Nilo Pedrazzini

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Skills

Computer languages Solid programming skills in Python, R and Bash. Intermediate skills in Ruby.

Cloud skills Experience working with Microsoft Azure virtual machines, storage/blobs.

Data handling and NLP In no particular order, good knowledge of Gensim (e.g. Word₂Vec/KeyedVectors and ldamodel), SpaCy, NLTK, Sci-kit Learn,

Pandas, NumPy, BeautifulSoup.

Web Development ■ Solid skills in HTML/CSS, and XML. Intermediate skills in JavaScript. One-

year experience with SQL and Django for database management.

Version Control Solid Git knowledge.

Data Visualisation ■ Extensive experience with several Python libraries, particularly Matplotlib, Seaborn and Plotly (& Plotly Dash for web app deployment). Solid skills in

base R plotting and ggplot2.

Languages Italian (native), English (C2), Russian (C1), Serbian (reading C1, speaking and listening B2), Spanish (Dele B2), German (Goethe-Zertifikat B1), Norwegian (Bokmål) (A2-B1). Good reading knowledge of French and Bulgarian. Work-

ing knowledge of Ancient Greek, Latin, Hittite, Old Church Slavonic.

Misc. Software sustainability. Collaborative software development (GitFlow). Corpus building and linguistic annotation. Linguistic Data Analysis. Development of digital and computational tools for historical languages. Teaching (Linguistics and Digital Humanities). Copyediting. TeX.

Teaching and research positions

2020

Research

January 2022- Research Assistant in Corpus-Based Digital Humanities. The Alan Turing Institute (London) - Within the project Living with Machines

Research Assistant. Oxford School of Global and Area Studies - Largely within the project Depictions of Post-COVID-19 Futures in Russian International Media: Multimodal Viewpoint Analysis, International Multimodal Communication Centre (IMCC). • I carried out annotation and correlation analyses of speech-gesture

co-occurrences in Russian and American media.

■ Guest Researcher. Universitetet i Oslo (Norway). ESRC-funded (Overseas Institutional Visit award). - Collaborative project (with Prof. Dag T. T. Haug ♣) on the temporal semantics of non-finite clauses and their competition in Ancient Greek and Early Slavic.

Teaching and research positions (continued)

Research Assistant. Department of Experimental Psychology, University of Oxford. - I collaborated with the ReadOxford research group , whose aim is to answer different questions related to child literacy development. - I developed R scripts to make corpus data reproducible and statistically analysable for morphological complexity and lexical variation. - My major contribution has been scripting an R code to automatically calculate the Average Reduced Frequency (ARF) of combined lemmata/parts of speech in the Oxford Children Corpus and Childes treebank . Code freely available in my GitHub repository .

Teaching

July 2022 | Invited lecturer (Digital Humanities at Oxford Summer School). Introduction to Word2Vec.

Sept 2021–Jan 2022 | Hourly-Paid Lecturer in Digital Humanities, King's College London (Department of Digital Humanities). Module 7AAVDM14: *The Cultural Web: Building a Humanities Website.* (HTML/CSS, Jekyll, Git)

April-June 2021 Tutor (Oriel College & Lady Margaret Hall, University of Oxford). Introduction to Historical Linguistics.

Jan-Mar 2021 **Tutor** (Oriel College & Lady Margaret Hall, University of Oxford). Introduction to Semantics & Pragmatics; Introduction to Sociolinguistics.

Sept-Dec 2020 **Tutor** in Linguistics, Oriel College, University of Oxford. General Linguistics Foundations; Introduction to Psycholinguistics.

Other Employment

2018 − 2020 IT/AV Support Assistant. Somerville College, University of Oxford. I staffed the college IT Helpdesk to assist with software issues. I also set up mics, projectors and other AV equipment at college events.

2018 − now Undergraduate Admissions Interviewer. Lady Margaret Hall, University of Oxford. I interview candidates applying for admission to the BAs in Modern Languages & Linguistics and in Psychology, Philosophy & Linguistics.

2014 – 2019 Supervisor & Assistant Manager. Le Pain Quotidien, London & Oxford Supervisor position since July 2016. Waiter/Barista until then. Acting as Assistant General Manager between December 2016 and January 2018.

Trainee Assistant Curator-Cataloguer. Slavonic Collections, The British Library. I enhanced the online catalogue of all Slavonic early-printed Cyrillic books held at the BL, in accordance with LC Subject Headings, correcting mistakes, checking items *de visu*, adding information on binding and ownership, doing provenance research where appropriate and disseminating the results in social media. I acquired knowledge of MARC21, LMS (ALEPH), rare-book handling and copy-specific information structure.

Academic Service

2015

2022–now Main organizer of the Open Humanities Seminar Series (OHSS). •

Fellow. Reproducibility Research Oxford (RROx) - UK Reproducibility Network (UKRN) - I am particularly involved in the discussion around best Open Humanities practices.

