Spatio-temporal Model for Presenting and Analyzing Humanities Research Resources

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Abstract

Humanities Researchers deal with wide variety of research resources such as numerical documents, texts, images, moving images, archival papers, and many kinds of objects including ethnographical artifacts, archaeological objects, flora and fauna specimens, etc. An ideal style of the research may to pursue cross-search among every kind of resources in terms of time, space, and thematic keywords. To realize this, diverse expressions of those terms among the research fields must be mediated.

In this presentation, a conceptual model for archiving research resources in terms of time, space, and thematic keywords is shown together with (1) the basic consideration on an ontology covering discipline-oriented expressions from micro-view to macro-view for resolving differences among "culture" of research disciplines, that will help to promote both intra-discipline and inter-discipline researches, (2) and an idea of introducing forum-type cyclic data gathering and utilizing mechanism similar to the creative-commons.

In addition, an application of HuTime, a tool for time-based presentation and analysis, to eco-historical analysis of Yunnan Chronicle, a collection of prefectural historical records in Yunnan Province covering mainly after the World War 2, and several examples of them about interrelations between several events such as disastrous flood, puppy plantation and agricultural policy, etc. are introduced.

Keywords: GIS, chronicle, time-space integration, micro-macro and interdisciplinary analysis and presentation, ontology, cychronicle = cyclic chronicle