech

Previous positions

- 1993-1995 *Researcher*, Centre for Computational Linguistics, University of Leuven
“SECC: a Simplified English Grammar Checker and Corrector” (European LRE-project)
- 1995-1999 *English Language Specialist*, Lernout & Hauspie Speech Products, Ieper
English text-to-speech systems
- 1999-2001 *Language Group Manager*, Lernout & Hauspie Speech Products, Ieper
English text-to-speech systems

- 2001-2003 *Project Leader*, Scansoft, Merelbeke
Text-to-speech systems
- 2004-2010 *Research Assistant*, Faculty of Applied Language Studies, University College Ghent
“Sub-sentential alignment of translational correspondences” (PhD project)
- 2010-2015 *Post-doctoral Assistant*, Faculty of Arts and Philosophy, Ghent University

Education

- 1988 B.A. University of Leuven (Kandidaat Germaanse Filologie): Dutch & English
- 1990 M.A. University of Leuven (Licentiaat Germaanse Filologie): Dutch & Computational Linguistics
- 1995 M.A. University of Leuven (Licentiaat Informatica): Computational Linguistics
- 2010 Ph.D. University of Antwerp (Doctoraat in de taalkunde): Computational Linguistics.
Dissertation on *Sub-sentential alignment of translational correspondences*.

Supplementary Training

- 2005-2006 *Object-oriented programming*, University College Ghent
- 2006-2007 *Front-end programming*, University College Ghent
- 2007 *Certified Localisation Professional*, The Institute of Localisation Professionals, Ghent
- 2008 *Second Machine Translation Marathon* (Spring School), EuroMatrix, Berlin
- 2009 *Formation à la localisation multimédia* (eCoLoMedia Workshop), Brussels
- 2011 *Computer & Video Game Localisation* (Summer School), Localisation Research Centre, Limerick
- Writing Process Research: Keystroke Logging & Eyetracking* (Summer School), Antwerp
- 2012 *Localisation* (e-course), Imperial College London
- Introductory Course on Technology Transfer Skills*, Ghent University
- Tobii Training Day*, Ghent University
- 2013 *Research projects: administration, monitoring and reporting* (Werking onderzoeksprojecten: administratie, opvolging en rapportering), Opleidingen integratie, Ghent University
- Introduction to financial reporting* (Inleiding tot de financiële rapportering), Opleidingen integratie, Ghent University
- 2014 *Keystroke Logging Training School*, University of Antwerp
- Teacher Training Course* (Basisdocententraining), Ghent University
- Career reflection and assessment: training for MenZa mentees*, Ghent University

- 2015 *EAMT Workshop on Teaching MT to Translator Trainers*, EAMT, Dublin, 30 April–1 May
Peer Assessment, UGent, May 7th
Structured, topic-oriented authoring, Scripto, Ghent, December 10–11th
- 2016 *Presentation Techniques*, Ghent University, Ghent, April 25th
Turning Point, Ghent University, Ghent, May 12th
- 2017 *Coaching PhD students*, Ghent University, Ghent, February–March
Stress management, Ghent University, Ghent, February–March
Video training, Ghent University, Ghent, April
- 2018 *Turning Point (refreshment course)*, Ghent University, Ghent, April
Solution-oriented working, Ghent University, Ghent, April
Directing difficult conversations, Ghent University, Ghent, April
Effective selection using the STARR methodology, Ghent University, Ghent, April
Feedback to large groups, Ghent University, Ghent, October
Introduction to language programming with Python, Ghent University, Ghent, October–December
The active bystander training, Ghent University, November 20th
- 2019 *Presentation techniques*, Ghent University, February 19th
SAP reporting, Ghent University, March 26th
Grant writing: key essentials, Ghent University, October 18th
- 2020 *Multiple Choice training*, Ghent University, January 14th

Acquired projects and project management

- 2006–2009 *Dutch Parallel Corpus (DPC)*
 STEVIN (Dutch-Flemish Research Programme for Dutch Language and Speech Technology)
 In collaboration with Piet Desmet (Katholieke Universiteit Leuven Campus Kortrijk),
 Willy Vandeweghe (University College Ghent) and Hans Paulussen (Katholieke Universiteit
 Leuven Campus Kortrijk)
 Budget: 498.000 Euro
- 2012–2016 *A translation robot for each translator? A comparative study of process and quality of manual
 translation and the post-editing of machine translations*
 HOF (Research Fund, University College Ghent)
 In collaboration with Sonia Vandepitte (Ghent University) and Rob Hartsuiker (Ghent
 University)
 Budget: 235.165 Euro
- 2014–2017 *Smart Computer-Aided Translation Environment (SCATE)*
 IWT SBO 130041
 In collaboration with KU Leuven, Thomas More Antwerpen and Universiteit Hasselt
 Budget: 519.250 Euro
- 2017–2020 *Assessing The Comprehensibility of Automatic Translations (ArisToCAT)*
 FWO
 Budget: 253.508 Euro
- 2017–2021 *Predicting Difficulty in Translation (PreDicT)*
 BOF UGent

Budget: 213.600 Euro

2018-2021 *The Experimental Interpreting Lab. A state-of-the-art interpreting lab for collaborative research on interpreting and translation.*

FWO Medium-scale research infrastructure

Lead applicant Bart Defrancq (Ghent University)

Budget: 300.000 Euro

PhD Supervision

2012-2016 *Joke Daems* defended her PhD in the framework of the HOF ROBOT project on the process and quality of manual translation and the post-editing of machine translations

2014-2018 *Arda Tezcan* prepares a PhD in the framework of the IWT SBO SCATE project on confidence estimation for machine translation

2017-2021 *Bram Vanroy* prepares a PhD in the framework of the PreDicT project (Predicting difficulty in translation)

