

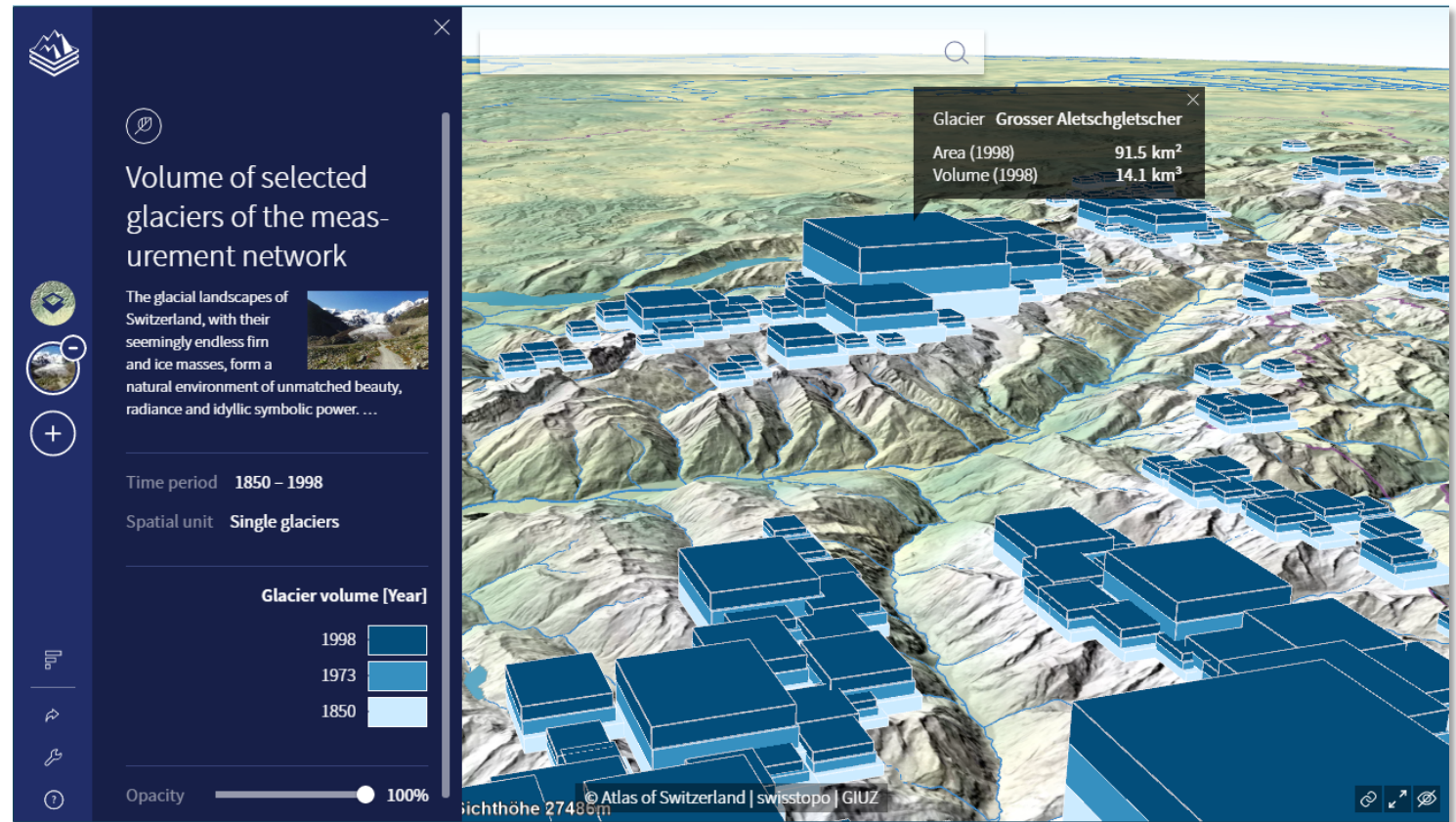
Storytelling in Interactive Atlases – Following the Intrinsic Map-Centered Approach

René Sieber, Michael Schmuki
Institute of Cartography and Geoinformation, ETH Zurich

The Role of Atlases

Information Retrieval by Means of:

- Relevant topics
 - Curated set of maps
 - Related information
Text, Pictures, Charts
 - Tools / Functions
Navigation, Overlay of map layers,
Data Import, Timeline, Query/Picking,
Comparison, Multimedia
 - Relationships
- Yet still ...



