Summarize and discuss at least one of the semantic web/linked data readings. What are some of the advantages and disadvantages of a linked data environment (as defined by the authors) in libraries, museums, and archives?

I have read with great interest the article written by Karen Coyle. It provides an excellent overview of the Semantic Web. It explores how the linked data Web environment will connect resources with each other by relationships which will be different from the web of documents without those relationships. The author reflects on the subject of the advantages we can receive and the possible disadvantages if we complete this project and create the linked data.

So what is the current Web? The current Web is a web of linked documents with unstructured data suitable for human consumption that is connected by hyperlinks and where queries are done by matching keywords in documents. Karen Coyle speaks about the Semantic Web which means a web of linked and structured data where data has semantic meaning and is well suited for machine-consumption that will better serve humans.

According to Karen Coyle, key characteristics of the Semantic Web will help to understand and evaluate its advantages and disadvantages.

- The Semantic Web is dynamic. For us it means that the data added to the Web in a special format will be able to link and be accessed right away without preliminary programming.
- The Semantic Web is a global information resource where library data will be in contact with other data created by non-librarians and this will provide an opportunity to use the data from multiple sources in many different ways.
- Extensibility is also one of the features. It presumes that new data can be added at any time and data taken from different sources can be recombined creating new temporary information.
- The Semantic Web creates meaningful relationships between things. The addition of relationships will transform the Web "from what it is today to a richer, more meaningful information environment" (Coyle, p.28).

As with any other thing or idea in the world the linked data also has its disadvantages, but I am sure it cannot stop us from exploring this path where we can do data mining the same way as in a database. Coyle noted, "It is somewhat difficult to explain what you can do with the linked data because the answer is just about anything" (p.28).

No doubt heritage institutions such as libraries, museums, and archives as well as their users will benefit from it. One advantage I see for the future is that all resources of all libraries will be online and a user will have an opportunity to access the resources of many libraries sitting in front of a personal computer. I am pretty sure that this new linked data environment will provide new searching techniques and will access multiple language resources. Identifiers in the linked data environment will permit us to display information in any number of languages. As a result, librarians will need to demonstrate more sophisticated technical competency and language capability. It will demand additional changes in library and information science school curriculum. The work of creating identifiers is rather technical and dealing with it will require better understanding of complicated technical tools and the development of appropriate technical skills in professionals. Thus, the world of library science will continue to change and become more and more technically oriented.

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Coyle, K. (2010). "Library data in a modern context." In *Understanding the semantic web: bibliographic data and metadata*. Chapter 2 (pp. 14-31). Library Technology Reports.