2019-2023 *Jasper Degraeuwe* prepares a PhD on Intelligent Computer-Assisted Language Learning (ICALL)

Scientific Advice

2009

Expert evaluator European FP7-ICT Programme

Reviewer RANLP 2009

Reviewer *Linguistica Antverpiensia new Series LANS(8/2009)*

2011

Expert evaluator European FP7-ICT Programme

Project reviewer *TTC – Terminology extraction, translation tools and comparable corpora* (European FP7-ICT project)

Reviewer RANLP 2011

Manuscript proposal reviewer for *Routledge English Language & Linguistics*

Reviewer EST Congress Proceedings “*Treks and Tracks in Translation Studies*” (John Benjamins)

2012

Reviewer NAFIPS 2012

Project reviewer *EuroMatrixPlus – Bringing Machine Translation for European Languages to the User* (European FP7-ICT project)

Reviewer MEDES 2012

Reviewer *Natural Language Engineering* (AI journal)

2013

Reviewer *CLIN journal* vol. 3

2014

Reviewer *Natural Language Engineering* (AI journal)

Reviewer *Literary and Linguistic Computing* (AI journal)

- 2015
 Reviewer Workshop on Post-editing Technology and Practice (WPTP)
 Reviewer Applied Linguistics (AI journal)
 Examiner PhD Orphée De Clercq (*Tipping the scales. Exploring the added value of deep semantic processing on readability prediction and sentiment analysis*)
- 2016
 Reviewer CLIN Journal
 Jury member EST Young Scholar Prize
- 2017
 Reviewer Translation and Interpreting in Transition, conference
 Reviewer EAMT, Conference of the European Association for Machine Translation
 Reviewer CLIN journal (Computational Linguistics in The Netherlands)
 Reviewer RANLP (Recent Advances in Natural Language Processing), conference
 Examiner PhD Joris Pelemans (*Efficient Language Modeling for Automatic Speech Recognition*),
 KU Leuven
 Examiner PhD Sabien Hanouille (*Translating documentaries. Does the integration of a bilingual glossary of domain-specific terminology into the translation process reduce the translators' workload?*),
 Ghent University
 Examiner PhD Varvara Logacheva (*Human Feedback in Statistical Machine Translation*),
 University of Sheffield
- 2018
 Reviewer Monograph *Quality estimation for MT and NLP*, Human Language Technologies series, Morgan & Claypool Publishers
 Reviewer Jos Trans (journal)
 Reviewer EAMT, Conference of the European Association for Machine Translation
 Jury member EAMT best thesis award
 Reviewer Translation Spaces (journal)
 Reviewer Meta: Journal des traducteurs / Translators' Journal
 Reviewer CMC and Social Media Corpora (conference)
 Reviewer CLIN journal
 Reviewer New Empirical Perspectives on Translation and Interpreting (book chapter, 2018)
- 2019
 Reviewer ACL
 Reviewer MT Summit 2019
 Reviewer RANLP (Recent Advances in Natural Language Processing), conference
 Reviewer Second Workshop on Human-Informed Translation and Interpreting Technology (HiT-IT 2019)
 Reviewer Computer, Speech and Language (journal)
 Reviewer Journal of Writing Research
 Jury member EAMT best thesis award
 Examiner PhD Camille Collard (*A corpus-based study of simultaneous interpreting with special reference to sex*), University of Ghent

2020

Reviewer Language Resources and Evaluation Conference (LREC 2020)
Examiner PhD Maarten van Gompel (*Context as Linguistic Bridges*), Radboud Universiteit Nijmegen
Reviewer International Workshop on Computational Terminology (Computerm 2020)
Reviewer SAGE Open (journal)

Organisation of conferences and workshops

2007 Atila workshop, Het Pand, Ghent, November 14, 2007
2012 EACL 2012 Tutorial Chair
2018 Atila workshop, Monasterium PoortAckere, Ghent, December 6-7, 2018

Service and membership

2008-2013 Member of the Study Programme Committee Master's in Translation, Faculty of Applied Language Studies, University College Ghent
2011-2013 Member of the Faculty Board, Faculty of Applied Language Studies, University College Ghent
2014- Member of the Study Programme Committee, Department of Translation, Interpreting and Communication, Ghent University
2014- Member of the Research cell, Faculty of Applied Language Studies, Ghent University
2014- Operational head of the Language Technology Section, Faculty of Applied Language Studies, Ghent University
2018- Member of the Faculty Board, Ghent University, Faculty of Arts and Philosophy, Ghent University

Teaching

Introduction to Language technology (hands-on sessions), Ba3, Faculty of Applied Language Studies, University College Ghent (2006-2007)
Computer-assisted translation, Postgraduate Dutch and Translation, Faculty of Applied Language Studies, University College Ghent (2007-2014)
Language Technology, MA, Faculty of Applied Language Studies, University College Ghent (2008-2010)
Computer-aided translation, Continuing-education Course, Faculty of Applied Language Studies, University College Ghent (2009)
Localisation, Postgraduate Dutch and Translation, Faculty of Applied Language Studies, University College Ghent (2010-2011)
Website management, MA, Faculty of Applied Language Studies, University College Ghent (2011-2012)
Localisation, MA, Faculty of Applied Language Studies, Ghent University (2010-2016)
Website management, Postgraduate Dutch and Translation, Faculty of Applied Language

Studies, Ghent University(2012-2015)
Technical Translation, MA, Faculty of Applied Language Studies, Ghent University (2013-2015)
Methodological Tools for Digital Humanities, Doctoral Schools, Ghent University (2014)
Introduction to translation technology, Baz & Postgraduate Dutch and Translation, Ghent University (2015-2018)
Localisation, Postgraduate Computer-Assisted Language Mediation, Ghent University (2016-2019)
Machine Translation and Post-editing, Postgraduate Computer-Assisted Language Mediation, Ghent University (2016-2019)
Introduction to translation technology, Baz & Postgraduate Dutch and Translation, Ghent University (2018-2019)