Atlas of Switzerland – online [2016]

The Role of Atlases

The Main Problem of Information Retrieval

Population Density [1990–2000]

Population Density [1870–1880]

What is missing:

- Spotlight to discover the *most relevant facets*
- Relations between topics
- Explanations of scenes

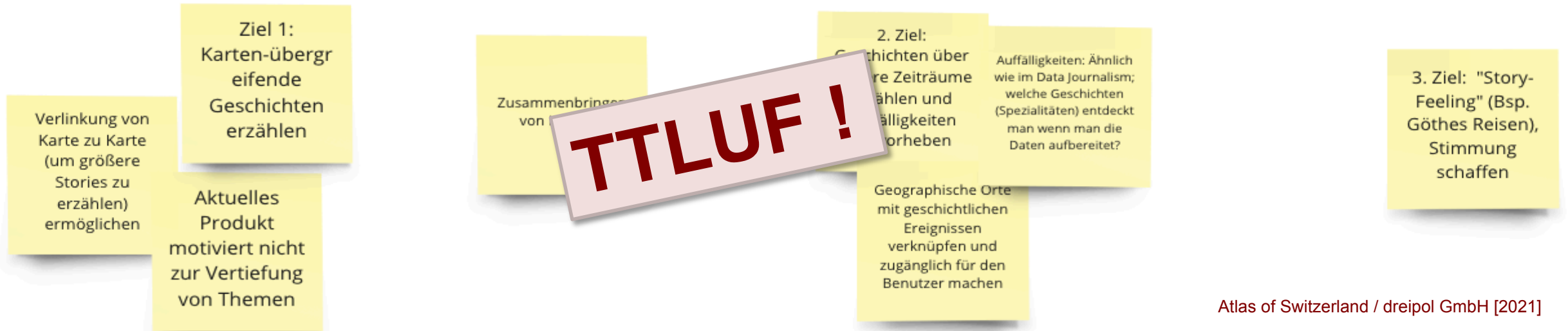


Atlas of Switzerland 3 [2010]

