



Sotasampo

talvi- ja jatkosota semanttisessa webissä

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Semantic Computing Research Group (SeCo)

Suomalaiset sotavangit Neuvostoliitossa 1939-1945

*Sotasammon 9. sovelluksen julkistustilaisuus
20.11.2019 Kansallisarkisto*

Sotasammon takojat 2014-

Aalto-yliopistossa ja
HELDIG-keskuksessa

Data Providers

- Eero Hyvönen (vetäjä)
 - Erkki Heino
 - Esko Ikkala
 - Mikko Koho
 - Petri Leskinen
 - Eetu Mäkelä
 - Minna Tamper
 - Jouni Tuominen
 - ...
- National Archives
 - Defense Forces
 - National Survey
 - Assoc. of Military History
 - Bonniers
 - Finnish Literature Society
 - Wikidata/Wikipedia
 - ...

Visio: Sotasampo ja ”Sampo”-portaalit

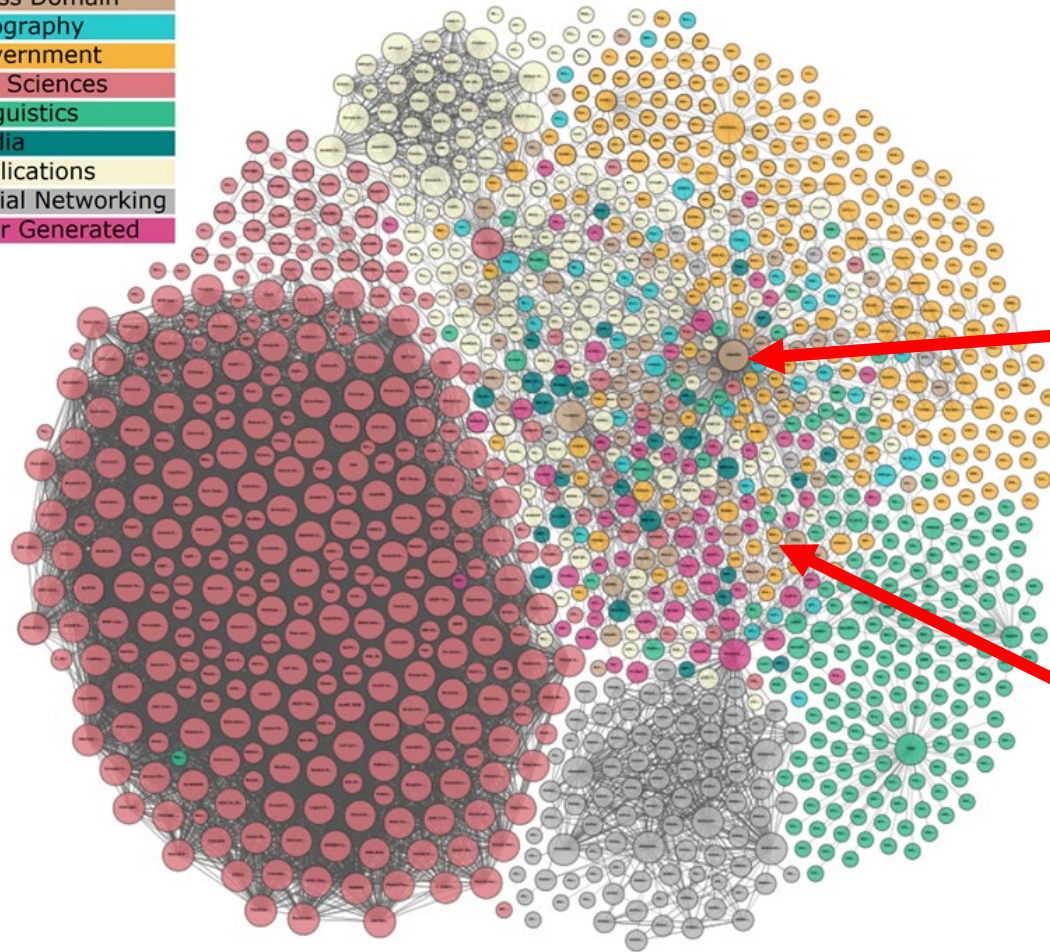


Web of Data: Linked Open Data Cloud

Human Knowledge on the Semantic Web

Legend

Cross Domain
Geography
Government
Life Sciences
Linguistics
Media
Publications
Social Networking
User Generated



Wikipedia

Your data

**LODStats 2018 (<http://stats.lod2.eu/>):
10 000 datasets, 150 billion triples**

Big Boys Have Entered the Game: Knowledge Graphs

<http://schema.org>

- Google Knowledge Graph
- Microsoft Satori
- IBM Watson
- eBay Products
- Facebook Graph
- ...