Publications

- 1995 Geert Adriaens and Lieve Macken (1995), “Technological evaluation of a controlled language application: precision, recall, and convergence tests for SECC”, Proceedings of the 6th International Conference on Theoretical and Methodological Issues in Machine Translation (TMI), Leuven, Belgium, 123–141
- 2002 Jeska Buhmann, Jean-Pierre Martens, Lieve Macken, and Bert Van Coile (2002), “Intonation Modelling for the Synthesis of Structured Documents”, Proceedings of the International Conference on Spoken Language Processing (ICSLP), Denver, Colorado (USA), 2089–2092
- 2007 Lieve Macken (2007), “Analysis of Translational Correspondence in view of Sub-sentential Alignment”, Proceedings of the METIS-II Workshop on New Approaches to Machine Translation, Leuven, Belgium, 97–105
- Lieve Macken, Julia Trushkina, Hans Paulussen, Lidia Rura, Piet Desmet, and Willy Vandeweghe (2007), “Dutch Parallel Corpus. A multilingual annotated corpus”, Proceedings of Corpus Linguistics 2007, Birmingham, United Kingdom
- Veronique Hoste, Iris Hendrickx, and Lieve Macken, (2007), “The referential versus non-referential use of the neuter pronoun in Dutch and English”, Proceedings of Corpus Linguistics 2007, Birmingham, United Kingdom
- Lieve Macken, Julia Trushkina, and Lidia Rura (2007) “Dutch Parallel Corpus: MT Corpus and translator’s aid”, Machine Translation Summit XI, (Ed. B. Maegaard), European Association of Machine Translation, Copenhagen, Denmark, 313–320
- 2008 Julia Trushkina, Lieve Macken and Hans Paulussen (2008) “Sentence alignment in DPC: maximizing precision, minimizing human effort”, Proceedings of the 6th Language Resources and Evaluation Conference (LREC 2008), Marrakech, Morocco
- Hans Paulussen, Lieve Macken, Julia Trushkina, Piet Desmet, and Willy Vandeweghe

(2008) “Dutch Parallel Corpus: a multifunctional and multilingual corpus”, *Cahiers de l’Institut de Linguistique de Louvain, CILL, Louvain-La-Neuve*, 32.1-4 (2006), 269-285

Lieve Macken, Els Lefever and Veronique Hoste (2008) “Linguistically-based sub-sentential alignment for terminology extraction from a bilingual automotive corpus” *Proceedings of the 22nd International Conference on Computational Linguistics (Coling 2008)*, Manchester, United Kingdom, 529-536

Lieve Macken and Els Lefever (2008) “Translational Equivalence in Statistical Machine Translation or Meaning as co-occurrence”, *Linguistica Antverpiensia/New Series*, (Ed. Sonia Vandepitte), Antwerp, Belgium, 7/2008, 193-208

2009 Lieve Macken and Walter Daelemans (2009) “Aligning linguistically motivated phrases”, *Selected Papers from the 18th Computational Linguistics in the Netherlands Meeting*, (Eds. S. Verberne, H. van Halteren and P-A Coppen), Nijmegen, The Netherlands, 37-52

Els Lefever, Lieve Macken and Veronique Hoste (2009) “Language-independent bilingual terminology extraction from a multilingual parallel corpus”, *Proceedings of the 12th Conference of the European Chapter of the Association for Computational Linguistics*, Athens, Greece, 496-504

Lieve Macken (2009) “In search of the recurrent units of translation”, *Evaluation of Translation Technology. LANS 8/2009*, (Eds. Walter Daelemans and Véronique Hoste), Brussels: Academic and Scientific Publishers, 195-212

Kathelijne Denturck, Peter Velaerts, Heidi Verplaetse, Sonia Vandepitte, Lieve Macken, and Rita Godyns (2009) “Larsa: un outil d’extraction de relations sémantiques”, *Annotations Automatiques et Recherche d’Informations*, (Eds. Jean-Pierre Desclés and Florence Le Priol), London: Hermes Science Publishing, 193-208

2010 Lieve Macken and Walter Daelemans (2010), “A chunk-driven bootstrapping approach to extracting translation patterns”, A. Gelbukh (ed.), *11th International Conference on Intelligent Text Processing and Computational Linguistics (Iasi, Romania)*, Vol. 6008 of *Lecture Notes in Computer Science*, Springer-Verlag, Heidelberg, 394-405

Lieve Macken (2010) “Annotation Guidelines for Dutch-English Word Alignment.” *LT3 Technical Report 10-01*

Lieve Macken (2010), “An annotation scheme and Gold Standard for Dutch-English word alignment”, *Proceedings of the 7th Language Resources and Evaluation Conference (LREC 2010)*, Valletta, Malta

Lieve Macken (2010), “Sub-sentential alignment of translational correspondences”. PhD thesis. Antwerp: University Press Antwerp

Lieve Macken (2010), "A resource-light approach to morpho-syntactic tagging (Review of A. Feldman and J. Hana., idem, Rodopi, 2010)", *Literary and Linguistic Computing*, 25(3): 358–360

Hans Paulussen and Lieve Macken (2010), "Annotating the Dutch Parallel Corpus", *Proceedings of the Workshop on Annotation and Exploitation of Parallel Corpora AEPC 2010*, (Eds. Lars Ahrenberg, Jörg Tiedemann and Martin Volk), *NEALT Proceedings Series*, Vol. 10, 63–72

2011

Els Lefever, Lieve Macken and Véronique Hoste (2011), "Taal- en spraaktechnologie: een stand van zaken", *Over Taal*, 50 (1), 20–22. UGA

Lieve Macken, Orphée De Clercq and Hans Paulussen (2011), "Dutch Parallel Corpus: a Balanced Copyright-Cleared Parallel Corpus", *Meta*, 56(2), 374–390