Storytelling in Interactive Atlases

Main Motivation to Develop a Storytelling Feature

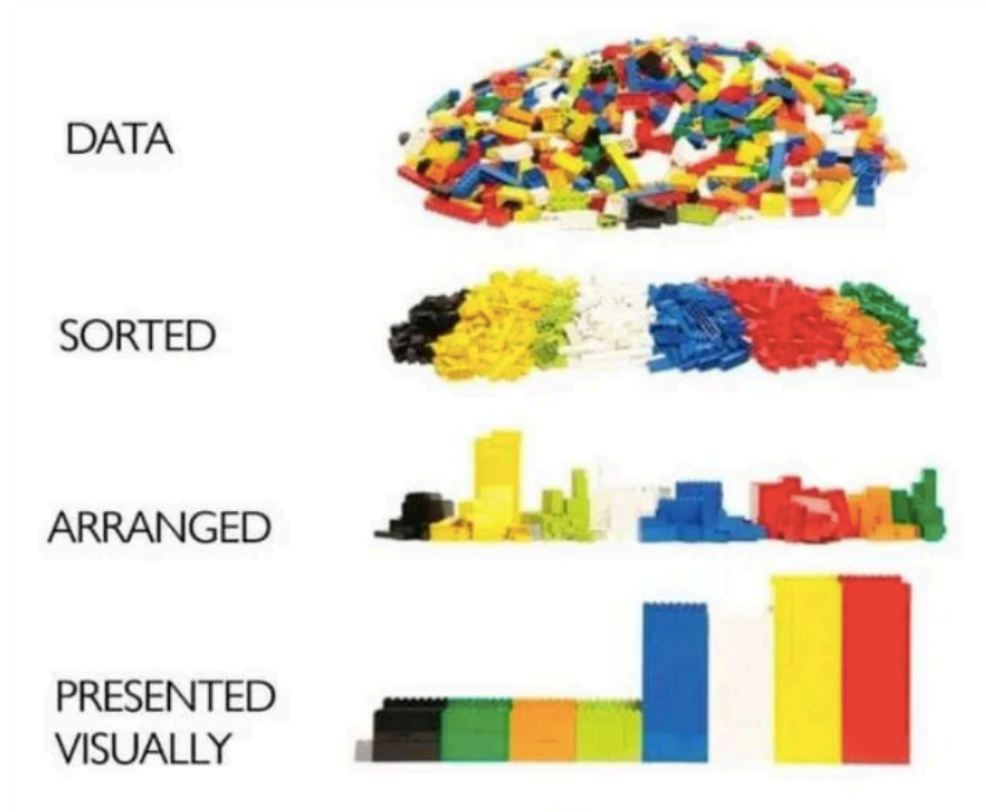
- ① **Topic** Tell stories by linking map topics, and by lighting up hidden data secrets
- ② **Time** Tell stories over a longer timespan