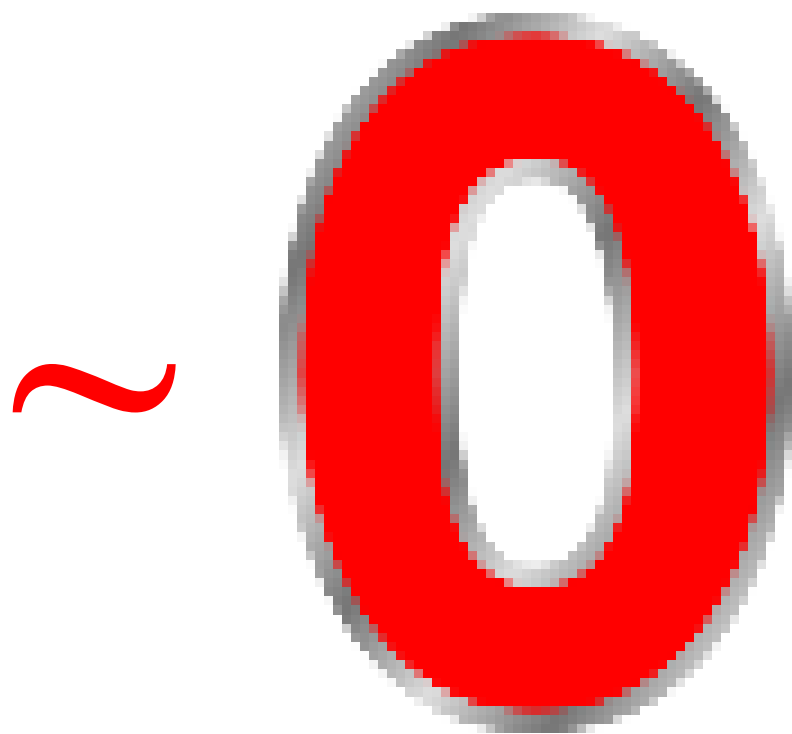


**What is the Most Devastating
Catastrophe in Human History?**



Description : World War II map of Europe providing details about the most devastating war in the world.

**How Much Data is Available
about WW2 as Linked Open Data?**



(in 2015)