Piet Desmet, Willy Vandeweghe, Hans Paulussen, Lieve Macken, Maribel Montero Perze, Orphée De Clercq, Lida Rura and Julia Trushkina (2011), "Dutch Parallel Corpus", *Instituut voor Nederlandse Lexicologie*, ISBN 9789491325007

2012

Mariëlle Leijten, Lieve Macken, Véronique Hoste, Eric Van Horenbeeck and Luuk Van Waes (2012), "From character to word level: Enabling the linguistic analyses of Inputlog process data", *Proceedings of the Second Workshop on Computational Linguistics and Writing (CL&W 2012): Linguistic and Cognitive Aspects of Document Creation and Document Engineering*, Avignon, France, 1–8

Lieve Macken, Véronique Hoste, Mariëlle Leijten and Luuk Van Waes (2012) "From keystrokes to annotated process data: Enriching the output of Inputlog with linguistic information", *Proceedings of the eighth international conference on Language Resources and Evaluation (LREC 2012)*. Istanbul, Turkey, 2224–2229

2013

Hans Paulussen, Lieve Macken, Willy Vandeweghe and Piet Desmet, "Dutch Parallel Corpus: a balanced parallel corpus for Dutch-English and Dutch-French", *Essential Speech and Language Technology for Dutch: resources, tools and applications*, (Eds. Peter Spyns and Jan Odiijk), Springer, 185–199

Lieve Macken, Els Lefever and Véronique Hoste, "TEXSIS: Bilingual Terminology Extraction from Parallel Corpora Using Chunk-based Alignment", *Terminology* 19(1), 1–30

Marjan Van de Kauter, Geert Coorman, Els Lefever, Bart Desmet, Lieve Macken and Véronique Hoste, "LeTs Preprocess: The multilingual LT₃ linguistic preprocessing toolkit", *Computational Linguistics in the Netherlands Journal*, 3, 103–120

Joke Daems and Lieve Macken, "Annotation Guidelines for English-Dutch Translation

Quality Assessment, version 1.1”, LT3 Technical Report 13-02

Joke Daems, Lieve Macken and Sonia Vandepitte, “Quality as the sum of its parts: A two-step approach for the identification of translation problems and translation quality assessment for HT and MT+PE”, Proceedings of MT Summit XIV Workshop on Post-editing Technology and Practice, Nice, France, 63-71

2014

Maribel Montero Perez, Hans Paulussen, Lieve Macken and Piet Desmet, “From input to output: The potential of parallel corpora for CALL”, Language Resources and Evaluation 48(1), 165-189

Joke Daems, Lieve Macken and Sonia Vandepitte, “Snelheid vs. kwaliteit: schuilt er wel winst in het gebruik van automatische vertaalsystemen?”, Beschouwingen uit een talenhuis, (Eds. S. Evenepoel, P. Goethals and L. Jooken), Academia Press, 141-146

Lieve Macken, Orphée De Clercq, Bart Desmet and Véronique Hoste, “Dutch Parallel Corpus en SoNaR”, Beschouwingen uit een talenhuis, (Eds. S. Evenepoel, P. Goethals and L. Jooken), Academia Press, 163-170

Klaar Vanopstal, Lieve Macken, Els Lefever, Marjan Van de Kauter, Joost Buyschaert and Véronique Hoste, “Terminologie: op het snijvlak van ambacht en technologie”, Beschouwingen uit een talenhuis, (Eds. S. Evenepoel, P. Goethals and L. Jooken), Academia Press, 179-189

Orphée De Clercq, Véronique Hoste, Bart Desmet, Philip van Oosten, Martine De Cock and Lieve Macken, “Using the Crowd for Readability Prediction”, Natural Language Engineering, 20(3), 293-325

Joke Daems, Lieve Macken and Sonia Vandepitte, “On the Origin of Errors: a Fine-Grained Analysis of MT and PE Errors and their Relationship”, Proceedings of the Ninth International Conference on Language Resources and Evaluation (LREC’14), 62-66. European Language Resources Association (ELRA), Reykjavik, Iceland.

2015

Vincent Vandeghinste, Tom Vanallemeersch, Frank Van Eynde, Geert Heyman, Sien Moens, Joris Pelemans, Patrick Wambacq, Iulianna Van der Lek - Ciudin, Arda Tezcan, Lieve Macken, Véronique Hoste, Eva Geurts and Mieke Haesen, “Smart Computer Aided Translation Environment”, Proceedings of the 18th Annual Conference of the European Association for Machine Translation (EAMT 2015). Antalya, Turkey.

Arda Tezcan, Véronique Hoste, Bart Desmet and Lieve Macken, “UGENT-LT3 SCATE System for Machine Translation Quality Estimation” . WMT15, Tenth Workshop on Statistical Machine Translation, Lisbon, Portugal

Joke Daems, Sonia Vandepitte, Robert Hartsuiker, and Lieve Macken, “The Impact of Machine Translation Error Types on Post-Editing Effort Indicators.” , Proceedings

of 4th Workshop on Post-Editing Technology and Practice (WPTP4), Miami

Stijn Van de Velde, Lieve Macken, Koen Vanneste, Martine Goossens, Jan Vanschoenbeek, Bert Aertgeerts, Klaar Vanopstal, Robert Vander Stichele and Joost Buyschaert. “Technology for large-scale translation of clinical practice guidelines : a pilot study of the performance of a hybrid human and computer-assisted approach”, *JMIR MEDICAL INFORMATICS* 3(4)

2016 Joke Daems, Michael Carl, Sonia Vandepitte, Robert Hartsuiker, and Lieve Macken, “The Effectiveness of Consulting External Resources during Translation and Postediting of General Text Types”. In Michael Carl, Srinivas Bangalore and Moritz Schaeffer (eds.), *New Directions in Empirical Translation Process Research: Exploring the CRITT TPR-DB: New Frontiers in Translation Studies*, 113-138. Springer.