- ③ **Location** Tell stories of different topics, at the same location
- ④ **User's Fun** Create a "Story feeling"



Atlas of Switzerland / dreipol GmbH [2021]

Storytelling in Interactive Atlases

A Lego™ Construction Guide for Stories



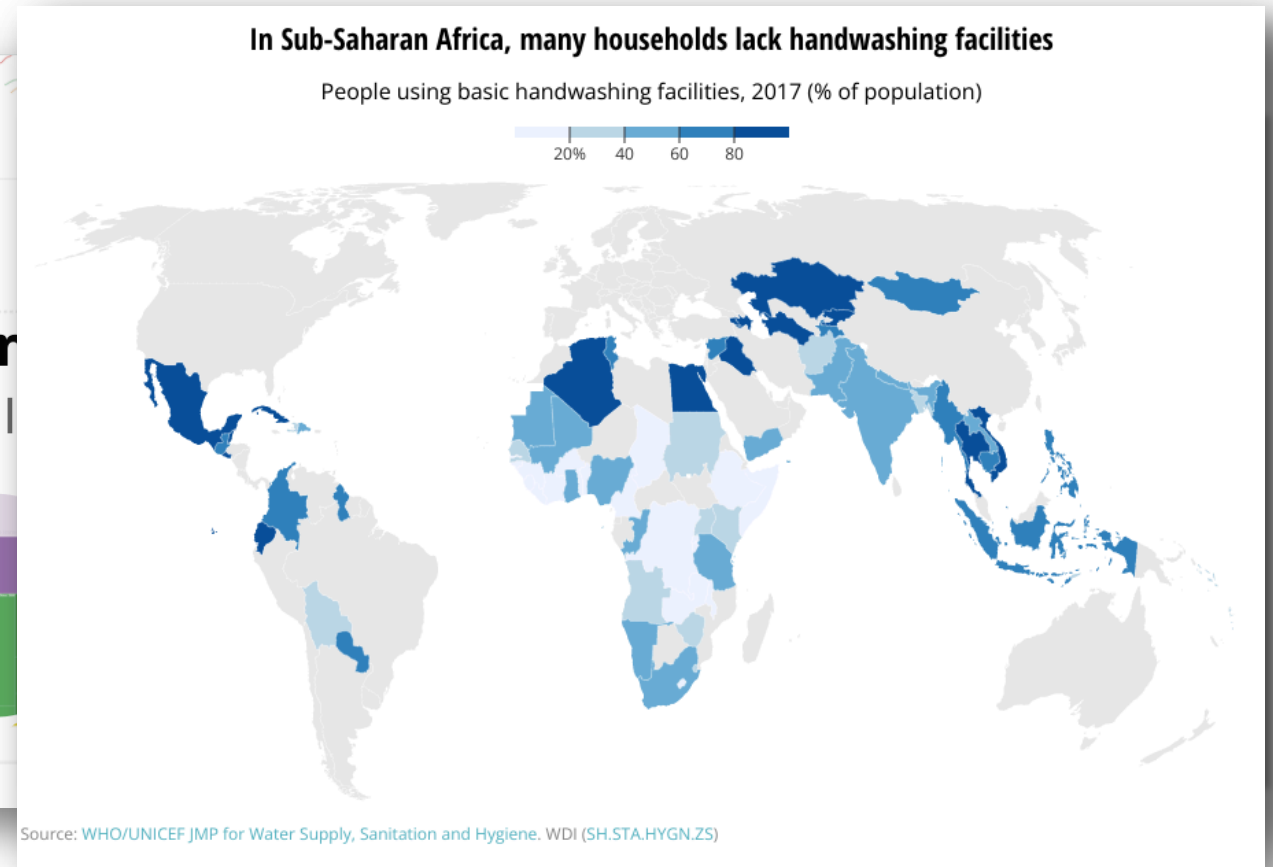
Hot Butter Studio, Brandon Rossen [2021]

