ADVANCES IN KNOWLEDGE ORGANIZATION
Proceedings of International ISKO Conference - ISSN: 0938-5495 - 2026 - São Paulo

Transforming the ISKO Encyclopedia into a Knowledge Network Using LLMs: An Experiment

Jian Qin

School of Information Studies, Syracuse University, USA

Qiaoyi Liu

School of Information Studies, Syracuse University, USA

Bei Yu

School of Information Studies, Syracuse University, USA

Abstract

This paper reports the results from an experiment of using AI technologies to establish basic understanding of the current state of subject representation and cross-referencing in the *ISKO Encyclopedia of Knowledge Organization* (IEKO) and what opportunities there may be in migrating IEKO to a new website. Twelve IEKO entries were randomly selected to test the feasibility of automatic detection of linkable entities and assess the accuracy in selecting these linkable entities. We obtained encouraging results: 1) the analysis of sample entries shows that many concepts and names are mentioned in articles but the rate of hyperlinks to these concepts and names are less than desirable. Sparse hyperlinks are a sign of insufficient subject representation; and 2) the AI tools are helpful in identifying linkable entities, though not fully automated. The paper discussed what the experiment result means for the feasibility of using AI tools for migrating IEKO to the new website as well as to knowledge organization research at large.

1.0 Introduction

Online encyclopedias are an indispensable part of learning and research infrastructure and play an important role in accelerating scientific research and assisting learning. There have been discussions on the various aspects of online encyclopedias, such as credibility assessment through a quasi-experiment that compares an open encyclopedia Wikipedia and an expert-vetted online encyclopedia (*Encyclopedia Britannica and Citizendium*) (Flanagin and Metzger 2011), and motivations and mechanisms affecting how different types of contributions made to the open encyclopedia *Wikipedia* (Anthony et al. 2009). Many of such discussions explored online encyclopedias as collaborative content creation (Liu and Ram 2011; Mesgari et al. 2015), altruism and behavioral factors (Simpson and Willer 2015; Hamari et al. 2016), and information quality and credibility (Arazy et al. 2011; Ren et al. 2024). Online encyclopedias have been considered as standalone information systems, in which different activities involved in building online encyclopedias are divided into sharing, creation, coordination, and collaboration subsystems. There has been even

effort trying to turn encyclopedias into ontology, such as the Philosophy Ontology (InPhO) project (Buckner et al. 2011) and using semantic technologies to develop intelligent online encyclopedia (Andon et al. 2020).

While studies of online encyclopedias are abundant, many of these studies focused on Wikipedia and not all lessons and experiences are applicable to a different type of online encyclopedia—the one that has scholarly, archival quality and is tightly managed by a small editorial team in a specialized domain. The International Society of Knowledge Organization (ISKO) website hosts such a publication – the ISKO Encyclopedia of Knowledge Organization (IEKO). The IEKO contains a collection of high-quality scholarly articles published in the journal *Knowledge Organization* and other venues in library and information science (LIS) and is freely open for public access. With the extraordinary effort of the editor-in-chief Birger Hjørland and co-editor Claudio Gnoli, the IEKO has so far accumulated 125 articles that are organized by subject, alphabetical, and chronological orders.

As the ISKO website is migrating to an all-in-one cloud platform like WordPress content management system, the IEKO is facing several challenges. The IEKO is currently formatted in static, manually created web pages that are stored as html files. This format means that heavy human intervention will be required in editing and formatting for publishing new and updating existing entry articles. For instance, the entry “Art studies and knowledge organization” mentioned Dewey Decimal Classification (DDC) and Library of Congress Classification (LCC) in Introduction section, but neither entity is linked, even though DDC is one of the entries in IEKO. Although IEKO does not have an entry for LCC yet, it would be helpful to make an external link to LCC’s official website. There are known problems for static html webpages: they are error prone and time consuming for content creation and updating. In the case of DDC entry, it will require editors to scout where DDC is referenced across IEKO and create the link accordingly. More importantly, static html pages are unstructured contents and will hinder the full utilization of modern semantic technologies to enhance the subject representation and semantic navigation inside the encyclopedia. However, transforming an online encyclopedia into a modern knowledge network is a daunting task either for manual or automatic work. The manual work for transforming IEKO will continue to have the problems mentioned above. If taking the automatic route, the technical architecture will need to be changed accordingly for IEKO, which will incur some initial cost of time and expertise as well as require testing and evaluation, but the future editing and managing of IEKO will benefit from the modern architecture and technologies.