Ayla Rigouts Terryn, Lieve Macken, and Els Lefever. 2016. “Dutch Hypernym Detection: Does Decomposing Help?”. In *Joint Second Workshop on Language and Ontology & Terminology and Knowledge Structures (LangOnto2 + TermiKS)*, 74-78. European Language Resources Association (ELRA).

Sarah Schulz, Guy De Pauw, Orphée De Clercq, Bart Desmet, Véronique Hoste, Walter Daelemans, and Lieve Macken. 2016. “Multi-modular Text Normalization of Dutch User-generated Content.” *Acm Transactions on Intelligent Systems and Technology* 7 (4).

Arda Tezcan, Véronique Hoste, and Lieve Macken. 2016. “Detecting Grammatical Errors in Machine Translation Output Using Dependency Parsing and Treebank Querying.” *Baltic Journal of Modern Computing* 4: 203-217.

Arda Tezcan, Véronique Hoste, and Lieve Macken. 2016. “UGENT-LT₃ SCATE Submission for WMT16 Shared Task on Quality Estimation.”. In *Proceedings of the First Conference on Machine Translation, Volume 2: Shared Task Papers*, 843-850. Association for Computational Linguistics.

2017 Patrick Goethals, Els Lefever, and Lieve Macken. 2017 “SCAP_TT: Tagging and Lemmatising Spanish Tourism Discourse, and Beyond.” *Ibérica* 33: 273-282.

Joke Daems, Sonia Vandepitte, Robert Hartsuiker, and Lieve Macken. 2017. “Translation Methods and Experience: A Comparative Analysis of Human Translation and Post-editing with Students and Professional Translators.” *Meta* 62(2).

Joke Daems, Sonia Vandepitte, Robert J. Hartsuiker, and Lieve Macken. 2017. “Identifying the Machine Translation Error Types with the Greatest Impact on Post-editing Effort.” Ed. Anna Esposito. *Frontiers in Psychology* 8.

Joke Daems, Orphée De Clercq, and Lieve Macken. 2017. *Translationese and post-editese:*

how comparable is comparable quality, *Linguistica Antverpiensia New Series-themes in Translation Studies* 16: 89–103.

Arda Tezcan, Veronique Hoste, and Lieve Macken. 2017. “A Neural Network Architecture for Detecting Grammatical Errors in Statistical Machine Translation.” *The Prague Bulletin of Mathematical Linguistics* 108: 133–145.

Arda Tezcan, Véronique Hoste, and Lieve Macken. 2017. “SCATE taxonomy and corpus of machine translation errors”, *Trends in E-tools and resources for translators and interpreters*, Eds. Gloria Corpas Pastor and Isabel Durán-Muñoz), Brill, Rodopi, 219–244.

Lieve Macken. 2017. Hoe een computer zelf leert vertalen, *DIXIT*, Tijdschrift over taal- en spraaktechnologie, p.7-8.

2018 Lieve Macken and Arda Tezcan. 2018. “Dutch Compound Splitting for Bilingual Terminology Extraction.” In *Multiword Units in Machine Translation and Translation Technology*, ed. Ruslan Mitkov, Johanna Monti, Gloria Corpas Pastor, and Violeta Seretan. *Current Issues in Linguistic Theory*. Vol. 341. John Benjamins, 147–162.

Joke Daems, Michael Carl, Sonia Vandepitte, Robert Hartsuiker, and Lieve Macken. 2018. “How Do Students Cope with Machine Translation Output of Multi-Word Units? An Exploratory Study.” In *Multiword Units in Machine Translation and Translation Technology*, ed. Ruslan Mitkov, Johanna Monti, Gloria Corpas Pastor, and Violeta Seretan. *Current Issues in Linguistic Theory*. Vol. 341. John Benjamins, 61–80.

Laura Van Brussel, Arda Tezcan and Lieve Macken. 2018. “A fine-grained error analysis of NMT, SMT and RBMT output for English-to-Dutch.” *Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018)*. Miyazaki, Japan.

Arda Tezcan, Véronique Hoste, and Lieve Macken. 2018. “Estimating Post-Editing Time Using a Gold-Standard Set of Machine Translation Errors.” *Computer Speech & Language*.

Bram Vanroy, Bram, Orphée De Clercq, and Lieve Macken. 2018. “Predicting Difficulty in Translation: A Pilot Study.” In *Proceedings of the Third Congress on Technological Innovation for Specialized Linguistic Domains*, ed. Timothy Read, Salvador Montaner, and Beatriz Sedano, 163–174. Beau Bassin, Mauritius: Éditions Universitaires Européennes.

Lieve Macken and Iris Ghyselen. 2018. “Measuring comprehension and acceptability of neural machine translated texts: a pilot study.” In *Proceedings of the 40th Conference Translating and the Computer*, 120–126, London, UK, November 15–16, 2018. AsLing

2019

Arda Tezcan, Veronique Hoste, and Lieve Macken. 2019. "Estimating Post-editing Time Using a Gold-standard Set of Machine Translation Errors." *Computer Speech and Language* 55: 120–144.

Bram Vanroy, Orphée De Clercq, and Lieve Macken. 2019. "Correlating Process and Product Data to Get an Insight into Translation Difficulty." *Perspectives. Studies in Translation Theory and Practice*.

Joke Daems, and Lieve Macken. 2019. "Interactive Adaptive SMT vs. Interactive Adaptive NMT: a User Experience Evaluation." Ed. Sheila Castilho, Federico Gaspari, Joss Moorkens, Maja Popovic, and Antonio Toral. *Machine Translation* 33 (1).