Academic Service (continued)

2020 – now

■ Editorial Assistant & Copyeditor. Journal of Open Humanities Data (JOHD), Ubiquity Press. I am involved in a wide range of tasks, including contacting potential collaborators for research events; creating and moderating satisfaction surveys; providing support with Lagrange Templates; conducting data analysis on publication metrics; occasionally serving as Section Editor.

2019 – now

June 2021

Supervision (with Dr Barbara McGillivray) of Malithi Alahapperuma (MSc Digital Humanities, University College London), as part of her work placement at the Alan Turing Institute, providing mentorship on the collection and correlation analysis of metrics for the Journal of Open Humanities Data.

Education

2019

DPhil (PhD), University of Oxford in Linguistics, Philology & Phonetics. ♣ Thesis title: Early Slavic participle clauses and their competition: a computational approach. ESRC full scholarship ♣ Supervisor: Dr. Hanne M. Eckhoff.

MSt, University of Oxford in Slavonic Studies (Distinction).

Bosnian-Croatian-Serbian language (Serbian standard); history of Church Slavonic; Cyrillic palaeography.

2015 - 2017

Graduate Program, Università di Pavia in Linguistics.

Project title: Secondary uses of Russian second-genitive: a corpus-driven quantitative diachronic

analysis. Supervisor: Prof. Silvia Luraghi. I have earned 70% of the credits towards an MA in Theoretical and Applied Linguistics, completing exams in computational linguistics, first-order logic, advanced phonology & phonetics, linguistic typology, Celtic linguistics, Hittitology, advanced Slavic philology, advanced Russian language, advanced Russian literature (in Russian). Average grade: 29.2/30 (predicted Distinction).

BA, Università di Pavia in Modern Languages and Cultures (Russian and English).

Thesis title: La poesia sillabica dei Vecchi Credenti e il Barocco russo: lamenti anonimi della prima metà del XVIII secolo [Old Believers' syllabic poetry and the Russian Baroque: Anonymous lamentations from the first half of the 18th century]. Supervisor: Prof. Maria C. Bragone. Grade: 110/110 Summa cum Laude.

Further Training

Digital Humanities & Research Software Engineering Summer School (Alan Turing Institute, London [held online]). Main topics: 1. GitFlow 2. Software sustainability 3. Good data visualisation 4. Software development life cycle 5. Historical language modelling; MyBinder.

Mediterranean Machine Learning Summer School (Milan, Italy [held online]). Sessions attended: 1) Reinforcement learning 2) Causal inference 3) Low-resource machine translation 4) Data-efficient optimization with Bayesian optimization.

Digital Humanities at Oxford Summer School (Oxford [held online]). Strand: From Text to Tech (Python for NLP). I received a bursary for attending.

- Transkribus User Conference (Innsbruck, Austria). Topics covered: 1. Training of large HTR models 2. Automatic recognition of tables 3. Transkribus Text2Image tool.
- Corpora & Discourse International Conference (Sussex University [held online]) Main topic: corpus methods in discourse analysis.
- Belgrade Winter School in Indo-European Linguistics (Belgrade, Serbia). Courses attended: 1. Phrygian 2. Messapic 3. Gothic. 6
- Preparation for Learning and Teaching at Oxford (PLTO).
- Digital Editions course (Taylor Institution Library, Oxford, UK). Topics: 1. Transcription principles 2. XML (TEI) 3. Unicode.
- 2017 15th New York-St. Petersburg Institute of Linguistics, Cognition and Culture (St. Petersburg, Russia). Courses attended: 1. Generative syntax 2. Morphology 3. Phonology 4. Formal semantics.
- Bulgarian language course (SSEES, University College London, UK).
- Russian language course (Echo Eastern Europe School, Kiev, Ukraine).
- 2013 Spanish language course (¡Málaga Sí! Language School, Málaga, Spain).

Awards and grants

- Circle U. Prize Award (PI: Barbara McGillivray), as a contributor to the project *The Language of Mechanization*, part of the *Living with Machines* project (The Alan Turing Institute), for innovative and novel approaches to inter- and trans-disciplinary research §
- 2020 Overseas Institutional Visit Award (Economic and Social Research Council), for a two-month visiting research period at the University of Oslo, Norway
 - Digital Humanities Summer School (DHOx2020) Bursary
- 2019-2023 Economic and Social Research Council (Grand Union DTP) Full PhD Scholarship
 - 2019 Somerville College Archibald Jackson Prize

Publications and Presentations

Peer-reviewed papers

- **Pedrazzini**, N., & McGillivray, B. (Forthcoming). Machines in the media: semantic change in the lexical field of mechanization in 19th-century British newspapers. *NLP4DH Conference Proceedings* (Association for Computational Linguistics).
- Marongiu, P., **Pedrazzini**, N., Ribary, M., & McGillivray, B. (Forthcoming). Le Journal of Open Humanities Data (JOHD): enjeux et défis dans la publication de data papers pour les sciences humaines.
- McGillivray, B., Marongiu, P., **Pedrazzini**, N., Wigdorowitz, M., & Zordan, E. (2022). Deep Impact: A study on the impact of data papers and datasets in the Humanities and Social Sciences. *Publications*, 10(4).
- **Pedrazzini**, N. (2022). One question, different annotation depths: A case study in Early Slavic. *Journal of Historical Syntax* (Special issue: "Annotating Historical Corpora"), *6*(7), 1–40.

