

Semantic Kalevala

Finnish National Epic on the Semantic Web

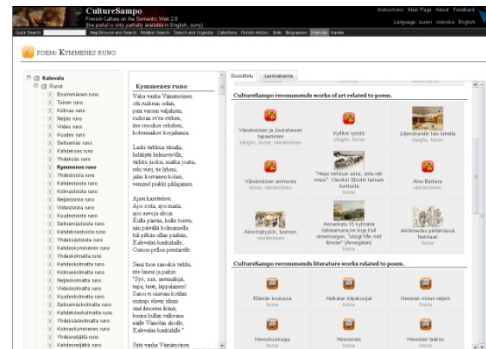
*Then old Väinämöinen played one day,
played a second
there was not that person
or brave man,
not a man or woman
who did not start to weep,
whose heart did not melt**

Linking Cultural Heritage

Kalevala, the national epic of Finland, has been at the core of Finnish culture, art, and national identity ever since its publication in 1849. The original epic was edited by Elias Lönnrot, based on Finnish folk poetry. The epic, translated into over 60 different languages, continues to inspire today's life and culture in Finland as well as abroad. Kalevala is a cultural junction, an axis into which various kinds of Finnish cultural works and objects are related in different ways. Semantic Kalevala has been created to utilize and demonstrate this linking aspect of the epic, and to celebrate its 160th anniversary.

Semantic Net of Millions of Objects

The system is based on Semantic Web technologies, a growing field in IT research aiming to create more intelligent and usable web applications by making Web contents interoperable and computer-readable.



Semantic Kalevala recommendations.

Semantic Kalevala is part of the semantic portal CultureSampo, a large national Finnish cultural heritage portal containing hundreds of thousands of cultural collection objects from tens of cultural institutions (folk poems, works of art, photos, music, books etc.). The contents are associated with each other by a semantic network.

Extending the Reading Experience

The reader, or user, of Semantic Kalevala can browse its multiple connections and links to Finnish culture by reading the epic's 50 poems. Each poem and event gives different, unique links, or recommendations to related content of CultureSampo. Semantic Kalevala also shows the internal similarities of the epic's events through recommendations inside Kalevala.

*Kalevala, Poem 41: 169-176. Translation: Francis Peabody Magoun, Jr.

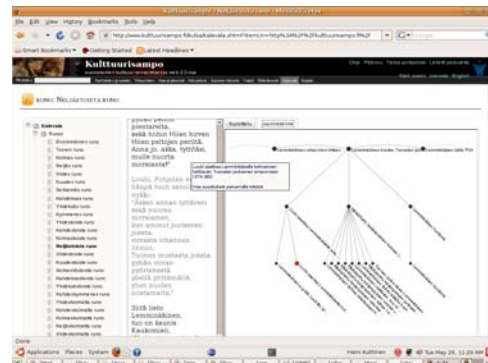
Using and Visualizing Narratives

Kalevala's narrative structure has also been described and can be browsed. The epic has been divided into three levels of narrative hierarchy: events, scenes, and episodes. Each event belongs to a larger scene, whereas scenes belong to episodes which are focal narratives or sub-plots within the great narrative itself. By browsing these, the user can follow the structure of the epic from a wider perspective not evident in the text itself.

In addition, Semantic Kalevala includes descriptions of the epic's main characters, places, and scenes as well as concise, explicit titling of the verses which both help to understand the archaic Kalevala-metric poetry and the rich elaborate narration of the epic. Together all these features make Kalevala come to life in a new modern context of hyper-text and the Semantic Web.

Acknowledgements

Semantic Kalevala and CultureSampo have been created by the Semantic Computing Research Group of the Helsinki University of Technology and the University of Helsinki. The work is part of the national FinnONTO project, with support from the Finnish Funding Agency for Technology and Innovation (Tekes), the Finnish Cultural Foundation, and a consortium of thirty eight organizations, including the Finnish Literature Society.



A view of Semantic Kalevala. The 50 poems are on the left, a selected episode of a poem is in the middle with an explanation, and the narrative structure is visualized on the right. Semantic recommendation links to related contents can be seen by changing the visualization tab.

The Portal on the Semantic Web

<http://www.kulttuurisampo.fi/>

Research and Publications

Semantic Kalevala

<http://www.seco.tkk.fi/applications/kulttuurisampo/kalevala/>

CultureSampo

<http://www.seco.tkk.fi/applications/kulttuurisampo/>

Contact Persons

Tuomas Palonen, researcher

tuomas.palonen@gmail.com

Eero Hyvönen, professor

+358 50 3841618

eero.hyvonen@tkk.fi