This paper reports the results from a preliminary experiment of using AI technologies to establish basic understanding of the current state of subject representation and cross-referencing in IEKO and what opportunities there are in migrating IEKO. The following sections will first describe the methods used to perform the experiment including the data, objectives of experiment, and tools and methods used to run the experiment. The result section will report the outcomes generated from the experiment and compare the differences of outcomes in terms of precision and recall in subject representation. In the

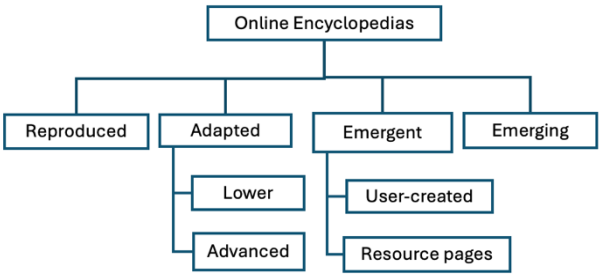
discussion we will share the thoughts on the transformation tasks and lessons learned from the experiment.

2.0 Related Research

Research literature on online encyclopedias spans over the last three decades and has evolved with advances in information science and semantic technologies. The bulk of this literature body is focused on the study of Wikipedia that fall broadly into two groups: social-behavioral discussions and content quality and credibility analysis. Nonetheless, a small number of publications produced some general description for online encyclopedias as a web genre and emergent trends in formats, structures, and navigation.

2.1 Characteristics of Online Encyclopedias

Encyclopedias as a genre of information have served as a gateway to understanding the most profound or intricate knowledge human beings have produced (Kister 1981). The genre characteristics of an encyclopedia, as Tereszkiewicz (2010) puts it, are usually grouped according to major criteria such as scope, size, classification, and author. Whether general or specialized, encyclopedias are produced by principles that delineate the aspects of function, form, and content. Online encyclopedias are designed generally for occasional consultation rather than linear reading, making them suited to digital platforms. Features of online encyclopedias include real time updates, multimedia integration, and interactive tools which enhance user experience and accessibility. In the context of online encyclopedias, the genre concepts of function, content, form, and functionality are resolved around multiple aspects of information systems and human-information interactions. Tereszkiewicz (2010) conducted a survey of 78 online encyclopedias and created a typology based on the sample (Figure 1).



.

Figure 1. A topology of online encyclopedias, reproduced bases on (Tereszkiewicz 2010).

While reproduced and adapted encyclopedias are primarily the digital form of existing physical counterparts with added functionalities, such as hyperlinking and navigation systems, the emergent group comprise two types of portals: user-created encyclopedia web pages with diversified content extending the scope of an encyclopedia resource and the resource pages that are thematically oriented portals from a specific domain of

knowledge (IEKO falls into the resource pages group). The emerging encyclopedias depart considerably from the conventions of the encyclopedia genre and often have a high level of interactivity (Tereszkiewicz 2010).

2.2 Transformative Evolution

The transition from encyclopedia in CD-ROMs to web-based platforms marked the beginning of transformative changes in online encyclopedias, which is culminated by the rise of Wikipedia that are now widely recognized as the dominant platform for collaborative knowledge creation and dissemination (Roncaglia 2021). The web technologies enabled many desired functionalities for online encyclopedias, such as regularly updating the content and containing current facts, connecting various multimedia resources, linking to original sources and related articles (Andon et al. 2020). Wikipedia as a collaboratively created general online encyclopedia has been studied most extensively, topics ranging from the method of content creation to quality and credibility of content to motivations and collaboration of participating authors and editors. Although there have been skeptics and distrust for its content, researchers found that Wikipedia has gained a steady ascendence in quality and reliability of its content (Anthony et al. 2009). The fact that Wikipedia and online encyclopedias at large have emerged as platforms fostering creativity, independent research, and digital literacy in higher education offers strong evidence of the reputation and indispensable role in creative learning (Vidackovic et al. 2025). Online encyclopedias such as Wikipedia can serve as the digital cultural heritage gateway and site because they are conceptually grounded, technically advanced, and practically accessible for public education (Pentzold et al. 2017).

