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THE ERASMUS MUNDUS JOINT MASTER IN LEXICOGRAPHY – EMJM-EMLEX
New Developments and Goals

Abstract This paper introduces the Erasmus Mundus Joint Master in Lexicography – EMJM-EMLex - especially some new developments and objectives. The EMJM-EMLex programme remains focused on lexicography, but is evolving into a multidisciplinary, digital discipline in order to adapt to societal and scientific changes. Founded in 2009, experience to date confirms that the success of EMLex lies in its unique objectives and in responding to the ever-changing needs of society while fostering international collaboration, linguistic diversity and cultural exchange (Dias, 2022). The programme's multidisciplinary approach is in line with the Council of Europe's language policy goals, emphasising lifelong learning and multilingualism. With 8 full member universities and 8 associate members in its consortium, the programme offers an international and interdisciplinary curriculum covering lexicography, digital humanities, language technologies and natural language processing. EMJM-EMLex integrates theoretical and practical aspects of lexicography over four semesters, including mobility periods, advanced modules, internships and a master's thesis, after which graduates receive a joint degree from the member universities. EMJM-EMLex graduates are prepared for diverse career opportunities. The programme's commitment to innovation, internationalisation and sustainability ensures its continued relevance and impact in the digital age.

Keywords lexicography; digital humanities; language technologies; EMJM-EMLex

1. Introduction

Given the challenge of bridging the gap between theoretical and practical lexicography, there had been contemplations of the possibility of establishing a lexicography master's degree programme since the 1980s; which however were typically met with initial reluctance and a pessimistic outlook, partly due to the perceived low demand for lexicographers, while overlooking the evolving needs of modern lexicographic products and the growing importance of online lexicography (Schierholz, 2010, pp. 343-344). Overcoming various difficulties, the European Master in Lexicography (EMLex) has been offered since 2009. This international master's degree (120 ECTS) has been awarded the title of "Erasmus Mundus Joint Master Degree" by the Education, Audiovisual and Culture Executive Agency since 2016.

Through its broad curriculum, EMLex has been training the next generation of lexicographers who are versed and well established in both lexicographic theory and practice, and are suited to tackle modern language and lexicographic problems. Therefore, the programme offers a globally oriented and interdisciplinary master's

degree programme in lexicography aimed at students who have an interest in engaging with dictionaries and digital lexicographic tools.

For a third time, the Audiovisual and Culture Executive Agency has granted the recognition of Erasmus Mundus Programme to EMLex for the period of 2024–2030. An increasing interdisciplinarity of the programme, EMJM-EMLex, was proposed for this new period, incorporating aspects such as digital humanities, statistics, artificial intelligence, language technologies, and natural language processing. Thus, students will be equipped with the relevant competencies to meet the linguistic and lexicographic demands of an evolving digital and globalised society.

The new EMJM-EMLex consortium consists of eight full member universities and eight associate members. The full members include Universidade de Santiago de Compostela (coordinating institution), Università degli Studi Roma Tre, Universidade do Minho, Friedrich-Alexander-Universität Erlangen-Nürnberg, Károli Gáspár Református Egyetem, Université de Lorraine, Ilia State University, and Universität Hildesheim. The associated members are Stellenbosch University, Leibniz-Institut für Deutsche Sprache, University of Surrey, Akademie der Wissenschaften zu Göttingen, Université Félix Houphouët-Boigny, Universität Innsbruck, Pontificia Universidad Católica de Valparaíso, and the University of Texas at Austin.

2. New Developments and Goals

2.1 New Countries in Focus

One of the new developments in EMJM-EMLex is the focus on Africa and South America. In this international master programme, efforts are being made to reach a wider global audience, and this includes promoting the programme beyond Europe. For the first intake, a focused social media advertising campaign is being launched to bolster the brand presence of EMJM-EMLex, to create more awareness about the programme and to attract young and motivated future lexicographers especially from Africa[1]. In those parts of the world, there are many languages that have not received much attention in terms of lexicographic development and the creation of lexicographic resources for speakers of such languages. Thus, there is huge potential to be harnessed by training lexicographers from those continents.