Storytelling in Interactive Atlases – The Extrinsic Approach

Storyline-Centered



<https://datatopics.worldbank.org/sdgateas/> [2021]



Storytelling in Interactive Atlases – The Intrinsic Approach

The 4 Map-Centered Story Types

Type 1 Scrollytelling	Type 2 Guided Tour	Type 3 Narrative-Related	Type 4 Camera-Related
Author-driven Linear sequence Story is always visible (navigation) Switch to related stories	Author-driven Linear sequence (movie) Story is told during the journey (text/speech) (Switch to related stories)	User-driven Narrative-dependent sequence (e.g., time) Story is told on demand (hover/click on POIs) Switch to related stories	User-driven Frustum- (camera view) dependent sequence Story is told on demand (hover/click on POIs) Switch to related stories



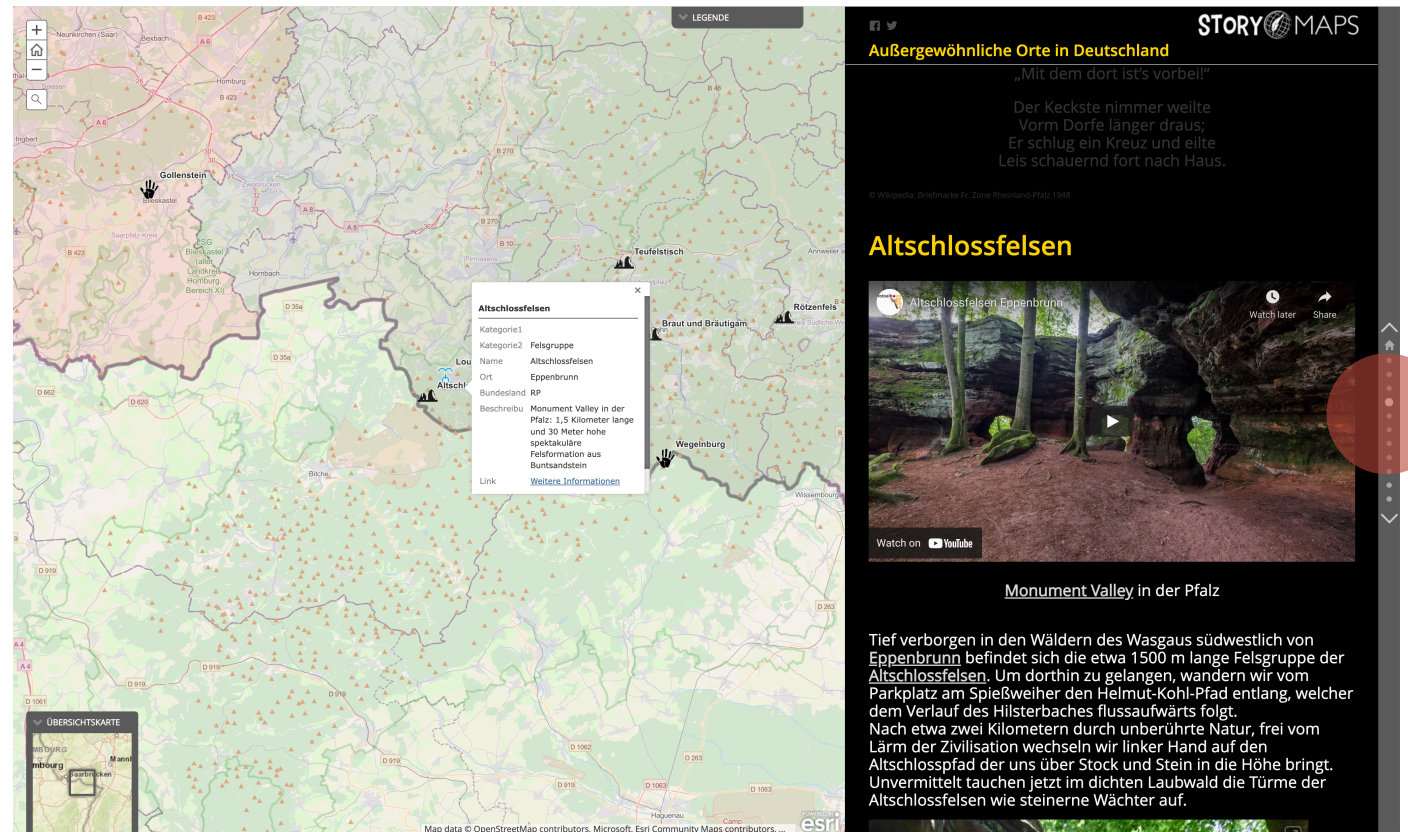
Storytelling in Interactive Atlases – The Intrinsic Approach

Type 1 Scrollytelling

- Author-driven
 - Linear sequence
 - Story is always visible (navigation)
 - Switch to related stories
- *“Book reading” / Travelling experience*

Extraordinary places in Germany

<https://www.storymaps.de/> [2021]



Storytelling in Interactive Atlases – The Intrinsic Approach

Type 2 Journey / Guided Tour

- Author-driven
 - Linear sequence (movie)
 - Story is told during the journey (text/speech)
 - (Switch to related stories)
- *Cineastic Experience*