2.3 Online Encyclopedias as Knowledge Networks

After more than two decades' development, online encyclopedias evolved into linked data and knowledge networks of difference strengths. At the basic level, references in articles are clickable and linked to Google Preview and WorldCat, as it shows in the Oxford Research Encyclopedias, an aggregated collection of online encyclopedias (Remy 2015). The Encyclopedia Britannica presents a richer style: besides linked references, linked entities (data) are added throughout the articles where appropriate. It is particularly noticeable that "knowledge nuggets" (short answer to top questions in an article) are often placed at the head section (Figure 2) and digitized archival materials are integrated in the entry (Britannica Editors 2026).

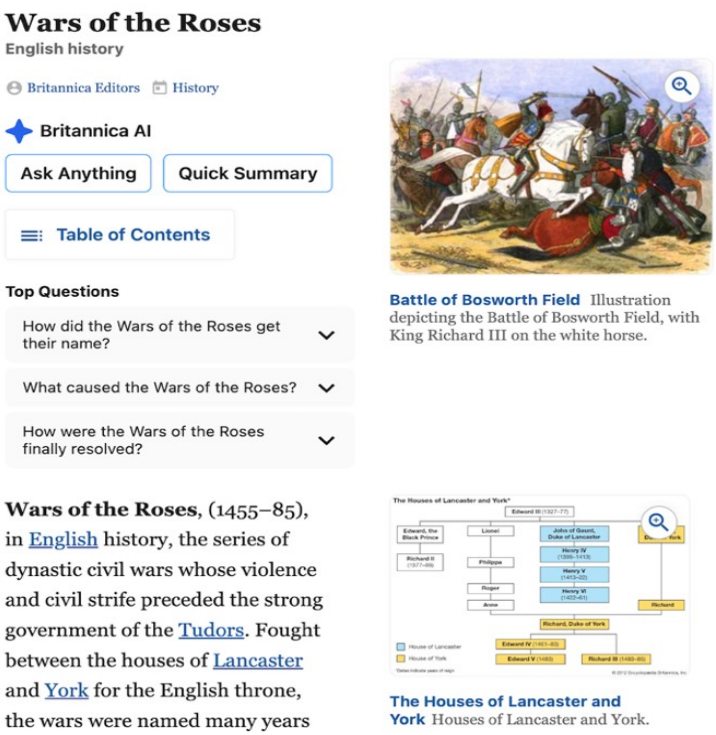


Figure 2. Portion of a sample article page in Britannica (https://www.britannica.com/event/Wars-of-the-Roses).

The exemplar Wikipedia is built with strongly structured and semantically rich entity database based on rigorous format ontologies. The highly structured data in Wikidata—the content base for Wikipedia—can be consumed not only by human agents but also by software agents (Roncaglia 2021).

The web platforms offer unlimited opportunities for online encyclopedias to fully take the advantages of technologies. The Open Encyclopedia Systems (OES) allows encyclopedia editors and publishers to apply structured data models and semantic linking among other functions (Grote and Strobl 2025), which can be potentially useful for IEKO migration to a new web platform.

3.0 Methods

The migration of ISKO website creates an opportunity to rethink how IEKO might be enhanced for its subject representation, cross-linking inside and across individual articles within IEKO and even across external resources such as Wikidata. The first task in this process is to identify the current state of IEKO and where enhancements might be needed. We designed an experiment with the following objectives:

1. Explore the feasibility of using AI tools to convert html article pages into template-based structure while keeping the existing cross references and indexing links.
2. Explore the feasibility of semantic enhancement for existing indexing and cross-references using AI tools.

3. Assess the accuracy and exhaustivity of semantic enhancement performed by AI tools.

We used two AI tools, GPT 4.1 mini and Claude Sonnet 4, to perform experiment tasks on a selected set of articles. To examine the current state of subject indexing and cross-references in IEKO articles, we employed a hybrid cross-reference detection pipeline to identify opportunities for semantic enhancement. The pipeline begins by extracting encyclopedia entries from the IEKO alphabetical index page. For each entry, the script collects the entry title and article URL, then assign a slug that functions as the identifier derived from the URL. Slugs are short labels for normalizing variants in entry titles. For example, slug “bliss” normalizes “bliss”, “henry bliss”, and “henry evelyn bliss”; and “facet” normalizes “faceted”. Normalization of entry titles (slugs) allows for the system to accurately match links consistently, organize entries, and generate fallback patterns when title-based matching is insufficient. Non-entry pages such as index or editorial pages were excluded.