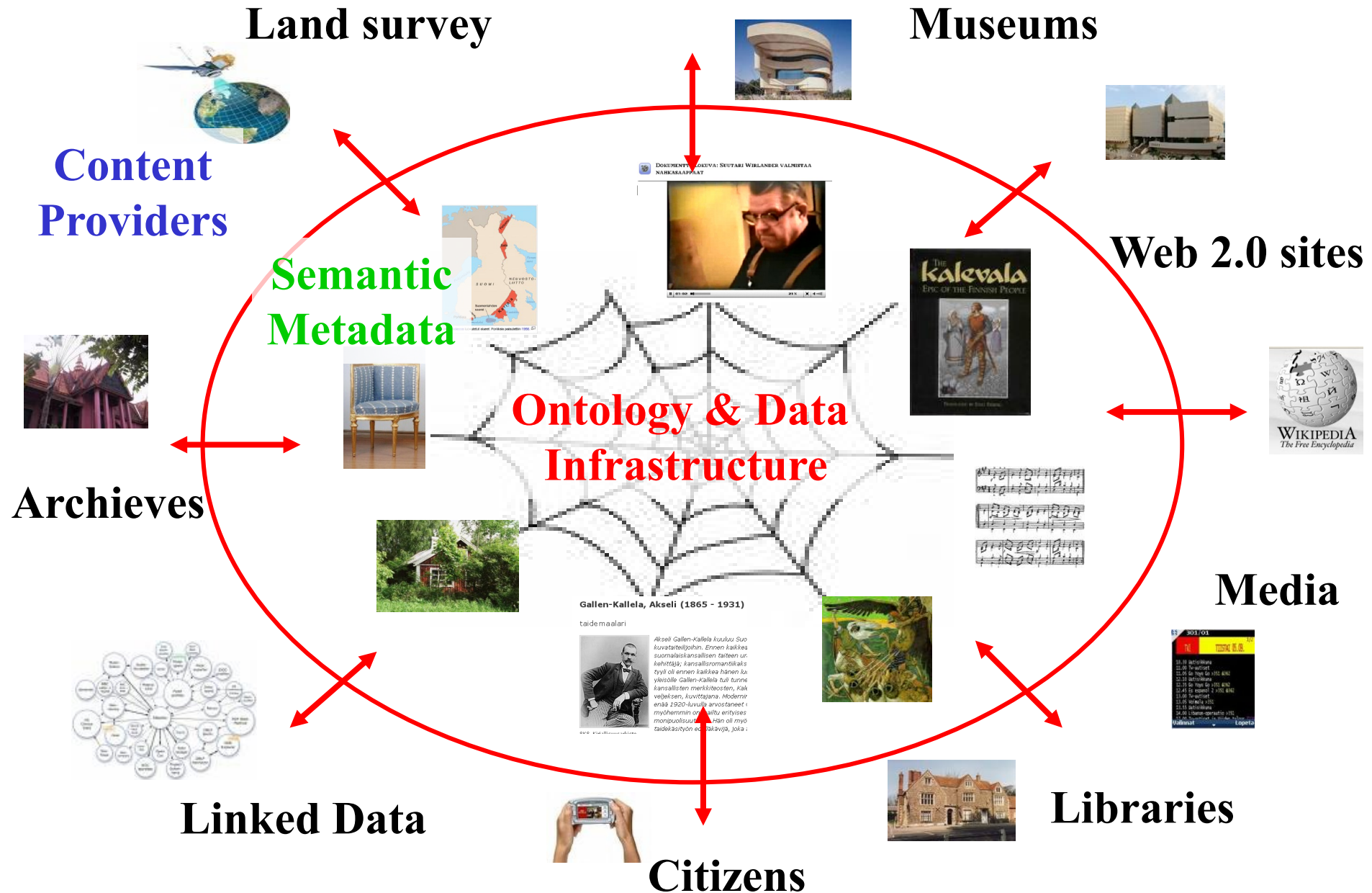
**”We learn from history, that
we learn nothing from history”**

Georg Wilhelm Friedrich Hegel

WarSampo tries to prove that Hegel was wrong!

The more we know about the price of the war
the less there will be wars

"Sampo" Model for Publishing Cultural Heritage Contents: Everybody Wins!



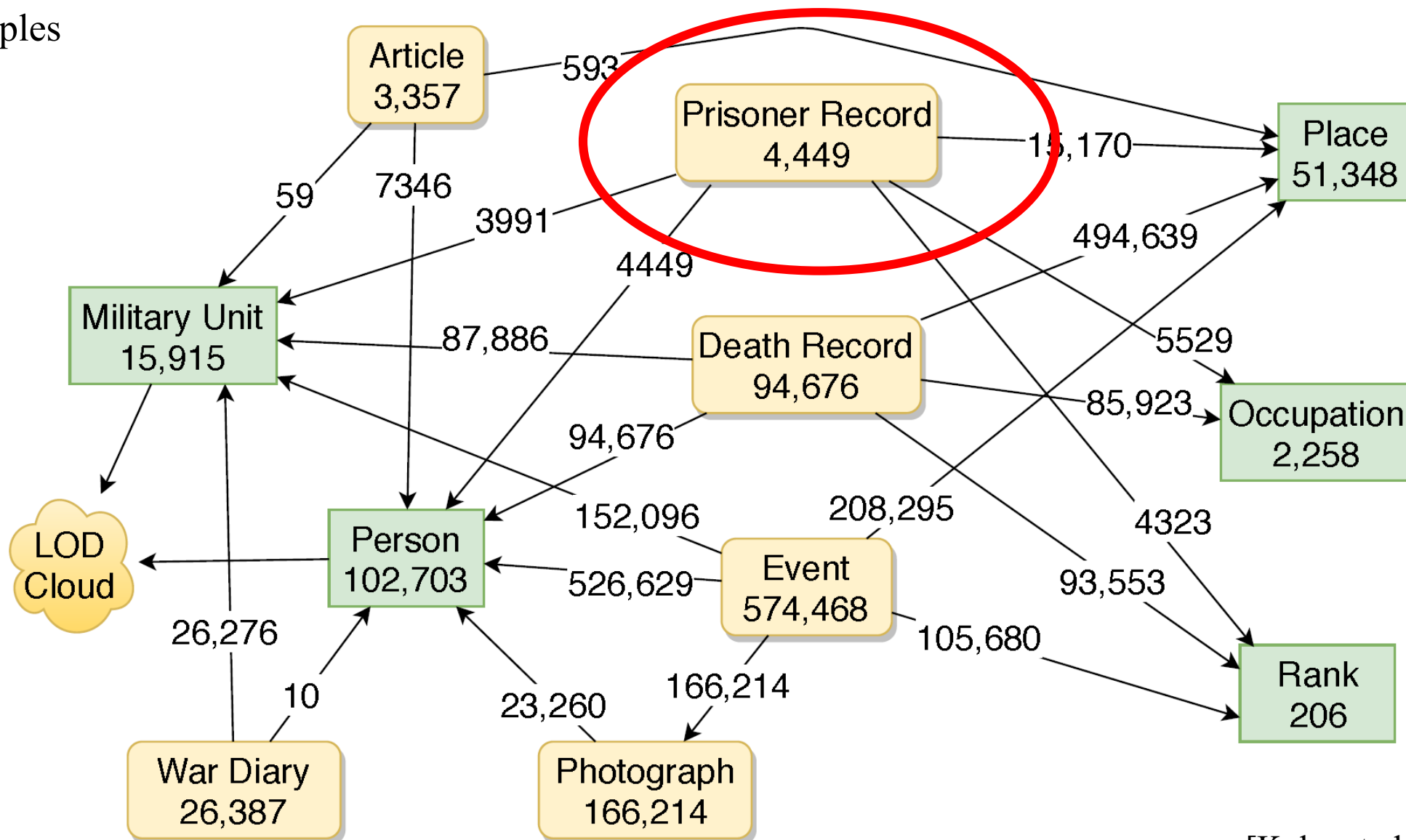
Sampo = Mythical artifact of the Finnish Epic Kalevala that gives to its owner riches and good fortune.
A metaphore of technology.



