TNA ACTIVITY REPORT

Integrative Approaches in Computational Literary Studies and Global Knowledge Structures

Author: Kim Byungjun

Current position: Research Assistant Professor

Affiliation: KAIST (Korea Advanced Institute of Science and Technology)

Host institution: Trier Center for Digital Humanities

Mentor(s): Christof Schöch

Period of stay: March 25, 2024 ~ May 21, 2024

Introduction and Research Objectives

I focused on exploring the OpenAlex[1] database and its potential applications in the fields of computational literary studies and digital intellectual history. This report summarizes my research activities, methodological approach, and the outcomes of my visit, along with considerations for future work and an evaluation of the NLP tools used.

Exploring the OpenAlex Data Architecture

To lay the groundwork for my research, I thoroughly examined the data architecture of OpenAlex. Understanding its structure and capabilities was crucial for identifying its relevance to computational literary studies. OpenAlex provides a wealth of metadata, including research topics, author affiliations, and gender information, which can be leveraged to investigate various aspects of literary studies.

OpenAlex Applications in Computational Literary Studies

I explored recent research examples that demonstrate the application of OpenAlex in digital humanities and computational social sciences. These examples highlighted the pivotal role of OpenAlex in advancing scholarly inquiries. By analyzing the research topics provided by OpenAlex, I investigated the focus of literary studies and how it has evolved over time. Additionally, I utilized the authors' affiliation and country data to examine the demographics

---

[1] https://openalex.org/

of literary studies authors, including their institutional affiliations, countries, and gender, to identify any potential inequalities.

Integrating OpenAlex API with Linked Open Data (LOD)

To facilitate the integration of OpenAlex data into research environments, I developed Python code that leverages the OpenAlex API and connects it with Linked Open Data (LOD). This code, along with documentation, is available on my GitHub repository: https://github.com/ByungjunKim/LODinG_OpenAlex. This repository is part of the LODinG - Linked Open Data in the Humanities project, conducted by the Trier Center for Digital Humanities (TCDH), and was created as part of sub-project 3, which focuses on integrating LOD with the OpenAlex database. Based on this work, I had the opportunity to present my findings at a colloquium hosted by the TCDH.

Fellowship Outcomes and Future Collaborations

My two-month fellowship at the Computational Literary Studies INFRA has been an invaluable experience, allowing me to gain insights into the research approaches employed in computational literary studies and digital humanities in Europe. I had the opportunity to network with Professor Schöch and other researchers, fostering potential collaborations. With South Korea joining HORIZON EUROPE as an associated member this year, I plan to leverage this experience to initiate global research projects between South Korea and Europe in the future.

The outcomes of my fellowship, including the presentation on the structure and utility of the OpenAlex database, can be accessed via this Google Presentation link: https://docs.google.com/presentation/d/1sbP7kgQ8dEz2AGxL25zmT9RHFn8ufOEFVzYh0NEObKM/edit?usp=sharing

In conclusion, my fellowship at the Computational Literary Studies INFRA has provided me with a solid foundation for future research endeavors in computational literary studies and digital intellectual history. The insights gained and the connections made during this period will undoubtedly contribute to the advancement of these fields and promote international collaboration.