Melting Swiss Glaciers



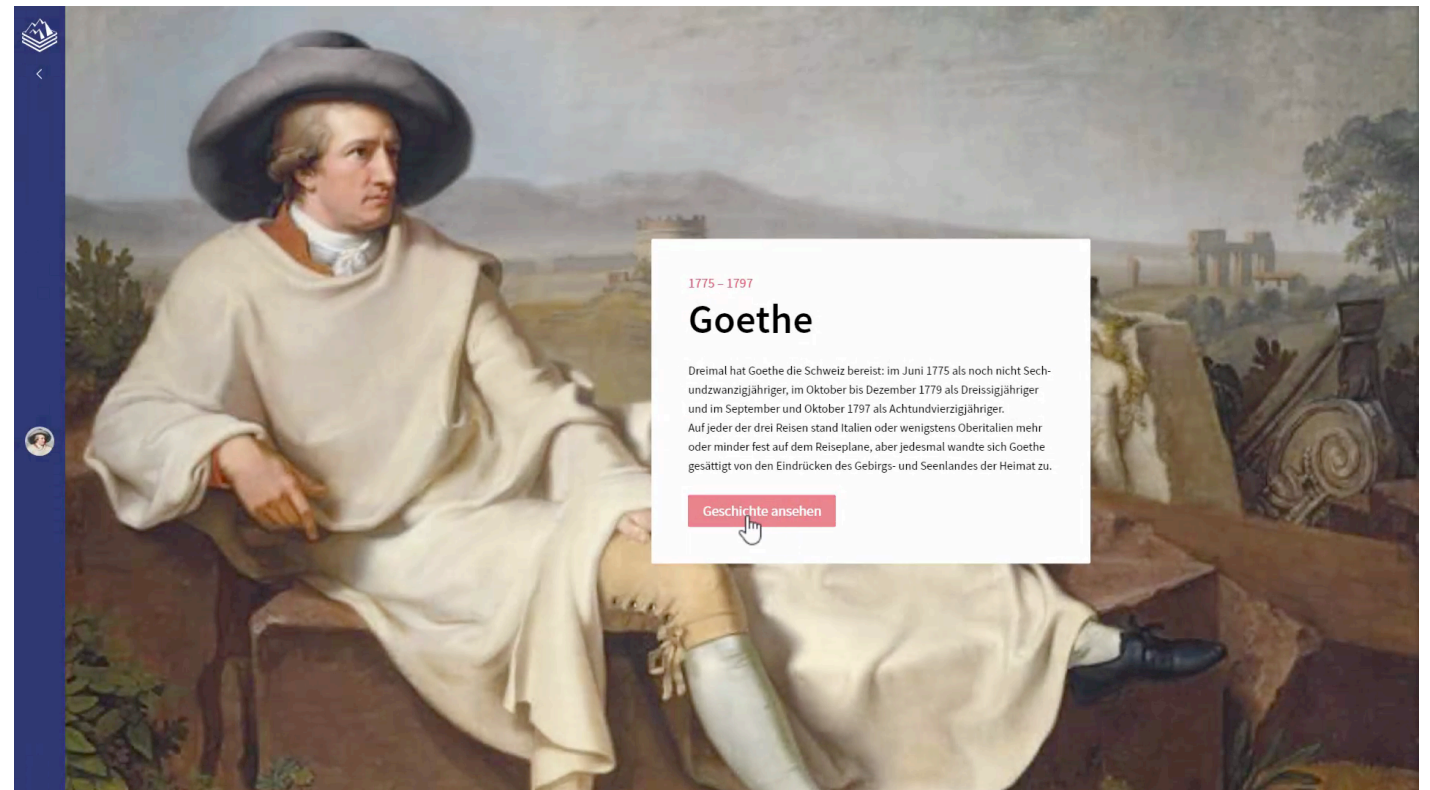
Atlas of Switzerland – Sandbox [2020]

Storytelling in Interactive Atlases – The Intrinsic Approach

Type 3 Narrative-Related Story

- User-driven
 - Narrative-dependent sequence
 - Bidirectional control (story | map)
 - Story is told on demand
 - Switch to related stories
- Free “Book reading” / Travelling experience

The Swiss Journeys (1775 – 1797) of J.W. Goethe



Atlas of Switzerland – Sandbox [2021]