Defense of Sampo
A. Gallen-Kallela, 1896

WarSampo Infrastructure: Linked Open Data Cloud

14 million triples



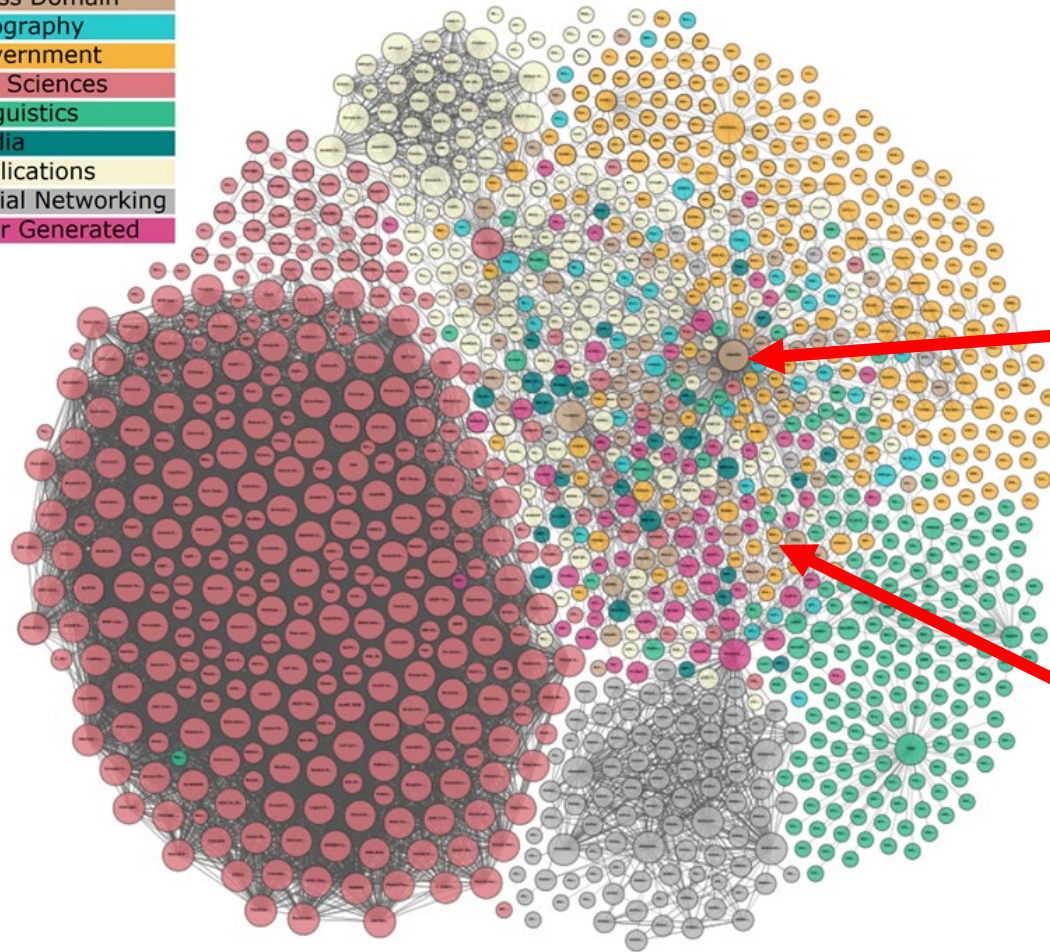
[Koho et al., 2019]