In addition, this campaign enabled the observation of the interest that lexicography awakens, and indeed, it aroused a lot of interest. The advertising campaign was launched in early 2024, during the application period for the 2024/25 academic year. Targeting individuals aged 20 to 35 with bachelor's degrees in language-related fields across various African cities in Nigeria, Cameroon, Togo, Egypt, South Africa, Kenya, Namibia, Senegal, Ivory Coast, Morocco, Ghana, Tanzania, and Ethiopia, the campaign utilised Facebook and Instagram as primary platforms. It featured a 15-second promotional video released from February 5th to 29th, followed by newsfeed and stories ads from February 12th to 29th.

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[1] For the next intake, South America will be the target continent.

The campaign garnered significant traction, amassing 3,779,263 impressions with a commendable 57% View Through Rate (VTR), indicative of strong engagement among the target audience. Moreover, the Click Through Rate (CTR) of 0.72% surpassed expectations, signifying effective targeting of users interested in pursuing the master's programme. Notably, the campaign yielded its most favourable outcomes in Ghana, South Africa, and Ivory Coast, underscoring the efficacy of the advertising efforts in the continent. This interest was also reflected in the number of applicants.

2.2 Lexicography as a Multidisciplinary Discipline

The EMJM-EMLex programme is undergoing transformative developments to adapt to the evolving landscape of digitalisation and societal needs. While the core focus remains on lexicography, the programme is evolving into a multidisciplinary digital discipline, aligning with the demands of a global and multilingual society. In response to the increasing emphasis on multilingualism and lifelong learning by organisations such as the Council of Europe, there is a growing need for critical approaches to lexical information systems (see Villa Vigoni Theses on Lexicography of EMLex, 2018). Moreover, the market for lexicographic products is very large and, as Granger has already pointed out "barriers between the different types of language resources – dictionaries, encyclopedias, term banks, lexical databases, vocabulary learning tools, writing aids, translation tools – are breaking down." (Granger, 2012, p. 4). Furthermore, we agree with Gouws (2017, p. 26) that in today's world neither lexicography nor lexicographical didactics can deal only with dictionaries – even if they are electronic – but must focus on the whole range of resources and media used, especially by the younger generation for these purposes. Taking this into account, new technologies and methods of analysis, as well as studies on users *in actu* (Wiegand, 1988, p. 501), can contribute to the design of better resources.

The social changes are also accompanied by the increasing intertwining of lexicography with natural language processing (NLP) and artificial intelligence (AI). Lexicographical knowledge is central to the development of resources for humans or machines at a wide variety of levels. It supports the responsibility not only of conveying linguistic, specialised and cultural knowledge, but also of the specialised conversion and application of this knowledge in modern user-oriented reference works and resources. In this context, we understand lexicography as a link between lexicographical expertise, AI and the digital humanities.

Internally, the programme is tasked with addressing subject-related tasks such as establishing high-quality knowledge repositories, such as reference works, dictionaries, databases, information systems, as well as training conditions to ensure the reliable data supply in modern information societies. Externally, in the era of big data, machine translation systems, robots for automatic text production, digital humanities, as well as regarding new methods and techniques for automatic data collection and language generation, lexicography fulfils the task of a mediating authority between different worlds of knowledge and research, and between the world of research, the academic world and society.

The aforementioned requires the integration of current scientific research results and innovations into the curriculum, which also contributes to enhancing students' key digital competences and skills, for example:

- NLP-related content is offered, e.g., in courses such as *Basics of Lexicography* (1st semester) and in advanced seminars such as *Computational Lexicography* or *Modelling and Representing Data in Digital* Lexicography (2nd semester).

- Machine Translation, automatic translation and generation, as well as the role of AI for gaining lexicographical data are topics in courses such as *Dictionaries and Translation* (2nd Semester) and in the in-depth modules in the 3rd semester.

- Statistical content and visualisation of digital data as well as languages and technologies are taught, e.g., in the 3rd semester and in special courses.

- The interaction of new analysis and data retrieval strategies, the emergence of new lexicographic resources and the evolution of dictionary use requires knowledge to establish quality criteria and resources appropriate to users. Advanced seminars such as *Metalexicography* and *Research into Dictionary Use* play a key role here. Metalexicography and dictionary use research are areas that are not only important on a theoretical level; the last-mentioned field, for example, is becoming increasingly central to adequate media literacy, as required in many (school) educational guidelines in European countries.

