

SUBSCRIPTIONS

Natural Language Engineering (ISSN 1351-3249; electronic 1469-8110) is published six times a year in January, March, May, July, September and November. Six parts form a volume. The subscription price (excluding VAT and sales tax) of volume 27 (2021) (which includes postage) is £438 net (US\$715 in the USA, Canada and Mexico) for institutions print and electronic, institutions electronic only £362/\$597; £54 net (US\$85 in the USA, Canada and Mexico) for individuals ordering direct from the publisher and certifying that the journal is for their personal use. Single parts are £81 (US\$136 in the USA, Canada and Mexico) plus postage.

Orders, which must be accompanied by payment, may be sent to a bookseller, subscription agent or direct to the publisher: Cambridge University Press, Journals Fulfillment Department, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK; or in the USA, Canada and Mexico: Cambridge University Press, Journals Fulfillment Department, 1 Liberty Plaza, Floor 20, New York, NY 10006, USA. EU subscribers who are not registered for VAT should add VAT at their country's rate. VAT registered subscribers should provide their VAT registration number. Japanese prices for institutions are available from Kinokuniya Company Ltd, PO Box 55, Chitose, Tokyo 156, Japan.

COPYING

This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Organizations in the USA who are also registered with C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of U.S. Copyright law) subject to payment to C.C.C. of the per-copy fee of \$16.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 1351-3249/2015.

ISI Tear Sheet Service, 3501 Market Street, Philadelphia, PA 19104, USA, is authorised to supply single copies of separate articles for private use only.

Organisations authorised by the Copyright Licensing Agency may also copy material subject to the usual conditions.

For all other use, permission should be sought from Cambridge or from the American Branch of Cambridge University Press.

INSTRUCTIONS FOR CONTRIBUTORS

Instructions for Contributors will be found on the Journal's webpage at www.cambridge.org/nle
This journal and other journals are included in the Cambridge Journals Online service which can be found at journals.cambridge.org

© Cambridge University Press 2021

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, non-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

NATURAL LANGUAGE ENGINEERING

Volume 27 Part 3 MAY 2021

CONTENTS

ARTICLES

- Neural machine translation of low-resource languages using SMT
phrase pair injection 271
*Sukanta Sen, Mohammed Hasanuzzaman, Asif Ekbal, Pushpak Bhattacharyya
and Andy Way*
- Nonuniform language in technical writing: Detection and correction 293
*Weibo Wang, Aminul Islam, Abidalrahman Moh'd, Axel J. Soto
and Evangelos E. Milios*
- Syntax-ignorant N-gram embeddings for dialectal Arabic
sentiment analysis 315
Hala Mulki, Hatem Haddad, Mourad Gridach and Ismail Babaoğlu
- Investigating translated Chinese and its variants using machine learning 339
Hai Hu and Sandra Kübler

BOOK REVIEWS

- Deep Learning in Natural Language Processing*, edited by Li Deng and
Yang Liu. Singapore: Springer, 2018 373
Haoda Feng and Feng Shi
- Neural Machine Translation 2020, by Philipp Koehn, Cambridge,
Cambridge University Press 377
Alexandra Birch

EMERGING TRENDS

- Emerging trends: Ethics, intimidation, and the Cold War 379
Kenneth Ward Church and Valia Kordoni

The cover illustration is computer generated from an engraving of the Tower of Babel in an eighteenth-century bible.

Cambridge Core

For further information about this journal
please go to the journal website at:
cambridge.org/nle



MIX
Paper from
responsible sources
FSC® C007785

CAMBRIDGE
UNIVERSITY PRESS