Web of Data: Linked Open Data Cloud

Human Knowledge on the Semantic Web

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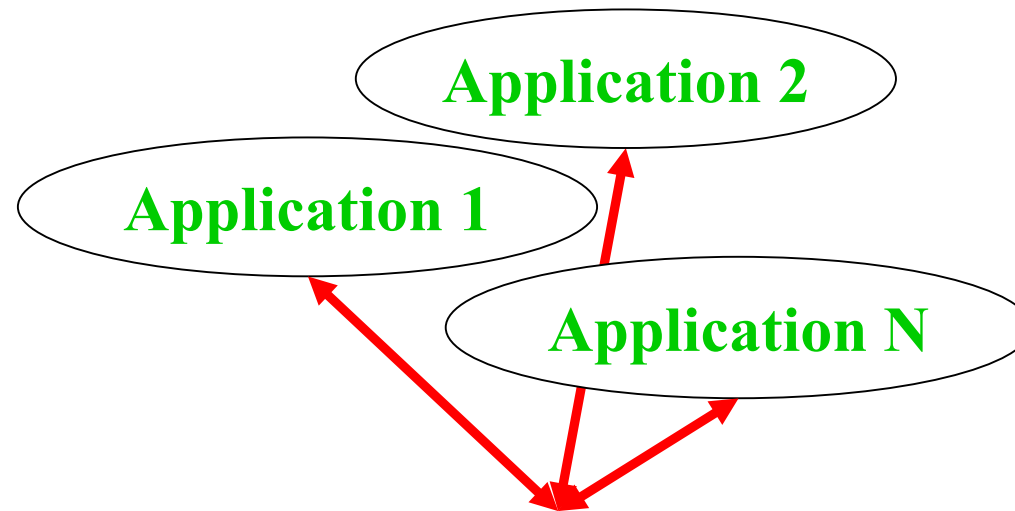
Wikipedia

WarSampo

Machines & Developers View: SPARQL

Useful for Digital Humanities Researchers, too!

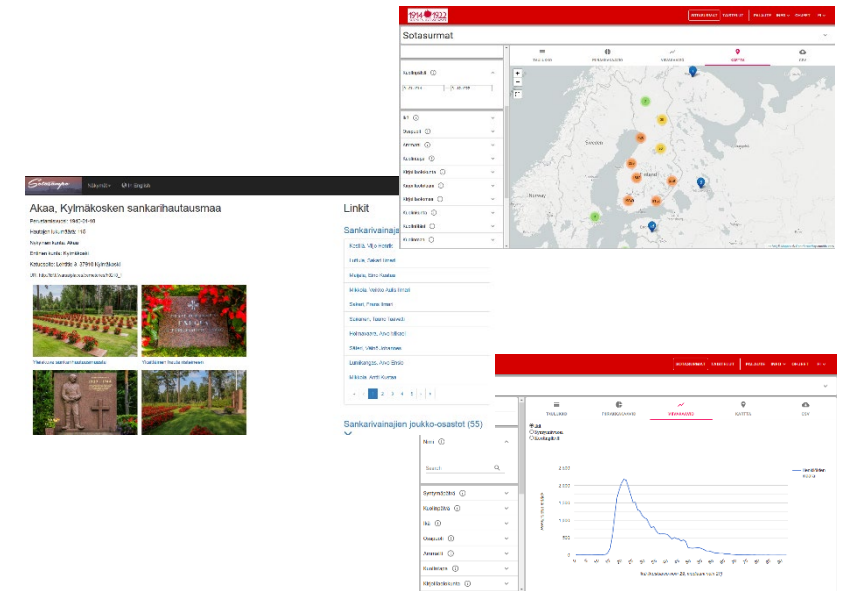
Client Side
(Browser)



