

THE NINES SCHEMA

AGGREGATE / CONTEXTUALIZE / COLLABORATE

13 May 2004 : Version 2.0 : Bethany Nowviskie

BACKGROUND

NINES, an academic consortium dedicated to building a “networked interface for nineteenth-century electronic scholarship,” is working to gather, integrate, and disseminate rich digital resources in order to promote research and pedagogy in nineteenth-century studies. This integration demands institutional solutions (ie. those which address the current crisis in humanities publishing and its attendant woes), technological solutions (ie. strategies for increasing the interoperability of existing resources and for standardizing future work in digital humanities to enable the production of rich interpretive and analytical tools), and – above all – solutions which respect core scholarly values, practices, and conclusions about the nature of humanities documents. To that end, NINES has developed and will promote a standard encoding schema for all objects to be peer-reviewed and published under its auspices. This document describes the NINES schema, essentially a text-based “wrapper” file that houses metadata and lends structure to digitized primary and secondary scholarly materials in NINES.

SCHEMA GOALS

The NINES schema has three principal goals. It is designed to 1) aggregate a collection of documentary witnesses into a logical or conceptual “work;” 2) record the documentary production and critical reception histories of each NINES work;

and 3) track changes to the schema itself, which can come about as the result of scholarly collaboration.

- 1) **Resource aggregation:** In ever-increasing numbers since the advent of the World Wide Web, scholars of nineteenth-century art, literature, and culture have produced valuable academic resources in hypertext and other digital form. These resources range from HTML encodings of hard-to-find material, produced by individual instructors for classroom use, to massive online research collections and scholarly editions, which integrate digital images with SGML- or XML-encoded texts and provide users with specialized viewing and annotation tools. Unfortunately, because of their differing file formats, few of these electronic resources have been aggregated and integrated in ways that open them to shared search and analysis tools, and no model has yet been put forth for focusing future scholarly energies in nineteenth-century online work. The NINES schema offers such a model and common standard. Legacy resources (in HTML or other formats) can easily be “wrapped” by our schema and brought into a networked interface. At the same time, the schema looks forward to further critical and editorial production, by advocating archival encoding standards endorsed by the Library of Congress and the TEI Consortium (see below).
- 2) **Documentary history:** Humanities documents come down to us through history not as isolated, inviolable objects, but rather as complexly inter-related elements in larger artifactual, conceptual, and social schemes, or *works*. In other words, we understand any given instance of a poem in the context of that poem’s production history (including its composition and all other

documentary forms in which it appeared), and in terms of its later reception (which includes both critical and creative re-imaginings of the original). Scholars therefore need organizational encoding systems that appreciate the relation of documents to works. The NINES schema provides descriptive metadata for works (including production and reception histories) and presents sub-collections of documents in a classificatory scheme sufficiently nuanced to support stemma visualization and the application of analytic tools. While the list of documents related to any particular work is constrained and machine-readable in order to permit algorithmic transformation, all production and reception histories housed in the NINES schema are written for and by scholars of nineteenth-century arts and letters.

- 3) **Scholarly collaboration:** Humanities computing, in the tradition of great collaborative bibliographical projects, brings scholars together in the production and maintenance of complex systems of text and images. A primary goal of NINES is to support collaborative building of scholarly resources and to do so in a way that exposes that collaboration to the same modes of historical analysis as the material being studied. To that end, the NINES schema offers a system for tracking and attributing revisions to the production and reception histories that form its core representation of any given work. This revision system, which borrows from and extends TEI nomenclature, preserves a record of scholarly conversation about documents and works. No past statements are lost to the system, just as no present statements appear without context.

STANDARDS: XML, METS, AND TEI

Forthcoming: some discussion of our adoption of METS and our extensions to TEI, while also describing the benefits of XML and TEI standards and specifying that all new NINES documents are to be TEI-encoded.

THE CONTENT MODEL

The corrected DTD will go here.

A SAMPLE SCHEMA

The updated Wombat example will go here.

SCHEMA GLOSSARY

The glossary (with added attribute information) will go here.

CONCLUSION

Some final words: What's next for the NINES schema? (Tools integration, etc.)