Storytelling in Interactive Atlases – The Intrinsic Approach

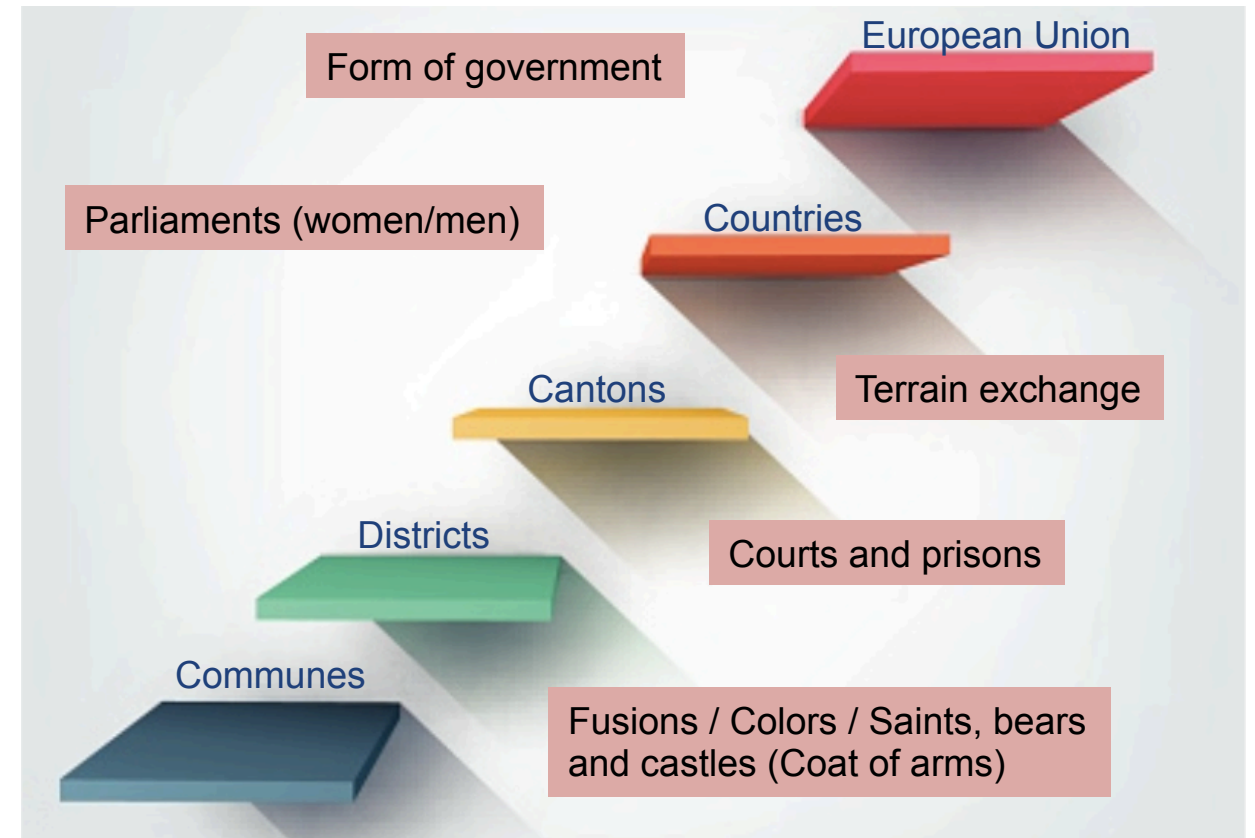
Type 4 Camera-Related Story

- *User-driven*
- Frustum- (camera view) dependent sequence
- *Sub-Stories* depend on *zoom level / camera position*

Zooming

<https://gramconsulting.ca/> [2021]