SPARQL End Point

Linked Data Finland Service
WWW Standard Model

Server Side
<http://ldf.fi>





Linked Data Finland

Living Laboratory Data Service for the Semantic Web

This site is the Living Laboratory of the [Linked Data Finland](#) research initiative, conducted by the [Semantic Computing Research Group](#) at [Aalto University](#) in collaboration with University of Helsinki and a large consortium of Finnish public organizations and companies.

Our goal is to make life easier for both publishers as well as consumers of structured data on the Web. We base our work on the [Linked Data](#) paradigm and stack of standards, which combines an expressive, semantic data model ([RDF](#)) with standardized access mechanisms ([SPARQL](#) and [live HTTP URIs](#)).

5-star Linked Data

The baseline of our work is the [5-star Linked Data model](#), proposed [originally](#) by Tim Berners-Lee.

- ★ Make data available on the Web in whatever format.
- ★★ Make data available as structured data (e.g., Excel instead of an image scan of a table).
- ★★★ Use non-proprietary formats (e.g., CSV instead of Excel format).
- ★★★★ Use URIs to denote things, so that people can point at your data.
- ★★★★★ Link your data to other data to provide context.

7-star Linked Data Service

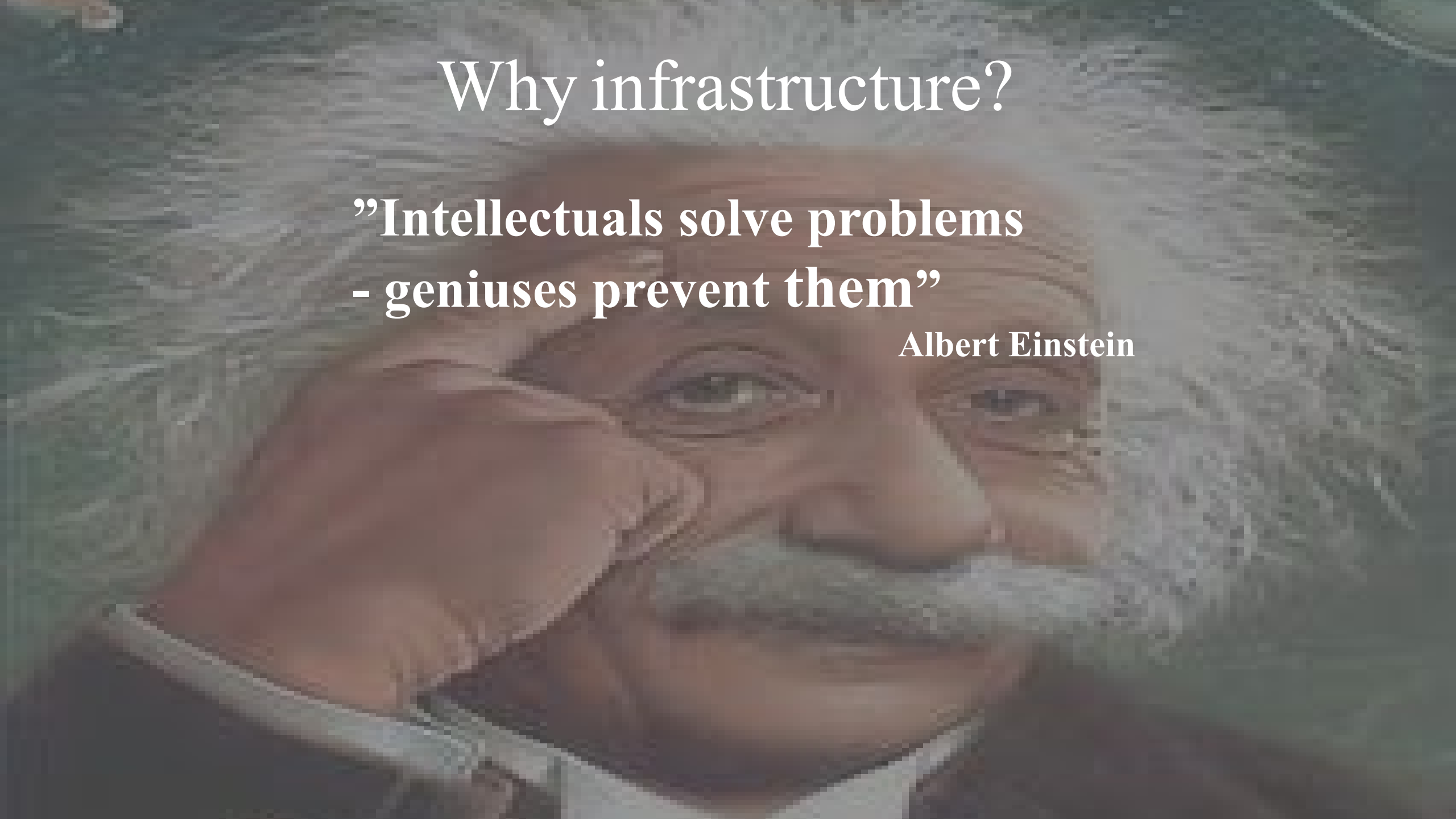
However, in our opinion, providing 5-star Linked Data is just the beginning. To actually make use of the datasets, consumers need more support in getting to know and access them, as well as a better grasp of their quality and provenance. To this end, we extend the model with two additional stars:

