The eye-tracking workshop titled „Unlocking Understanding: An Interdisciplinary Exploration through Eye-Tracking Research on the UN Disability Rights Convention“ was held at the Institute for Legal Research, Faculty of Law, University of Coimbra, Portugal, from May 22 to May 23, 2024. This workshop was a mandatory course for students of International Legal Communication (Master’s program, Faculty of Applied Linguistics, University of Warsaw) as part of the ILC Research Workshop „UNIVERSITY LEAGUE“.

The primary objective of the workshop was to introduce participants to the principles and applications of eye-tracking methodology and to establish a platform for international cooperation between researchers from the two universities. The workshop was designed for students and researchers interested in eye-tracking and its potential applications across various fields such as linguistics, marketing, law, and beyond. The focal point of the workshop was the eye-tracking analysis of legal texts, specifically Article 8 of the “Convention on the Rights of Persons with Disabilities“. The principal research question addressed was: “Do reading strategies differ between the original version of the text and its simplified version?”

The scientific supervision for the workshop was provided by Prof. Anna Borowska in the field of linguistics, and Prof. Joanna Osiejewicz in the field of law, with eye-tracking research led by Dr. Agnieszka Błaszczak and Dr. Agnieszka Kałdonek-Crnjaković. Four students from the International Legal Communication program participated in the workshop: Dr. Magda Żelazowska-Sobczyk and Natalia Osiejewicz, BA onsite, Camila Pinheiro De Morais Velloso Dos Santos, BA, and Jane Lefebvre-Prevost, BA, online. Additionally, two participants from the University of Coimbra, who were final-year MA law students, attended the workshop, along with scientific staff: Marta Graça, PhD, Fernando Vannier dos Santos Borges, PhD, and Eduardo Figueiredo, PhD candidate.

Firstly, participants were welcomed by Prof. Ana Margarida Simões Gaudêncio, University of Coimbra, and Prof. Anna Borowska, University of Warsaw. Next, Dr. Agnieszka Błaszczak prepared an introductory presentation on the subject of eye-tracking research. The starting
point was to familiarize the workshop participants with key eye-tracking terms such as fixation, saccade, scanpath, heatmap, AOI (area of interest), gaze duration, and others. Eye tracking is a technology that involves monitoring eye movements to analyze a user’s reactions to specific stimuli. An eye tracker is equipped with cameras that record the states of eye movement, allowing researchers to obtain information about noticed and overlooked areas, collect and analyze data, and create heat maps of the viewed data. Depending on the specific design of the study, researchers can utilize wearable eye trackers, which empower them with high-quality behavioral data in any environment, or screen-based, stationary eye trackers, which provide precise data on what captures a person’s attention and where they look. In both cases, the collected data is analyzed using research software that enables detailed examination of eye-tracking data and the development of applications leveraging this data. Subsequently, Dr. Agnieszka Błaszczak presented the specifications of these two groups of devices, highlighting their benefits and limitations. Example recordings from eye-tracker applications shown during the workshop were derived from eye-tracking studies conducted at the University of Warsaw by Dr. Agnieszka Błaszczak and Dr. Agnieszka Kałdoniec-Crnjaković.

Secondly, the participants took part in the experiment. Research involving eye tracking in legal texts typically focuses on how individuals read and comprehend legal documents. Eye tracking technology allows researchers to monitor where individuals look while reading legal texts, providing insights into their attentional patterns, comprehension strategies, and the effectiveness of document design. This research can inform legal writing, layout, and formatting improvements to enhance readability and understanding for various audiences, including legal professionals, policymakers, and the general public. For this reason, during the first day of the workshop, participants were tasked with reading the original version of Article 8 of the “Convention on the Rights of Persons with Disabilities”. The study participants included law students as well as students of international legal communication, who are linguists with a legal background. After reading, they completed a questionnaire to assess their understanding of the text.

During the second day of the workshop, participants revisited Article 8 of the Convention, but this time they read a simplified version of the target text, rewritten in plain language. After analyzing the eye-tracking results from the first day, Dr. Agnieszka Błaszczak and Dr. Magda Żelazowska-Sobczyk identified fixation areas on visualizations in the form of heatmaps. These areas of the text were modified using plain language. The revised text was then presented to the workshop participants, who again participated in the eye-tracking study and subsequently completed a questionnaire to assess their understanding of the text. Dr. Agnieszka Błaszczak then discussed the results of the eye-tracking experiment from both the first and second days. The results were visualized using heatmaps and gaze plots, comparing the scanpaths of law students and international legal communication students, revealing different reading strategies. Law students focused on every element of the text, including the numbering of individual sections, which was completely ignored by the second group of students. Conversely, the international legal communication students started reading from the second or third word in a line but tended to read the entire text twice, unlike the law students who were more accustomed to legal language and the specificity of such texts. The
findings highlighted the distinct reading strategies of the two groups of students. Finally, Prof. Anna Borowska discussed the questionnaire results and emphasized the importance of continuing to explore and innovate with eye-tracking technology.

The two-day workshop concluded with the conference „Unlocking Understanding: An Interdisciplinary Exploration through Eye-Tracking Research on the UN Disability Rights Convention.” Two invited talks were delivered: “Special Educational Needs vs. Inclusivity in Poland: Law and Regulations vs. Reality” by Magda Żelazowska-Sobczyk, PhD, University of Warsaw, and “(In)visibility of Persons with Disabilities in Human Rights Law: Lights and Shadows on the Path towards the CRPD” by Eduardo Figueiredo, University of Coimbra.

The eye-tracking workshop, held within the framework of the International Legal Communication Research Workshop „UNIVERSITY LEAGUE” at the University of Coimbra, successfully introduced students and researchers to the fundamental aspects of eye-tracking methodology, equipment, software, and potential applications across various fields. The workshop facilitated networking and established a platform for future research and collaboration between the two universities.