Vincent Vandeghinste, Tom Vanallemeersch, Liesbeth Augustinus, Bram Bulté, Frank Van Eynde, Joris Pelemans, Lyan Verwimp, ... Lieve Macken, ...et al. 2019. "Improving the Translation Environment for Professional Translators." Ed. Lieve Macken, Joke Daems, and Arda Tezcan. *Informatics* 6 (2).

Joke Daems and Lieve Macken. 2019. "Van CAT Tot TenT. Van Computerondersteund Vertalen Tot Vertaalomgevingen." In *In Balans. Een Inleiding Tot Vertaal- En Tolkwetenschap*, ed. Gert De Sutter and Isabelle Delaere, 262–283. Leuven: Acco.

Arda Tezcan, Joke Daems, and Lieve Macken. 2019. "When a 'sport' is a Person and Other Issues for NMT of Novels." In *Proceedings of the Qualities of Literary Machine Translation*, ed. James Hadley, Maja Popović, Haithem Afli, and Andy Way, 40–49. Dublin, Ireland: European Association for Machine Translation.

Ayla Rigouts Terryn, Lieve Macken, Els Lefever, Robert Vander Stichele, Koen Vanneste and Joost Buysschaert. 2019. "Pilot study on medical translations in lay language: post-editing by language specialists, domain specialists or both?" In *Proceedings of Translating and the computer* 41 (TC41), 101–112. Geneva: Tradulex.

Lieve Macken, Laura Van Brussel and Joke Daems. 2019. "NMT's wonderland where people turn into rabbits. A study on the comprehensibility of newly invented words in NMT output". *Computational Linguistics in the Netherlands Journal*, 9, 67–80.

Bram Vanroy, Arda Tezcan and Lieve Macken. 2019. "Predicting syntactic equivalence between source and target". *Computational Linguistics in the Netherlands Journal*, 9, 101–116.

2020

Arda Tezcan, Veronique Hoste, and Lieve Macken. 2020. "Estimating Word-level Quality of Statistical Machine Translation Output Using Monolingual Information Alone." *Natural Language Engineering*, 26 (1): 73–94

Lectures & Conference contributions

- 2006 Lieve Macken, *Translation units, translational correspondence and sub-sentential alignment*, presentation, ATILA-meeting, Corsendonck, November 15th
Lieve Macken, *Dutch parallel corpus: multilinguaal en multifunctioneel*, presentation (invited), 4e themadag TST-centrale “Stevin: De gebruiker centraal”, Rotterdam, November 30th
- 2007 Lieve Macken, *Manual Annotation of Translational Correspondence*, presentation, CLIN, Leuven, January 12
Lieve Macken and Walter Daelemans, *Aligning linguistically motivated phrases*, presentation, ATILA-meeting, Gent & CLIF-symposium, Leuven
- 2008 Lieve Macken and Walter Daelemans, *Aligning complex translational correspondences via bootstrapping*, presentation, ATILA-meeting, Antwerp, & CLIN, Groningen
- 2009 Lieve Macken, *Dutch Parallel Corpus: a multifunctional multilingual corpus*, presentation (invited), Corpus linguistics serving research in terminology and translation, ISTI, Brussels
Els Lefever, Lieve Macken and Véronique Hoste, *Language-independent terminology extraction from a multilingual parallel corpus*, presentation, CLIN, Groningen, January 22nd
Lieve Macken and Walter Daelemans, *Aligning complex translational correspondences via bootstrapping*, presentation, CLIN, Groningen, January 22nd
Lieve Macken, *A chunk-driven bootstrapping approach to learning translation patterns*, presentation, LTCI, Ghent
Lieve Macken and Hans Paulussen, *DPC Processing stages: preprocessing, alignment and annotation*, presentation, DPC Workshop, Antwerp
Lieve Macken and Walter Daelemans, *A chunk-driven bootstrapping approach to extracting translation patterns*, presentation, ATILA, Corsendonck
- 2010 Lieve Macken, *Sentence alignment in the Dutch Parallel Corpus: experiments with different alignment tools*, presentation, MATS 2010, Methodological Advances in corpus-based Translation Studies, Ghent
Lieve Macken, *Dutch Parallel Corpus: a multifunctional multilingual corpus*, poster presentation, MATS 2010, Methodological Advances in corpus-based Translation Studies, Ghent
Lieve Macken, Els Lefever and Véronique Hoste, *Bilinguale termextractie van enkel- en meervoudige termen*, presentation, TiNT-dag, Vrije Universiteit, Amsterdam
- 2011 Bert Réveil, Jean-Pierre Martens and Lieve Macken, *Towards a language-independent data-driven compound decomposition tool*, poster presentation, CLIN-21, Ghent, Feb. 11
Lieve Macken and Eric Van Horenbeeck, *Enriching the analysis data of Inputlog with linguistic information*, presentation (invited), Summerschool Writing Process Research 2011: Keystroke logging & Eyetracking, University of Antwerp, September 7–9
Lieve Macken, *Dutch Parallel Corpus*, presentation (invited), Institute for Language and Communication (IL&C), UCL, Louvain-la-Neuve, November 29
Lieve Macken, session chair, ATILA, Antwerp, December 2nd

2012

Mariëlle Leijten, Lieve Macken, Véronique Hoste, Eric Van Horenbeeck and Luuk Van Waes, *From character to word level: Enabling the linguistic analyses of Inputlog process data*, paper presentation, CL&W 2012: Linguistic and Cognitive Aspects of Document Creation and Document Engineering, Avignon, France, April 23

Lieve Macken, Véronique Hoste, Mariëlle Leijten and Luuk Van Waes, *From keystrokes to annotated process data: Enriching the output of Inputlog with linguistic information*, poster presentation, LREC 2012, Istanbul, Turkey