We also manually constructed a dictionary of lexical variants for entry detection. This dictionary links each entry slug to a set of curated surface forms, including alternative spellings, abbreviations, singular and plural variants, adjectival forms, shortened expressions, and domain-specific naming variants. The purpose of this manually curated dictionary is to improve recall beyond exact title matching, therefore functioning as the rule-based layer of this design. Based on this dictionary, the script compiled boundary-aware regular expression patterns to search target article full text for candidate mentions of IEKO entries (excluding the target entry itself). These patterns were designed to reduce false positives caused by substring matching. In addition to curated aliases, we designed the system to generate fallback patterns from normalized slugs and cleaned entry titles, allowing it to capture both manually anticipated and automatically derived variants. If the system fails to extract hyperlinks from each detected mention, it would be categorized as mentioned-but-not-hyperlinked. This means there should be a cross-reference link to the identified entry, but no such a link exists in the current IEKO.

One issue we encountered in the experiment pertains to some IEKO entry names being highly ambiguous in ordinary prose, such as data, work, information, science, theory, subject, and document. This is where the rule-based layer alone is insufficient. To address this problem, we added an ambiguity policy that prevents bare keyword matches for common words from being accepted automatically. Instead, weak matches involving these terms were temporarily held back unless they appear in a stronger form, such as an explicit hyperlink, an arrow-bracket reference (a type of cross-reference used in IEKO, sometimes replacing hyperlinks), or a distinctive curated phrase. This design reduced the risk of inflating the number of cross-references that did not actually refer to any entity in the encyclopedia.

Finally, we included the Large Language Model (LLM) verification layer. For candidate entries that could not be confidently accepted by manual rules and ambiguity detection, we extract short contextual snippets (a 440-character surrounding window centered on the potential match) from the articles and submitted them to the LLM for disambiguation. The models are prompted to decide conservatively whether the term in context referred to any specific IEKO concept entry or merely an ordinary English use based on common sense.

This verification step along with the manual extraction creates a hybrid pipeline for identifying and extracting cross-references for IEKO.

The IEKO currently has 126 entries, which are listed in an alphabetical list and in classified sections, including general and historical issues, core concepts, KO systems, KO processes, methods, approaches, & philosophies, and KO in different contexts and applications. Each entry consists of a table of contents, abstract, the article text, and links to references cited and related entries. A sample of 12 were randomly selected for the experiment (see Table 1).

4.0 Results

The experiment first performed the task of detecting whether an entry is referenced across articles and whether a hyperlink to that entry exists anywhere in IEKO. Data in Table 1 show that, in the sample articles selected for examination, the chance of an entry is mentioned in other articles remains high, ranging from 29-70 times, which implicates that many entries are interrelated hence evidence for a highly specialized domain of study. The number of entries hyperlinked in articles other than the entry being examined indicates the popularity and importance of the entry inside IEKO. For example, the entry *Knowledge Organization* provides a comprehensive discussion for the field of KO, which results in the highest rate of being linked to other entries in IEKO. However, even though these entries are mentioned many times in other entries, the rate of hyperlinking tends to be low as the status column in Table 1 shows.

Table 1. Statistics for mentions and hyperlinks in selected entries.

Entry titles included in the sample	**# of entries in which the article is mentioned**	**# of entries Hyperlinked in the article**	**Reason for mention**			**Status**	
			Alias phrase	**Slug match**	**Stem overlap**	**Mentioned, not linked**	**Mentioned and linked**
Art Studies and KO	41	5	15	11	25	36	5
Bliss	58	14	10	15	33	44	14
Classification	70	6	13	20	37	64	6
Data Documents	41	4	9	11	21	36	5
DDC	71	28	9	8	54	48	23
Domain analysis	63	4	11	11	41	59	4
Facet	58	11	9	11	38	47	11
Greco-Roman antiquity, Classification of the sciences in	32	5	4	13	15	27	5
Knowledge Organization	68	35	13	7	48	31	37
Libraries, archives and museums (LAM)	54	14	10	13	31	40	14
Nomenclature for Museum Cataloging	29	1	4	6	19	28	1