Administrative Structures / Profiles



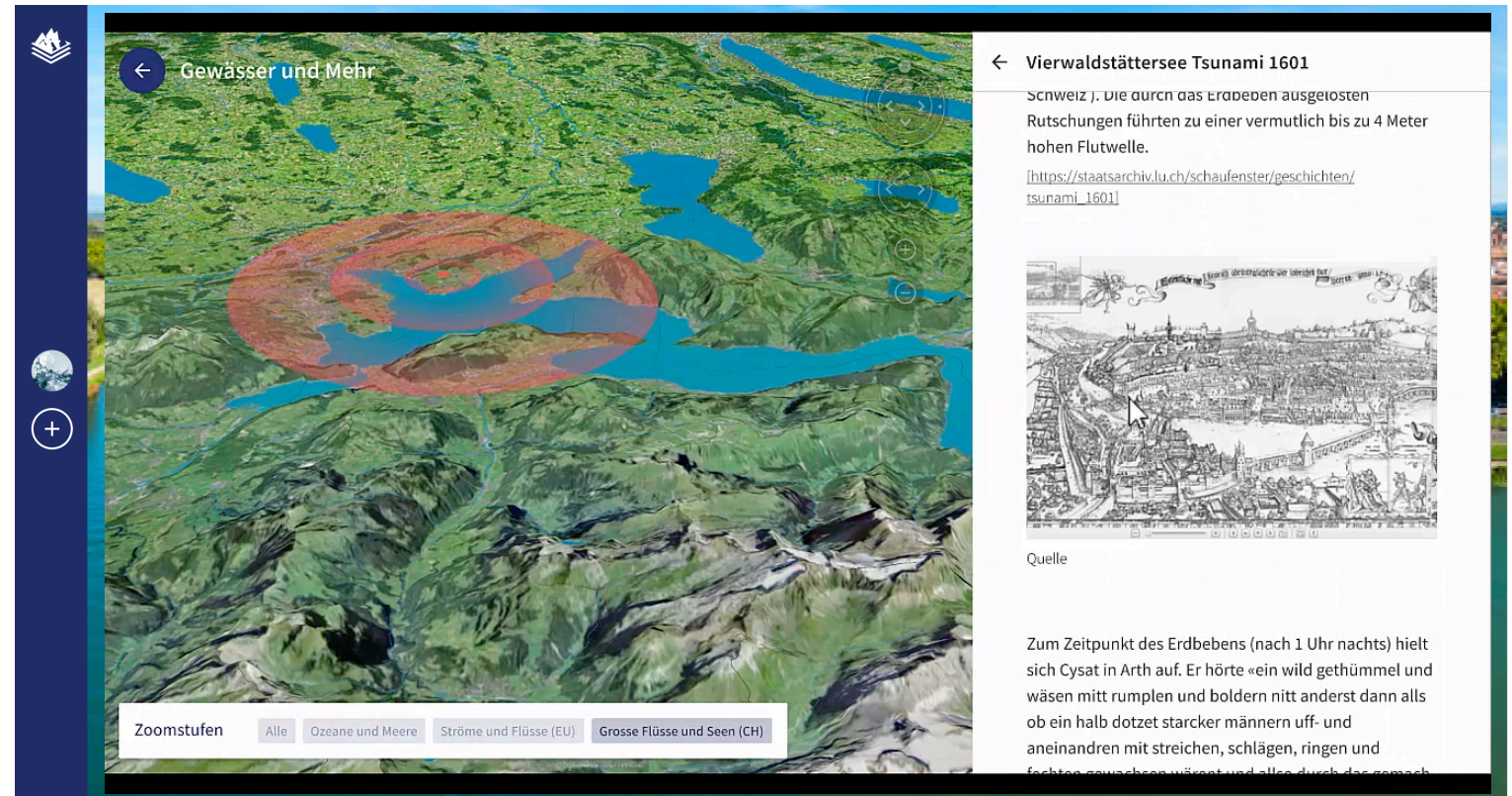
Storytelling in Interactive Atlases – The Intrinsic Approach

Type 4 Camera-Related Story

- *User-driven*
- Frustum- (camera view) dependent sequence
- *Sub-Stories* depend on *zoom level / camera position*
- Bidirectional control (story | map)
- Story is told on demand
- Switch to related stories

➤ *Free Cineastic Experience*

Water & more | Are there Tsunamis in Switzerland?



Atlas of Switzerland – Sandbox [2021]

Storytelling in Interactive Atlases – The Intrinsic Approach

Sum-Up

- Active, user-driven approach
- Makes maps vivid
- Needs only a couple of storytelling features (intro page, panel, slider)
- Could be expanded with additional map features
- Can be used for atlas advertisement
- Printed and Digital Atlases are well suited for Storytelling!

<https://www.alphagamma.eu>



Storytelling in Interactive Atlases – The Intrinsic Approach

More Storytelling Ideas for the AoS

- French Invasion and Helvetic Revolution
- Swiss Dunes and Pyramids
- Origin of place names
- Waterways – never built
- ...

**Thanks for
attending !**

**For further information
please contact:
sieberr@ethz.ch**