Lieve Macken, session chair, ATILA, Groesbeek, November 22-23

2013

Marjan Van de Kauter, Geert Coorman, Els Lefever, Bart Desmet, Sofie Niemegeers, Lubbert-Jan Gringhuis, Lieve Macken, Véronique Hoste, *LeT's Preprocess: the multilingual LT3 Linguistic Preprocessing toolkit*, poster presentation, CLIN-23, Enschede, the Netherlands, January 18th

Lennart Tondeleir, Joke Daems, Lieve Macken, *Machine Translation: friend or foe? Translator attitude, process, productivity and quality in human translation and post-editing machine translation*, poster presentation, CLIN-23, Enschede, the Netherlands, January 18th

Lieve Macken, *De TExSIS architectuur en vergelijking met de state-of-the-art*, presentation, TexSIS workshop, Ghent, February 11th

Joke Daems and Lieve Macken, *Faster is not always better, but what if it's not worse? A comparative study of human translation and post-edited machine translation quality*, presentation, Optimale Symposium, Rennes, June 6th

Joke Daems, Lieve Macken, Sonia Vandepitte and Rob Hartsuiker, *Quality as the sum of its parts: comparing human translation and post-editing of machine translation*, presentation, ATILA-meeting, Corsendonck, September 26-27th

2014

Joke Daems, Lieve Macken and Sonia Vandepitte, *Lost in post-editing: Identifying the MT error types that are most problematic for student post-editors*, presentation, CLIN-24, Leiden, the Netherlands, January 17th

Joke Daems, Lieve Macken and Sonia Vandepitte, *Two Sides of the Same Coin: Assessing Translation Quality in Two Steps Through Adequacy and Acceptability Error Analysis*, presentation, Workshop on automatic and manual metrics for operational translation evaluation (MTE 2014), Reykjavik, Iceland, May 26th 2014

Joke Daems, Lieve Macken and Sonia Vandepitte, *On the origin of errors: A fine-grained analysis of MT and PE errors and their relationship*, presentation, Ninth International Conference on Language Resources and Evaluation (LREC'14), Reykjavik, Iceland, May 27th 2014

Lieve Macken and Marjan Van de Kauter, *LeT's Preprocess: the Multilingual LT3 Linguistic Preprocessing Toolkit*, GLIMS, Ghent, November 12th 2014

Lieve Macken, session chair, ATILA, Ghent, November 21st

Sarah Schulz, Guy De Pauw, Orphée De Clercq, Bart Desmet, Véronique Hoste, Walter Daelemans and Lieve Macken, *Multi-Modular Text Normalization of User-Generated Content*, demonstration, ATILA, Ghent, November 21st

2015

Joke Daems and Lieve Macken, *A translation robot for each translator? A comparative study of process and quality of HT and PE*, European Commission, Ghent, January 30th

Arda Tezcan, Véronique Hoste and Lieve Macken, *SCATE Smart Computer-Aided Translation*

Environment. Evaluation of Computer-Aided Translation European Commission, Ghent, January 30th

Joke Daems, Sonia Vandepitte, Robert Hartsuiker and Lieve Macken, *Comparing human translation and post-editing using advanced research tools*, *Translation in Transition*, Germersheim, Germany, January 29th-30th

Arda Tezcan, Lieve Macken and Véronique Hoste, *A Corpus of Machine Translation Errors for English-into-Dutch language pair*, 25th Meeting of Computational Linguistics in the Netherlands (CLIN 2007), Antwerp, February 5-6

Arda Tezcan, Véronique Hoste, Bart Desmet and Lieve Macken, *UGENT-LT3 SCATE System for Machine Translation Quality Estimation*. WMT15, Tenth Workshop on Statistical Machine Translation, Lisbon, Portugal, September 17-18

Lieve Macken and Arda Tezcan, *Dutch compound splitting for bilingual terminology extraction*, ATILA, Antwerp, October 15-16

Joke Daems, Sonia Vandepitte, Robert Hartsuiker, and Lieve Macken, *The Impact of Machine Translation Error Types on Post-Editing Effort Indicators*, Proceedings of 4th Workshop on Post-Editing Technology and Practice (WPTP4), Miami, November 3rd

Joke Daems and Lieve Macken, *ROBOT: professionals vs. students, HT vs. PE, impact of MT on PE*, European Commission, Brussels, December 8th

Arda Tezcan, Véronique Hoste, and Lieve Macken, *SCATE Smart Computer-Aided Translation Environment. Evaluation of Computer-Aided Translation* European Commission, Brussels, December 8th

2016

Ayla Rigouts Terryn, Lieve Macken, and Els Lefever, *Dutch Hypernym Detection: Does Decomposing Help?*. Joint Second Workshop on Language and Ontology & Terminology and Knowledge Structures (LangOnto2 + TermiKS), 23 May 2016, Portorož (Slovenia)

Arda Tezcan, Véronique Hoste, and Lieve Macken, *Detecting Grammatical Errors in Machine Translation Output Using Dependency Parsing and Treebank Querying*, 19th Annual Conference of the European Association of Machine Translation, 30 May - 1 June 2016, Riga, Latvia

Arda Tezcan, Véronique Hoste, and Lieve Macken, *UGENT-LT3 SCATE Submission for WMT16 Shared Task on Quality Estimation*, ACL 2016 First Conference on Machine Translation (WMT16), 11-12 August 2016, Berlin, Germany

2017

Joke Daems, Lieve Macken, and Orphée Declercq, *Translationese and Posteditese: Can users and computers detect the difference?*. 27th Conference of Computational Linguistics in the Netherlands (CLIN27), February 10, Leuven

Arda Tezcan, Véronique Hoste, and Lieve Macken, *Estimating Post-editing time using machine translation errors*. 27th Conference of Computational Linguistics in the Netherlands (CLIN27), February 10, Leuven