 δdoi:10.18148/hs/2022.v6i4-11.96
- Pedrazzini, N., & Eckhoff, H. M. (2021a). OldSlavNet: A scalable Early Slavic dependency parser trained on modern language data. *Software Impacts*, 100063. Odoi:10.1016/j.simpa.2021.100063

Pedrazzini, N. (2020a). Exploiting cross-dialectal gold syntax for low-resource historical languages: Towards a generic parser for pre-modern Slavic. In F. Karsdorp, B. McGillivray, A. Nerghes, & M. Wevers (Eds.), Proceedings of the Workshop on Computational Humanities Research (CHR 2020) (Vol. 2723, pp. 237–247). Amsterdam, Netherlands: CEUR Workshop Proceedings. Retrieved from Phttp://ceur-ws.org/Vol-2723/short48.pdf

Conference Presentations

- Evaluating Language Models for Ancient Greek: Design, Challenges, and Future Directions. (August 2022). International Conference on Historical Linguistics 2022 (ICHL25: Oxford), with Barbara McGillivray, Malvina Nissim, Saskia Peels-Matthey & Silvia Stopponi. Retrieved from https://ichl.ling-phil.ox.ac.uk/abstracts/168
- Historic machines from 'prams' to 'Parliament': new avenues for collaborative linguistic research. (June 2022). DH Benelux 2022: RE-MIX. Creation and alteration in DH, with Mia Ridge, Giorgia Tolfo, Kalle Westerling and Barbara McGillivray. Retrieved from https://zenodo.org/record/6578021#.YtjqFy8w1Yh
- Le Journal of Open Humanities Data (JOHD): enjeux et défis dans la publication de data papers pour les sciences humaines. (November 2021). DHNord2021 round table "Le data paper: une nouvelle forme de publication scientifique en SHS", with Paola Marongiu, Marton Ribary & Barbara McGillivray. Retrieved from
 - folion fr/page/enjeux_et_defis_dans_la_publication_de_data_papers_pour_les_shs
- Participial free adjuncts in early Slavic treebanks: The discourse properties of the dative absolute.

 (September 2020). Slavic Linguistics Society (SLS) Conference, Bloomington (IN, USA) [held as online event]. Retrieved from https://slavicgf.sitehost.iu.edu/SLS/abstracts/Pedrazzini.PDF
- Tackling lack of linguistic data with HTR: A specialized model for the transcription of Serbian Church Slavonic manuscripts. (April 2021). El' Manuscript Conference 2020. Retrieved from \$\mathcal{O}\$http://www.elmanuscript2020.uni-freiburg.de/wordpress/wp-content/uploads/2021/04/ElManuscript-2021-Booklet-of-Abstracts_09.04.2021.pdf
- Same question, different annotation depths: early Slavonic dative absolute in deeply versus shallowly annotated treebanks. (November 2020). Grammar & Corpora International Conference, Kraków (Poland) [held as online event]. Retrieved from %https://gac2020.ijp.pan.pl/GaC_2020_paper_25.pdf
- 7 Exploiting Cross-Dialectal Gold Syntax for Low-Resource Historical Languages: Towards a Generic Parser for Pre-Modern Slavic. (November 2020). Computational Humanities Research Workshop, Amsterdam (The Netherlands).
- Challenges in historical corpus analyses of discourse relations: a case study in Old Church Slavonic. (17-19 June 2020). Corpora & Discourse International Conference, University of Sussex (UK) [held as online event]. Retrieved from Phttps://corporadiscourse.com/historical-discourse-videos/

Blog posts

- A reluctantly modern voice from the 17th-century Russian storm: Archpriest Avvakum and the Life written by himself. (10 June 2015). Retrieved from %https://blogs.bl.uk/european/2015/06/a-reluctantly-modern-voice-from-the-17th-century-russian-storm.html
- Fairytales on trial: the Good and the Beautiful in early-Soviet children's literature. (26th March 2019). Retrieved from 6thtps://blogs.bl.uk/european/2019/03/fairytales-on-trial.html

Other contributions

Data processing for: Dawson, N., Hsiao, Y., Tan, A., Banerji, N., & Nation, K. (2021). Features of lexical richness in children's books: Comparisons with child-directed speech. Language Development Research. Odoi:10.34842/5we1-yk94