Controlled vocabularies in a multilingual, network-based research environments

Proposals for a future research infrastructure in Switzerland

Thomas Hänsli, Director Digital Art History | Head Digital Media

Swiss Federal Institute of Technology, ETH Zurich, Switzerland Institute for the History and Theory of Architecture (gta)

> University of Zurich, Switzerland Institute for Art History (KHIST)

ITWG 2014, Dresden (September 7, 2014)









Current situation in Switzerland

- numerous research institutions, museums and archives are generating/providing art related research and meta data
- several institutions have established their own, similar vocabularies for describing and key-wording visual artefacts
- yet, only very few of them are compatible or interoperable in a reasonable way
- common search tool still is Google...
- thus, no mutual access despite a constantly growing amount of visual and textual based data related to art history
- yet again, the entire discipline depends on accessing, processing and safeguarding digital reproductions and reliable research and meta data



Reasons for shortcomings

- linguistic borders (german, french, italian, rumantsch and english as a common denominator)
- each linguistic region in Switzerland in alignment with a specific neighbourhood abroad*
- despite the geographic proximity, each European country has own funding policies and structures
- last but not least, different software products avoiding collaboration and resulting in well protected ,ecosystems' of database vendors
- these shortcomings apply to all countries, but are specifically crucial to multilingual Switzerland!



Examples of multilingual problems/ shortcomings in aggregated databases

Home My Europeana		Choose a language ~	Home My Europeana			Choose a language ~	Home My Europeana			Choose a language ~
europeana thek culture	Search Creators ¥ Bernini Giovanni Lorenzo	Q Search Help	europeana think culture	Search Creators ¥ Bernini Gianlorenzo		Q.Search Help	europeana tink culture	Search Creators ¥ le Bernin		Q Search Help
Matches for: who: Bernini Giovanni Loren zo Refine your results: • Add more keywords • Add more keywords • By media type • IMAGE (657) • TEXT (4) • By language of description • By year • By providing country • By copyright • By provider øf include content contributed by users Share: Share	Results per page: 24 × Results 1 - 24 of 661 Image: Sveta Terezija Image: Source of the	Altar der heiligen	Matches for: who: Bernini Gianlorenzo Refine your results: Add more keywords * Add more keywords * Add * By media type IMAGE (2) * By language of description * By year * By providing country * By provider * By provider # Include content contributed by users	Results per page: 24 V Autoritratto di Gianiorenzo Si Results per page: 24 V		1 of 1	Matches for: who: le Bernin Refine your results: • Add more keywords • By media type • INAGE (2) • By language of description • By year • By providing country • By copyright • By provider • Include content contributed by users Share:		Results 1 - 2 of 2	1 of 1
	Atar der heiligen Therese Atar der heiligen Therese Atar der heiligen Therese Atar der heiligen Therese Palazzi Vaticani – Scala Regia Atar der heiligen Therese Image: State of the state of th	Grabmal des	Share: Share: Share Follow us! Facebook Pinterest Other Europeana Sit State Biog Professional	Twitter Sign-u annour Sign-u Sign-u Google + Sign-u	sletter sign-up up to receive our bi-monthly newsle ncements. up here About us New content All providers Press Centre Jobs		Share Follow us! Facebook Pinterest Other Europeana Site Share Cher Suropeana Site Professional Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses Cherses	Twitter Scogle + Help Searching Europeana Results in Europeana Using MV Europeana Using MV Europeana What's new	Newsletter sign-up Sign-up to receive our bi-monthly ner announcements. Sign-up here About us New content All providers Previous newslet Press Centre Jobs	

Aggregated databases: Europeana [http://www.europeana.eu/, as of 10/2013]

- → 661 searchresults for Giovanni Lorenzo Bernini
- \rightarrow 2 searchresults for **Gianlorenzo Bernini**
- \rightarrow 2 (others) searchresults for Le Bernin





Potential of leading research institutions (selection only)

- <u>SIKART</u> Lexicon on Swiss Art
 - Swiss Institute for Art Research (SIK-ISEA)
 - 21'000 artist's names (only few in ULAN so far, partially in GND)
 - 50'000 metadata of art works
 - currently being made accessible within ULAN/CONA (and GND)
- Kunstbulletin Switzerland's leading contemporary art journal
 - numerous names of Swiss contemporary artists
 - by now available only on http://www.european-art.net/
 - to be made accessible within ULAN (and GND)
- <u>Digitale Diathek</u> ETH Zurich, University of Zurich, et al.
 - giving unified access to distributed Digital Image Database, mainly from within Switzerland
 - based on the Getty Vocabulary Program (currently ULAN, TGN, and AAT; CONA to come)
 - cross-reference to GND, SIKART gradually being added
- ETH Zurich Archives of the Institute for the History and Theory of Architecture
 - including the Archives of CIAM, Sigfried Giedion, and Gottfried Semper
 - 90'000 metadata of architectural objects in Switzerland
 - result of decade-long research and inventories
 - future research portal going online in 2015
 - metadata to be made accessible within CONA and/or GND