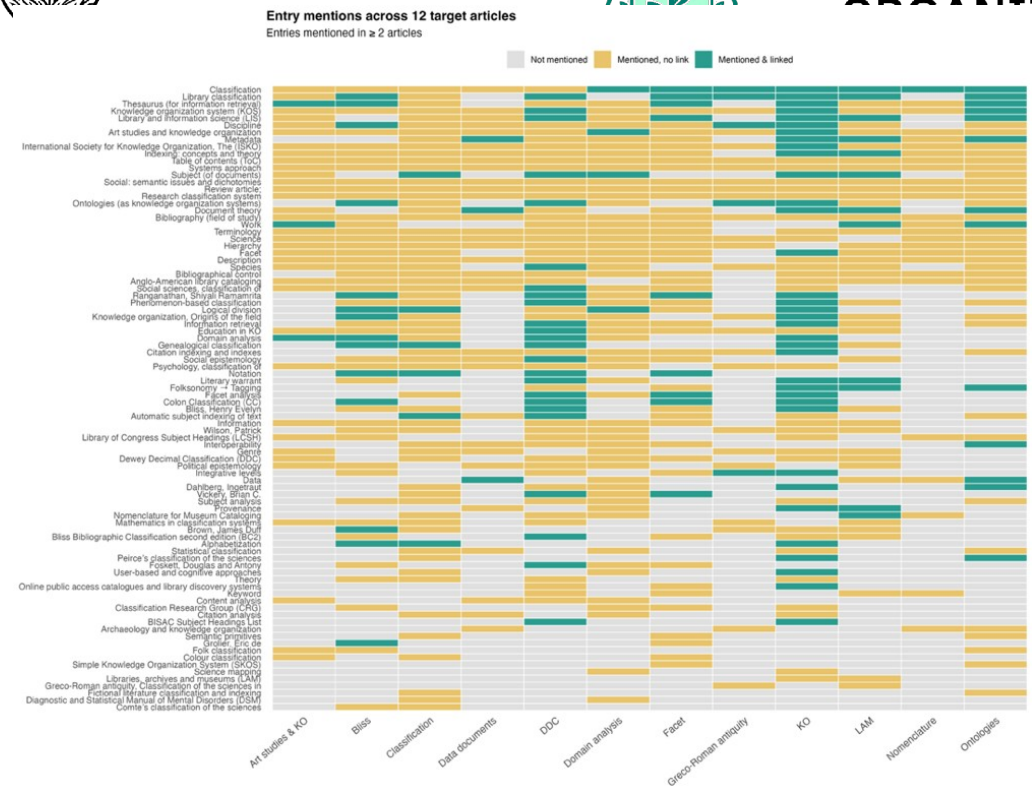


Figure 3. Cross-reference detected by Claude.

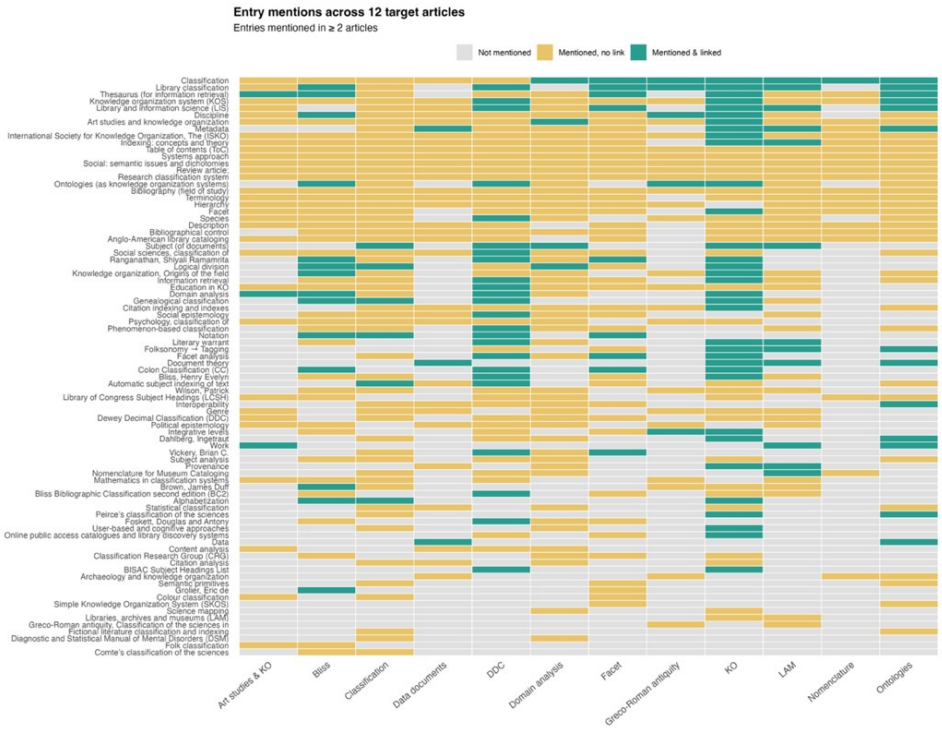


Figure 4. Cross-references detected by GPT.

