

EDITORIAL

NooJ is a linguistic development environment that provides tools for linguists to construct linguistic resources that formalize a large gamut of linguistic phenomena: typography, orthography, lexicons for simple words, multiword units and discontinuous expressions, inflectional, derivational and agglutinative morphology, local, phrase-structure and dependency grammars, as well as transformational and semantic grammars. NooJ contains a rich toolbox that allows linguists to construct, maintain, test, debug, accumulate and share linguistic resources. This makes NooJ's approach different from most other computational linguistic tools that typically offer a unique formalism to their users, and are not compatible with each other.

NooJ has been recently enhanced with new features to respond to the needs of researchers who analyze texts in various domains of Human and Social Sciences (history, literature and political studies, psychology, sociology, etc.), and more specifically of all the professionals who use corpora to teach a second language.

Since 2014, Professor Andrea Fernanda Rodrigo's, Silvia Reyes's and Rodolfo Bonino's team at the National University of Rosario (Argentina) has been particularly active in the NooJ community, developing several linguistic resources for Argentinian Spanish, software pedagogical applications for learners of Spanish as a second language and opening several cooperations, including with projects of description of Italian and Quechua.

This issue is therefore especially important for the NooJ community and more generally for all NooJ developers, as it is representative of its two most crucial projects: developing linguistic resources on the one hand, and using these resources to develop teaching applications on the other hand:

— In her article “Impacto del FMI en los medios periodísticos de Argentina, análisis automático con la Plataforma NooJ”, Carmen González analyzes how two themes — the COVID pandemic and Argentinian economic problems — are addressed in three Argentinian newspapers. The detailed linguistic resources developed for this study (in the form of formalized dictionaries and grammars) is of particular importance because it contains Rioplatense Spanish terms and expressions, to match the texts in the newspapers.

— In his article “Análisis transformacional y traducción de frases transitivas del Quechua”, Maximiliano Duran presents a system capable of automatically producing paraphrases of Quechua transitive sentences, based on the formalization of various elementary transformations: pronominalization, reduction, passivation and argument permutation. By combining these elementary transformations, the system can produce about a million paraphrases from an elementary sentence such as *Roberto Rosata kuyan* [Roberto loves Rosa].

— In their article “Rhetorical analysis techniques in Dante Alighieri's Divine Comedy”, Ritamaria Bucciarelli, Andrea Fernanda Rodrigo and Javier Julian

Enriquez show how NooJ theoretical framework relates to various scientific disciplines and present a concrete application of NooJ for an emotional analysis of Dante's Divine Comedy using Planat's model.

— In her article “Fukushima's Wastewater Release: A Corpus-based Analysis of the Lemma ‘Water’ in the Japanese and German Press”, Lisa Pezzali studies the use of the word “water” in Japanese and German newspapers, in relation with the Fukushima Daichi nuclear plant accident. By performing quantitative and qualitative analyses of this word and its contexts, she shows how these articles portray the release of water in the ocean as harmless or dangerous, using specific linguistic and communicative tools.

This issue should be of interest to all users of the NooJ software because it presents the latest development of the formalization of transformational grammars, as well as two corpus linguistics applications: one in emotional analysis of literature, one in political analysis of newspaper articles.

Linguists as well as Computational Linguists who work on Italian, Quechua and Spanish will find advanced, up-to-the-minute linguistic studies for these languages.

We think that the reader will appreciate the importance of this issue, both for the intrinsic value of each linguistic formalisation and the underlying methodology, as well as for the potential for developing pedagogical applications.

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