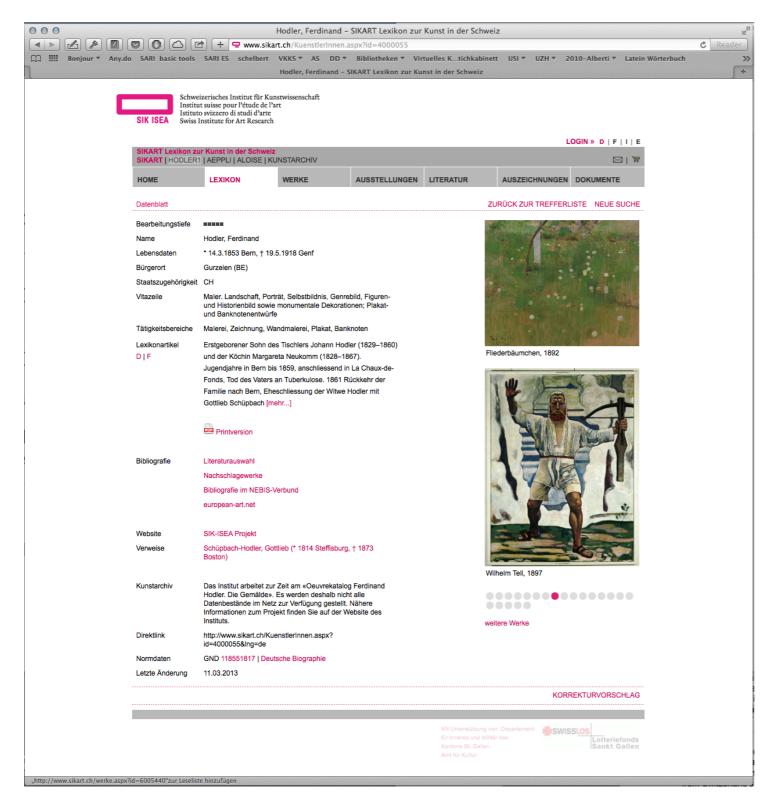
Hands-on: SIKART

- SIKART Lexicon on Swiss Art
- provided by the Swiss Institute for Art Research
- 21'000 artist's names (only few in ULAN, partially in GND)
- 50'000 metadata of art works (by 2016)
- result of decade-long research, online since 2006
- most renown source for Swiss art of the 19th/20th C.
- currently accessible through printed publications/website only
- currently being made accessible through ULAN/CONA (in collaboration with ETHZ /Digitale Diathek)

ETH zürich Universität



Hands-on: SIKART



• SIKART, example of Ferdinand Hodler [http://www.sikart.ch/KuenstlerInnen.aspx? id=4000055, as of 4.9.2014]