The visualizations in Figures 3 and 4 presents an extremely high agreement in supporting the data in Table 1. Both GPT and Claude produced virtually identical heatmaps. All 8 disagreements run in the same direction—GPT assigns a higher detection state than

Claude – making the discrepancy systematic rather than random noise. The ratio of yellow-to-teal cells (293:45, approximately 6.5:1) illustrates the magnitude of the cross-referencing gap that both models consistently detect: for every confirmed hyperlinked mention, there are roughly six and a half mentions with no link. The Ontologies article column shows the most divergence (3 cells differing). This is the only article where GPT detects multiple entries that Claude does not — all three involve ambiguous terms (Description, User-based and cognitive approaches, and Data) whose relationship to ontology discourse is genuinely interpretable either way.

The use of AI tools for cross-reference detection, however, has some limitations, particularly in cases where concept labels (slugs) overlap with ordinary English usage. For example, in the *Domain analysis* entry, the system identified the word "description" in the sentence "He also wrote (21) that the 'description and designation of the particular domain …" as a candidate cross-reference to the IEKO entry *Description*. However, in this context, the word is used in its ordinary linguistic sense rather than as a reference to the encyclopedia concept. A similar issue appeared in the *Henry Evelyn Bliss* entry, where the sentence "A letter on the problems of classification for the bibliography of science was published in the leading scientific journal *Nature*" led the system to identify "bibliography" as a candidate cross-reference to *Bibliography (field of study)*. Here again, the term functions as part of a general phrase rather than as an intentional conceptual reference to that specific entry. These examples show an important limitation of AI-assisted cross-reference detection: using lexical overlap alone is insufficient to determine whether a term is being used as an encyclopedia concept, a disciplinary term, or simply an ordinary English word within the sentence. Accurate judgment in such cases requires contextual interpretation, domain knowledge, and sensitivity to grammatical and rhetorical usage.

Diving further into individual entries, we found different types of entities in the entries that can be potentially linked or cross-referenced. Table 2 displays several examples of entities from the *Classification* and *Art Studies and KO* entries. The common sense tells us that not all entities should be made hyperlinks because it is neither necessary for a specialized subject encyclopedia nor feasible for the limited resources available. The linkable entities, based on the examples in Table 2, can be grouped into three levels in terms of scope: internal, external specialized, and external generic. Internally linkable entities refer to those mentioned in IEKO entries and within the KO field. The external specialized entities include those related to KO or LIS, hence specialized but not in any entry in IEKO. The external generic entities are the ones not from KO nor LIS, but rather, from other fields of studies, such as Thomas Kuhn who was from neither KO nor LIS, but his theory significantly influenced KO and LIS research.

Table 2 Examples of entities that can be potentially linked or cross-referenced from the *Classification* entry in IEKO

Type of entity	Entity name	Context in which the entity appears	Linked (Y/N)

Person	Frederik Suppe and Henry E. Bliss	...the definition of classification two (Frederik Suppe and Henry E. Bliss) are here selected as outstanding.	N
Concept	Conceptual classification	He called the broad meaning “conceptual classification.”	N
Concept	Systematic classification	...the narrower meaning Suppe called “systematic classification.”	N
Person	Elin K. Jacob	Elin K. Jacob found that classification and categorization are different processes...	N
Concept	Taxonomy	The term taxonomy originates from Greek taxis (meaning “order” or “arrangement”) ...	N
Standard	ISO 25964-2	ISO 25964-2: Information and Documentation-Thesauri and interoperability with other vocabularies, Part 2: Interoperability with other vocabularies (International Organization for Standardization 2013) contains a lengthy section 19 “Taxonomies.”	N
Person	Eleanor Rosch, Thomas Kuhn, Michael Billing	...the prototype theory suggested by Eleanor Rosch, as well as theories developed by Thomas Kuhn and Michael Billig.	N
KOS	Dewey Decimal Classification (DDC)	...the classes on art in three universal classification systems: the Dewey Decimal Classification (DDC), the Library of Congress Classification (LCC)...	N