- [Home](#)
- [Project](#)
- [Datasets](#)
- [Schemas](#)
- [Services](#)
- [Policies](#)
- [Documentation](#)
- [Validation](#)
- [Applications](#)
- [Your Data?](#)

Why infrastructure?

**”Intellectuals solve problems
- geniuses prevent them”**

Albert Einstein



Cultural Heritage "Samos" on the Semantic Web

<https://seco.cs.aalto.fi/>

- **CultureSampo** – Finnish Culture on the Semantic Web (2008)
 - **TravelSampo** - Mobile Contextualized Services of Cultural Tourism (2011)
 - **BookSampo** – Finnish Fiction Literature on the Semantic Web (2011) [2 million users in 2018]
 - **WarSampo** – Finnish WW2 on the Semantic Web (2015) [570 000 users]
 - » + War Cemeteries application [2017]
 - » + War Prisoners application [2019]
 - **BiographySampo** - Finnish Biographies on the Semantic Web (2018) [21 000 users]
 - **NameSampo** – Linked Data Workbench for Toponomastic Research (2019) [33 000 users]
 - **WarVictimSampo 1914-1922** – National War History (2019) [18 000 users]
-
- **MMM – Manuscript Migration Mapper**, with Oxford, Pennsylvania, IRHT (Paris) (2020)
 - **FindSampo** – Archaeology & Citizen Science of metal detectorists, with Finnish Heritage Agency (-2021)
 - **LawSampo** – Finnish Legislation and Case Law, with Ministry of Justice of Finland (2020)
 - **AcademySampo** – Historical Finnish Academic People in 1640–1899 (2020-2021)
 - **ParliamentSampo** – Parliament of Finland data, new project, Academy of Finland (2020-2022)

570 000

≈ 1/10 SUOMALAISISTA



**LODLAM OPEN DATA PRIZE
VENICE 2017**

2019

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Mikko Koho, Esko Ikkala and Eero Hyvönen: **Reassembling the Lives of Finnish Prisoners of the Second World War on the Semantic Web**. *Proceedings of the Third Conference on Biographical Data in a Digital World (BD 2019)*, Varna, Bulgaria, September, 2019. [bib](#) [pdf](#)

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2015

Eero Hyvönen, Jouni Tuominen, Eetu Mäkelä, Jérémie Dutruit, Kasper Apajalahti, Erkki Heino, Petri Leskinen and Esko Ikkala: **Second World War on the Semantic Web: The WarSampo Project and Semantic Portal**. *Proceedings of the ISWC 2015 Posters & Demonstrations Track*, CEUR-WS Proceedings, Bethlehem, PA, USA, October, 2015. Vol 1486. [bib](#) [pdf](#) [link](#)



<https://vimeo.com/212249404>

Extending WarSampo with new applications

Sotasampo

Talvi- ja jatkosota semanttisessa webissä

Sotasampo mahdollistaa toisen maailmansodan tutkimisen erilaisten toisiinsa linkitettyjen sovellusten avulla. Sotasammon avulla voit hakea, selata ja visualisoida laajoja tietoaaineistoja Suomesta toisessa maailmansodassa, ja tutkia esimerkiksi sodassa taistelleiden sukulaistesi vaiheita talvisodassa, jatkosodassa ja Lapin sodassa ([ohje](#)).