Hands-on: Digitale Diathek

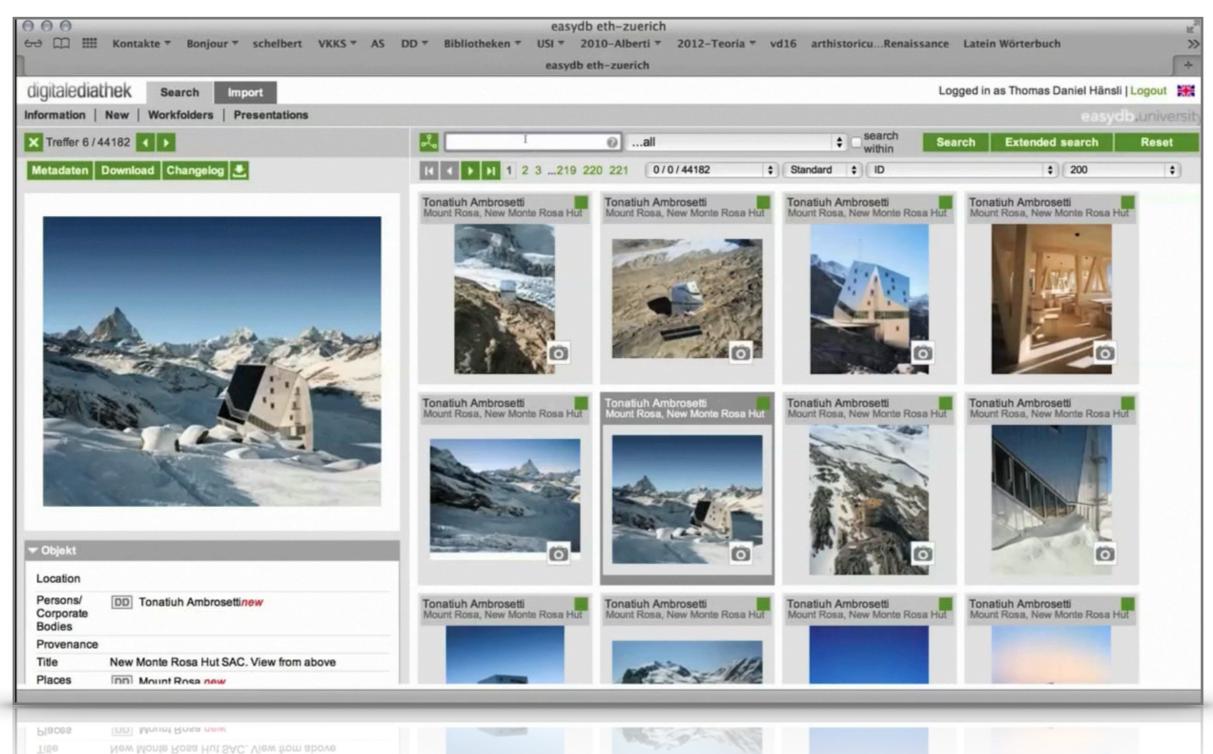
- giving unified access to Digital Image Databases, mainly from within Switzerland
- network-based architecture (no aggregated data for quality reasons)
- multilingual search capabilities for persons/cooperate bodies, places and art historical terms implemented into full text search
- possible thank to Digitale Diathek Vocabulary services provide to all contributed partners interested using it
- allows own additions, translations, and micro thesauri
- based on the Getty Vocabulary Program (ULAN/TGN/AAT)
- cross-references to GND, SIKART gradually being added
- yet, using a proprietary software (for the moment being)



 \mathcal{O}

Hands-on: Digitale Diathek

https://gta.digitale-diathek.net/asset?t=1&i=eth-zuerich&c=694&o=85570&v=flvhq&w=1264&h=730&checksum=e0e95d36436eaa161909adc914f5186c