EMJM-EMLex distinguishes itself by offering a multilingual context for acquiring multidisciplinary skills, particularly focusing on lexicographic and lexical knowledge. Through interaction with programme stakeholders, students are exposed to a range of courses that cater to their diverse cultural and social backgrounds while meeting international educational objectives for lexicography. This unique approach ensures that EMJM-EMLex graduates are equipped to analyse data effectively, develop innovative technologies, and critically engage with evolving modes of communication in today's globalised world.

2.3 Lexicography and Society

The first dictionaries ever produced may seem primitive according to the present standard, but their authors at least had the privilege of spontaneously understanding the social value of their work, i.e., the close relation between specific types of social needs and the solutions given by means of dictionaries. With the passing of the centuries and millenniums, this close relation was forgotten. [...] The social needs originally giving rise to lexicography were relegated to a secondary plane and frequently ignored (Tarp, 2009, p. 19).

Perhaps today, more than ever, it is necessary to make society aware of the value of lexicography. In a global society of immediacy and easy access to a large amount of data with a click, how can a user know that the resource they are handling is reliable?

The master's programme addresses these kinds of questions, but goes a step further by trying to involve society in lexicographic research and discussion. For example:

- Citizens can participate in some collaborative lexicographic projects; this is a lexicography for the citizens with the citizens, an open science lexicography.

- The programme fosters societal involvement through events such as EMLex Hackathons and Congresses, as well as proposes dissemination actions through TV-media, social networks focusing on language, lexicography, media literacy, etc.

- Outreach to educational institutions and the offer of training seminars for teachers and lecturers with a special focus on new digital resources is important in two senses: on the one hand, due to the necessary updating from a content or technical point of view for the purpose of using new resources in teaching and critical media competence; and on the other hand, because of the necessary sensitisation regarding the need for high quality lexicography, which in turn is fundamental for success in other professions, e.g., translators, interpreters, etc.

- The involvement of society also implies an approach based on the identified professional, social, institutional and industrial (market-related) needs. It is the task of the Consortium to identify gaps in the job market and create job networks. But it is also the task of the students and graduates to establish networks, not only with the entire teaching staff of the Master's programme, but also during their internships in centres all over the world.

In addition, it is very important to emphasise the internationalisation of the programme in order to ensure the exchange of experiences for the further development of institutional and personal cooperation networks with special attention to a multilingual, multicultural and egalitarian society and to maintain and intensify the established structures in the international professional world for students and teachers.

3. Conclusion

The specific development of optimisation actions within the EMJM-EMLex programme focuses on meeting professional needs and increasing the visibility of lexicography as a multidisciplinary field in the digital humanities. EMJM-EMLex faces the challenge of rapidly evolving demands in lexicography and dictionary research and strives to adapt itself constantly to meet these demands. This is exemplified by the recent expansion of the programme to include disciplines such as digital humanities, statistics, artificial intelligence and natural language processing, ensuring that graduates are well equipped to tackle the complexities of modern lexicography.

By extending its reach to Africa and South America, EMJM-EMLex not only broadens its geographic scope but also addresses the underrepresentation of certain languages in lexicographic resources. The success of targeted social media campaigns highlights

the significant interest in lexicography in these regions, suggesting a promising future for the inclusion of diverse linguistic perspectives in global lexicographic work.

Furthermore, the societal impact of lexicography, a focus of EMJM-EMLex, is also a critical aspect. By involving citizens in collaborative projects and promoting outreach through events and training seminars, EMJM-EMLex not only enhances the visibility and understanding of lexicography but also fosters a community that values and supports the development of lexicographic resources.

The future of lexicography lies in offering metalexicographic standards both in print and online, analysing large volumes of data using new NLP and AI techniques, developing information systems according to user types and quality criteria, documenting language and cultural knowledge, and being a socially responsible, inclusive and citizen-friendly lexicography, and EMJM-EMLex aims to provide a framework that prepares future lexicographers to adequately meet these needs.

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