5.0 Discussion

This study reports an experiment for testing how AI tools may be used to gather subject representation and cross-linking state in preparation for migrating IEKO from static html pages to a knowledge network to enable the full benefits of semantic and AI technologies. Twelve IEKO entries were randomly selected to test the feasibility of automatic detection of linkable entities and assess the quality of these linkable entities identified. The result of this experiment is encouraging. First, the analysis of sample entries shows that many concepts and names are mentioned in articles but the rate of hyperlinks to these concepts and names are less than desirable. While overlinking can overwhelm readers and waste time and resources in creating them, sparse hyperlinks may signal the need for improving subject representation. Second, the AI tools are helpful in identifying linkable entities such as persons, concepts, KOSs, standards, etc. An analysis of entity types and customized algorithms can help design a semantic infrastructure that integrates a local ontology and external ontological data such as Wikidata. Such a local semantic infrastructure will play a key role in automating the identification of linkable entities and marking them up as clickable links, be it for connecting articles within IEKO, external KO and LIS resources, or external knowledge bases such as Wikidata.

While the result is encouraging, we encountered some challenges. The main issue we ran into was how to distinguish between KO concept terms versus common language expressions such as description, data, and document. During the experiment we used locally developed disambiguation policies to set the rules for when such common language

expressions are linkable entities and when to ignore them because they are non-KO concept terms. AI tools would treat them without distinction if no human intervention were provided. Our experience is that human intelligence is needed, but this does not mean human intervention must be done manually. We can codify the human intervention in the form of computer readable and processable rule sets or human curated dictionaries, so that they can be incorporated into AI tools to maximize automatic processing and minimize manual labor.

The experiment result reminds us that the semantic infrastructure for online encyclopedias such as IEKO would require more than just a database. It would involve setting the policies on the scope of linkable entities, rules for disambiguation of common expressions from KO concept terms, customized dictionaries/vocabularies, among others. Although all these seem daunting for a volunteer-based editorial team, the impact of such foundational work can be valuable not only for a whole new IEKO but also for how to translate KO research into practical applications.

6.0 Conclusion

Migrating a website from an old to a new one makes a perfect opportunity to rethink and recreate the content, navigation system, and functionalities. The IEKO as a specialized resource is valuable both for learning about KO and research on KO. A more easily navigated, better linked IEKO will be able to function as a knowledge network and facilitate user interaction with articles and content more efficiently. The experiment reported in this paper provides some encouraging result, but further research will be needed not only for the migration of IEKO to the new website, but also for KO research at large.

One promising direction for future work is to use the existing cross-reference links as training data and few-shot learning context for the disambiguation step. Each confirmed link in IEKO represents an editorial decision that a particular term, in a particular context, is a genuine cross-reference within KO scholarship. By retrieving similar confirmed examples from the full 126-entry corpus and presenting them to the LLM as few-shot demonstrations, the pipeline can make disambiguation decisions grounded in established IEKO editorial practice rather than general language knowledge alone. This approach becomes more powerful as it scales to the full corpus, since a larger pool of confirmed examples provides richer and more varied training context for the harder cases — particularly common words like data, work, and description that are easily confused with ordinary English usage. One important limitation of this approach, however, is that it can only learn from links that editors have already made. If certain types of cross-references have been added more consistently than others over the years, the system will tend to reproduce those same patterns rather than identify genuinely new linking opportunities. Direct consultation with the IEKO editorial team on intended linking policy, combined with human review of a sample of the detected but unlinked cases, will be an important step before the pipeline output can be used with confidence.

AI Usage Statement

GPT 4.1 mini and Claude Sonnet 4 were used to process the texts of sample IEKO articles as described in the Methods section, which included generating Python code, extracting and normalizing concepts and entity names, and performing statistical analysis.

References

Andon, P. I., J. V. Rogushina, I. Yu. Grishanova, V. A. Reznichenko, A. M. Kyridon, A. V. Aristova, and A. O. Tishchenko. 2020. “Experience of the Semantic Technologies Use for Intelligent Web Encyclopedia Creation (on Example of the Great Ukrainian Encyclopedia Portal).” PROBLEMS IN PROGRAMMING, nos. 2–3 (September): 246–58. https://doi.org/10.15407/pp2020.02-03.246.

Anthony, Denise, Sean W. Smith, and Timothy Williamson. 2009. “Reputation and Reliability in Collective Goods: The Case of the Online Encyclopedia Wikipedia.” Rationality and Society 21 (3): 283–306. https://doi.org/10.1177/1043463109336804.