e New Monte Rosa Hut SAC. View from above



Two new proposals for a future research infrastructure in Switzerland

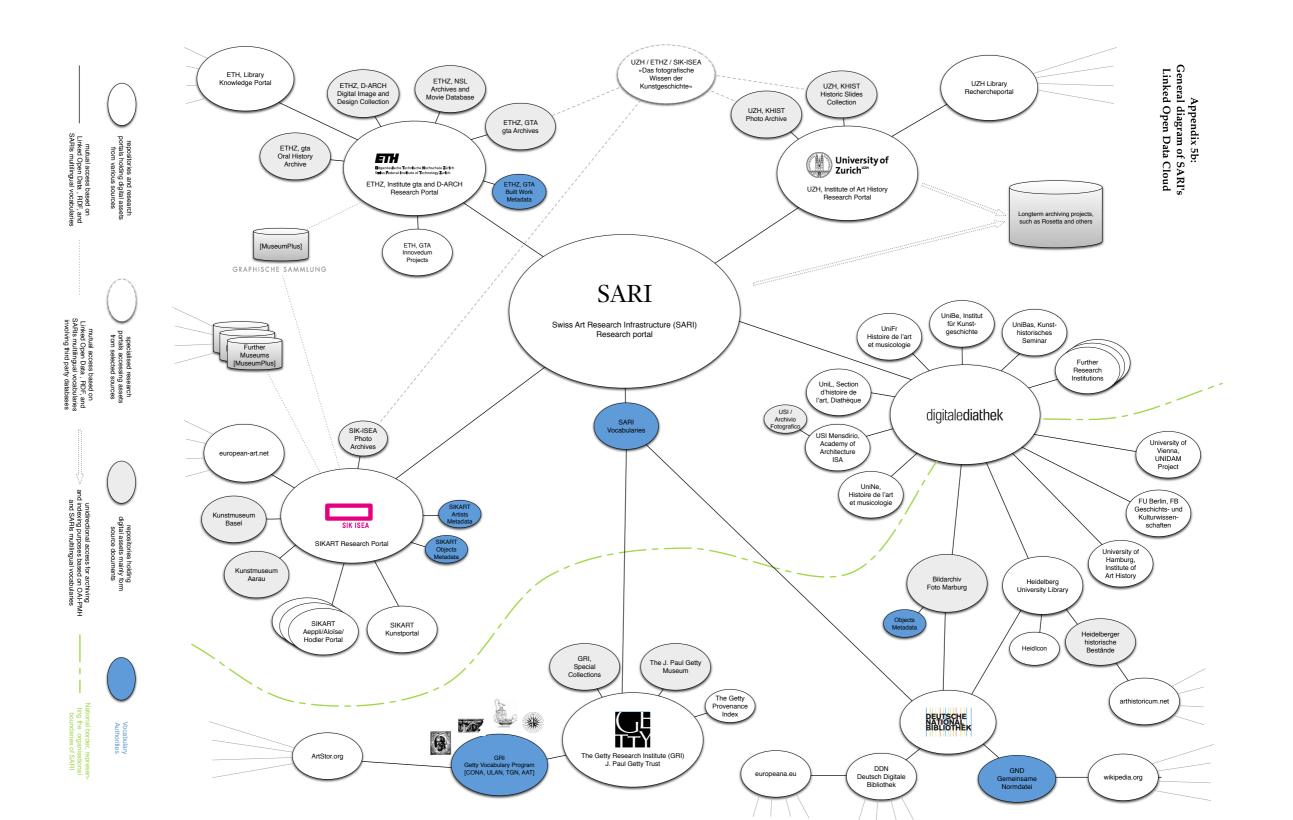


SARI

- SARI »New Swiss Art Research Infrastructure«
- Authors: Weddigen/Hänsli/Tönnesmann(†)/Fayet et. al.
- Applied for at »Swiss Federal State Secretariat for Education, Research and Innovation (SERI)« / »Swiss National Science Foundation (SNSF)«
- Program: »Swiss roadmap for New Research Infrastructures of National Relevance (2017/20)«
- Leading House: University of Zurich (UZH), in collaboration with the Swiss Federal Institute of Technology (ETHZ), Swiss Institut of Art Research, Zurich (SIK-ISEA)
- Partner: all Swiss universities involved in researching/teaching in art history, numerous museums, archives, collections, the Getty Vocabulary Program, others
- 4.54 mCHF, decision due 2014/2015, starting 2017



SARI – National Network





SARI – Key features (selection)

- unified access to visual and textual based data related to art history, including both research data and individual holdings
- network-based architecture, instead of aggregating remote databases
- providing tools for research and academic collaboration
- allowing incremental and curated contributions from research projects and individual holdings, such as museums, archives, and collections
- scholarly, technical, and financial resources for data curation of contributing partners
- unified access to established, yet extendable scholarly vocabularies for persons and corporate bodies, places and locations, works of art and historical terminology (based on LOD, see SLOAT)
- industry-grade search technologies, based on open source software



SARI – Goals

- unified access to research-relevant images and scientific metadata from existing networks, institutions, and research projects
- enhanced sustainability and visibility for research projects and individual holdings, such as museums, archives, and collections
- synergetic uses of scholarly skills in the participating universities and collections, taking into account each institution's main areas of expertise and focus in terms of methodology and content
- stretching beyond institutional, linguistic, and national borders
- enhance collaboration various actors, various academic levels
- seen as a potential model for an international network



SI OAT

- SLOAT »Swiss Linked Open Art Thesaurus«
- Applied for at »Rector's Conference of the Swiss Universities«
- Program: »SUK-P2. Scientific information: Access, Processing and Safeguarding« [2013-16]
- Authors: Weddigen/Hänsli/Lampugnani/Fayet et. al.
- Leading house: University of Zurich (UZH), in collaboration with the Swiss Federal Institute of Technology (ETHZ), Swiss Institut of Art Research, Zurich (SIK-ISEA)
- External partners: GRI Getty Vocabulary Program, others
- 466 kCHF, decision due 12/2014, starting 1/2015



SLOAT – Key features

- dedicated, open-access vocabulary service in the field of art history according to the specific needs of Switzerland's universities, research institutions, museums and collections
- based on open access and linked data (LOD), free of charge
- multilingual subjects, concepts and terms covering works of art, persons and corporate bodies, places and technical terms
- affiliate and provide unified access to all existing major vocabularies, thesauri and authority data used in the field of art history in Switzerland

(i.e. the Getty Vocabulary Program, GND, SIKART, others to come)



SLOAT – Goals

- multilingual access to visual and textual based data related to art history from existing networks, institutions and research projects
- stretching beyond institutional, technological, language and national borders
- synergetic uses of scholarly skills in the participating universities and collections establishing own vocabularies
- provide specialized institutions with the framework for adding own and translating existing content
- taking into account each institution's main areas of expertise and focus in terms of methodology and content

Further information

Thomas Hänsli, Director Digital Art History | Head Digital Media

ETH Zurich Swiss Federal Institute of Technology Institute for the History and Theory of Architecture (gta) Stefano Franscini-Platz 5 P.O.B. 250 8093 Zürich / Switzerland

Web: http://digitalarthistory.gta.arch.ethz.ch | Mail: thomas.haensli@gta.arch.ethz.ch