[f](#) Liity Sotasampo-ryhmään Facebookissa

Valitse hakunäkymä Sotasammon aineistoihin

Tapahtumat

Talvi- ja jatkosodan tapahtumat kartalla ja aikajanaalla muihin aineistoihin linkitettynä

Henkilöt

Aineistoissa esiintyviä henkilöitä ja heihin eri tavoin liittyviä tietoja

Joukko-osastot

Suomen joukko-osastot ja niihin liittyviä tapahtumia ym. tietoa mm. kartoilla visualisoituna

Paikat

Selaa ja hae toisen maailmansodan aikaisia paikkoja, kartoja sekä paikkoihin liittyviä muita aineistoja

Kansa taisteli

Kansa taisteli -lehtien artikkelien selaus ja haku

Menehtyneet

Sotakuolemien sankarivainajien hautauspaikkojen tutkiminen fasettihaun avulla

Valokuvat

SA-kuva-arkiston valokuvien selaus fasettihaun avulla

Sankarihautausmaat

Suomen sankarihautausmaat valokuvien avulla

Sotavangit

Suomalaiset sotavangit Neuvostoliitossa

Esimerkkisivuja

Henkilö

Joukko-osasto

Tapahtuma

2015

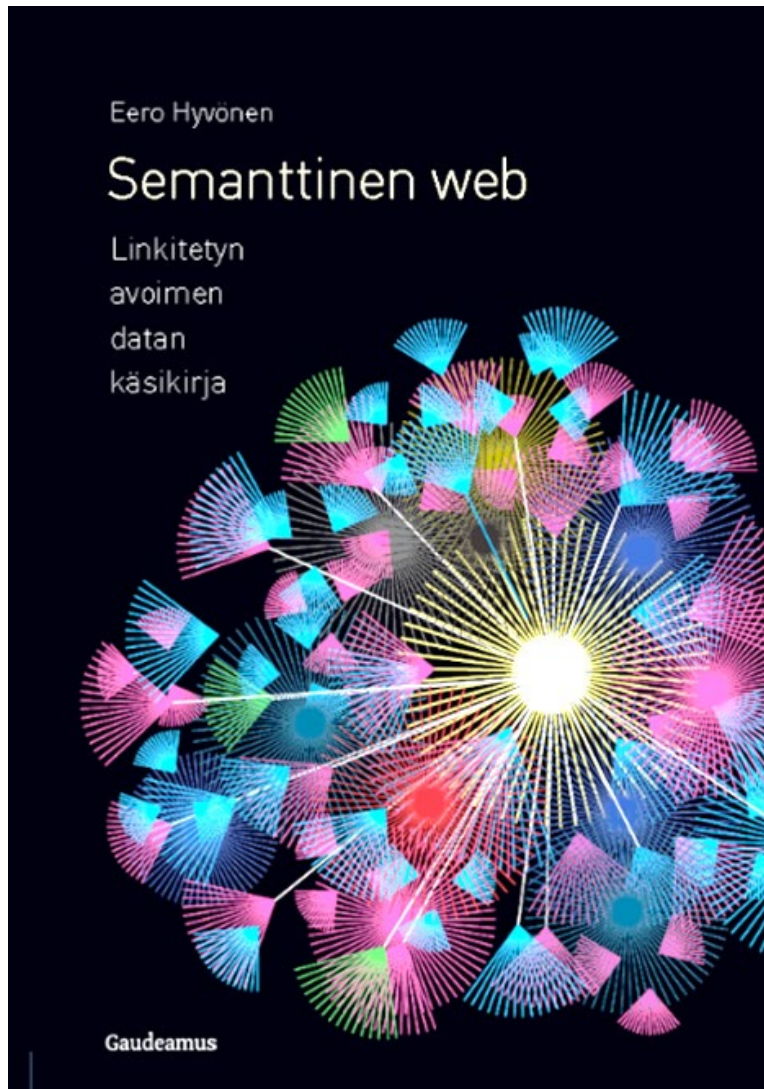
2016

2017

2019

More Info in Finnish:

<https://seco.cs.aalto.fi/projects/sotasurmat-1914-1922/>



More Info in English:

<https://seco.cs.aalto.fi/>
<https://seco.cs.aalto.fi/publications/>