Arda Tezcan, Véronique Hoste, and Lieve Macken, *A Neural Network Architecture for Detecting Grammatical Errors in Statistical Machine Translation*, The 20th Annual Conference of the European Association for Machine Translation (EAMT), Prague, Czech Republic, May 29-31, 2017

2018

Laura Van Brussel, Arda Tezcan and Lieve Macken, *A fine-grained error analysis of NMT, SMT and RBMT output for English-to-Dutch*. 28th Meeting of Computational Linguistics

in the Netherlands, Nijmegen, The Netherlands, January 26th, 2018
 Lieve Macken. *Teaching MT*, presentation (invited), EMT Network Meeting, Brussels, March 19th 2018
 Laura Van Brussel, Arda Tezcan and Lieve Macken, *A fine-grained error analysis of NMT, SMT and RBMT output for English-to-Dutch*. 11th International Conference on Language Resources and Evaluation (LREC 2018). Miyazaki, Japan, May 7-12, 2018
 Vincent Vandeghinste, Tom Vanallemeersch, Bram Bulté, Liesbeth Augustinus, Frank Van Eynde, Joris Pelemans, Lyan Verwimp, Patrick Wambacq, Geert Heyman, Marie-Francine Moens, Iulianna van der Lek-Ciudin, Frieda Steurs, Ayla Rigouts Terryn, Els Lefever, Arda Tezcan, Lieve Macken, Sven Coppers, Jens Brulmans, Jan Van Den Bergh, Kris Luyten and Karin Coninx, *Smart Computer-Aided Translation Environment (SCATE): Highlights*. The 21st Annual Conference of the European Association for Machine Translation (EAMT), Alicante, Spain, May 28-30, 2018
 Lieve Macken, *Recent trends in translation technology*, presentation (invited), The Council of the EU, July 5th 2018
 Lieve Macken, *Neurale machinevertaling*, presentation (invited), Interinstitutionele contactdag van de Nederlandse vertaalafdelingen van de EU-instellingen, October 1st 2018
 Lieve Macken and Iris Ghyselen, *Measuring comprehension and acceptability of neural machine translated texts: a pilot study*, Translating and the Computer, London, 15-16 nov 2018
 Lieve Macken, *Hoe een computer zelf leert vertalen*, presentation (invited), KBC inspiratiesessie machinevertaling, Leuven, December 17th 2018

2019

Bram Vanroy, Arda Tezcan and Lieve Macken, *Predicting Syntactic Equivalence in Translation*, 29th Meeting of Computational Linguistics in the Netherlands, Groningen, The Netherlands, January 31st, 2019
 Laura Van Brussel, Joke Daems and Lieve Macken, *Een baardjuffrouw en haar borstengeknoei. The influence of non-existing words in machine translation output on sentence comprehension*, 29th Meeting of Computational Linguistics in the Netherlands, Groningen, The Netherlands, January 31st, 2019
 Lieve Macken, *Hoe een computer zelf leert vertalen*, presentation (invited), Be. Translators community, Brussels, February 8th, 2019
 Lieve Macken, *Translating in the digital age: challenges and opportunities*, (invited), NLP Meetup, Ghent, March 13th 2019
 Lieve Macken, *Translating in the digital age: challenges and opportunities*, (invited), TeTra 5, Technologies for translation. Forli (Italy), March 14-15th 2019
 Lieve Macken *Human evaluation versus automatic metrics*. Workshop on customizing machine translation, Connecting Europe Facility Automated Translation (CEF-AT), Brussels April 25th 2019
 Lieve Macken. *Neural machine translation in practice*. European Parliament, Luxembourg, June 21st 2019
 Lieve Macken. *How product and process data complement each other in translation studies*. FLW Research day, de Krook, September 9th 2019.
 Lieve Macken, Joke Daems and Arda Tezcan. *ARISTOCAT: Assessing the Comprehensibility of automatic translations*. FLW Research day, De Krook, September 9th 2019.
 Lieve Macken, *Machine Translation and Post-editing*, guest lecture Universiteit Antwerpen, October 16th, 2019

Daniel Prou, Lieve Macken and Arda Tezcan. *The effect of MT on the translation workflow*, Directorate-General for Translation, Brussels, December 12th 2019

2020

Margot Fonteyne, Arda Tezcan and Lieve Macken. *Literary MT under the magnifying glass: Assessing the quality of an NMT-translated Agatha Christie novel*, 30th Meeting of Computational Linguistics in the Netherlands, Utrecht, The Netherlands, January 30th, 2020

Lieve Macken, *Neural Machine Translation in practice*, Directorate-General for Translation (EC), Brussels, March 10th 2020

Popularization

Automatisch Vertalen (Machine Translation), [Kennislink.nl](https://www.kennislink.nl)

Interview on Machine Translation, [Schamper](https://www.schamper.nl)

Interview on Translation apps, [NRC](https://www.nrc.nl)

Automatische vertaalsystemen krijgen hersenen, maar maakt dat hen beter? Taalconferentie, Gent Vertaalt, 6 oktober 2017 (i.s.m. Joke Daems)

In één muisklik van Oostends naar Nederlands, artikel over de masterproef van Rembert Hautekiet in de Krant van West-Vlaanderen, 6 oktober 2017

Demo Oostends-Nederlands automatisch vertaalsysteem op Iedereen UGent! (i.s.m. Rembert Hautekiet), 7 oktober 2017

Neural machine translation voor dummies, Onderzoeksforum vakgroep Vertalen Tolken en Communicatie, 19 december 2017

Interview Reinier Kist, NRC Handelsblad, 12 september 2018

Waarom vindt een automatisch vertaalsysteem soms nieuwe woorden uit?, *Mysterie van de dag*, Knack, July 2019

Interview Frederic Petitjean, 'Als de vertaalmachine plots een konijn van de rabbijn maakt', *De Tijd*, October 2019

Last updated: March 23, 2020