Arazy, Ofer, Oded Nov, Raymond Patterson, and Lisa Yeo. 2011. “Information Quality in Wikipedia: The Effects of Group Composition and Task Conflict.” Journal of Management Information Systems 27 (4): 71–98. https://doi.org/10.2753/MIS0742-1222270403.

Britannica Editors. 2026. “Wars of the Roses.” In Encyclopedia Britannica. https://www.britannica.com/event/Wars-of-the-Roses.

Buckner, Cameron, Mathias Niepert, and Colin Allen. 2011. “From Encyclopedia to Ontology: Toward Dynamic Representation of the Discipline of Philosophy.” Syntheses 182 (2): 205–33. https://doi.org/10.1007/s11229-009-9659-9.

Flanagin, Andrew J., and Miriam J. Metzger. 2011. “From Encyclopedia Brittanica to Wikipedia: Generational Differences in the Perceived Credibility of Online Encyclopedia Information.” Information, Communication & Society 14 (3): 355–74. https://doi.org/10.1080/1369118X.2010.542823.

Grote, Brigitte, and Maren Strobl. 2025. Open Encyclopedia System. Released. https://github.com/open-encyclopedia-system.

Hamari, Juho, Mimmi Sjöklint, and Antti Ukkonen. 2016. “The Sharing Economy: Why People Participate in Collaborative Consumption.” Journal of the Association for Information Science and Technology 67 (9): 2047–59. https://doi.org/10.1002/asi.23552.

Kister, Kenneth F., ed. 1981. Encyclopedia Buying Guide: A Consumer Guide to General Encyclopedias in Print. Ed. by Kenneth F. Kister. Bowker.

Liu, Jun, and Sudha Ram. 2011. “Who Does What: Collaboration Patterns in the Wikipedia and Their Impact on Article Quality.” ACM Transactions on Management Information Systems 2 (2): 1–23. https://doi.org/10.1145/1985347.1985352.

Mesgari, Mostafa, Chitu Okoli, Mohamad Mehdi, Finn Årup Nielsen, and Arto Lanamäki. 2015. “‘The Sum of All Human Knowledge’: A Systematic Review of Scholarly Research on the Content of Wikipedia.” Journal of the Association for Information Science and Technology 66 (2): 219–45. https://doi.org/10.1002/asi.23172.

Pentzold, Christian, Esther Weltevrede, Michele Mauri, David Laniado, Andreas Kaltenbrunner, and Erik Borra. 2017. “Digging Wikipedia: The Online Encyclopedia as a Digital Cultural Heritage Gateway and Site.” Journal on Computing and Cultural Heritage 10 (1): 1–19. https://doi.org/10.1145/3012285.

Remy, Charlie. 2015. “Oxford’s Research Encyclopedias: A New Model for Reference Content?” Journal of Electronic Resources Librarianship 27 (3): 204–10. https://doi.org/10.1080/1941126X.2015.1059663.

Ren, Yuqing, Haifeng Zhang, and Robert E. Kraut. 2024. “How Did They Build the Free Encyclopedia? A Literature Review of Collaboration and Coordination among Wikipedia Editors.” ACM Transactions on Computer-Human Interaction 31 (1): 1–48. https://doi.org/10.1145/3617369.

Roncaglia, Gino. 2021. “Encyclopedias and Encyclopedism in the Era of the Web.” JLIS.It 12 (3): 69-90. https://doi.org/10.4403/jlis.it-12757.

Simpson, Brent, and Robb Willer. 2015. “Beyond Altruism: Sociological Foundations of Cooperation and Prosocial Behavior.” Annual Review of Sociology 41 (1): 43–63. https://doi.org/10.1146/annurev-soc-073014-112242.

Tereszkiewicz, Anna. 2010. Genre Analysis of Online Encyclopedias: The Case of Wikipedia. 1st ed. Jagiellonian University Publishing House. PDF. https://ruj.uj.edu.pl/server/api/core/bitstreams/ddc42a4e-5f90-46f5-b19a-b268301d5a4d/content.

Vidackovic, Zlatko, Iva Rosanda Zigo, and Mateja Bublic. 2025. “Creative Learning in the Digital Age: The Role of Online Encyclopedias in University Education.” In Harnessing Networks to Drive Innovation and Achieve Sustainable Development Goals (SDGs). Varazdin Development and Entrepreneurship Agency; University North, Croatia, 215-221. https://www.esd-conference.com/upload/publications/6/Book_of_Proceedings_126_Varazdin_2025.pdf.