

OpenAtlas - A database system for object oriented modelling of historical relationships



1. Heterogeneous Data Sources
2. Data Model and Data Structure
3. Technical Implementation
4. Practical Application

Eastern Alps revisited

Interdisciplinary approach by archaeologists and historians

Funded by the Austrian Science Fund (FWF)

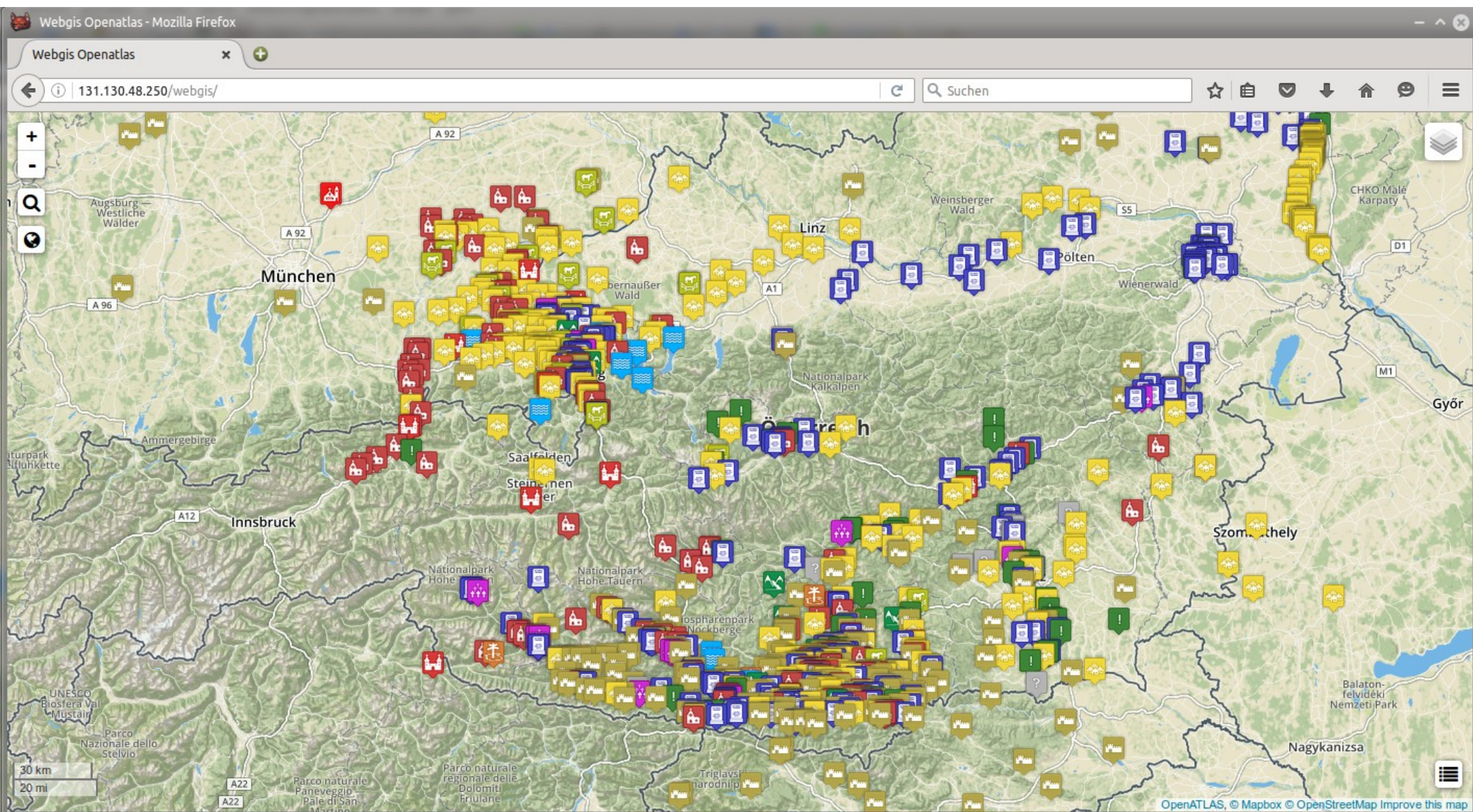
The fate of the Roman province Noricum
Destruction and Formation of elites
Appropriation of Space by new elites
Identities and ethnic labels
Economy, technology and trade

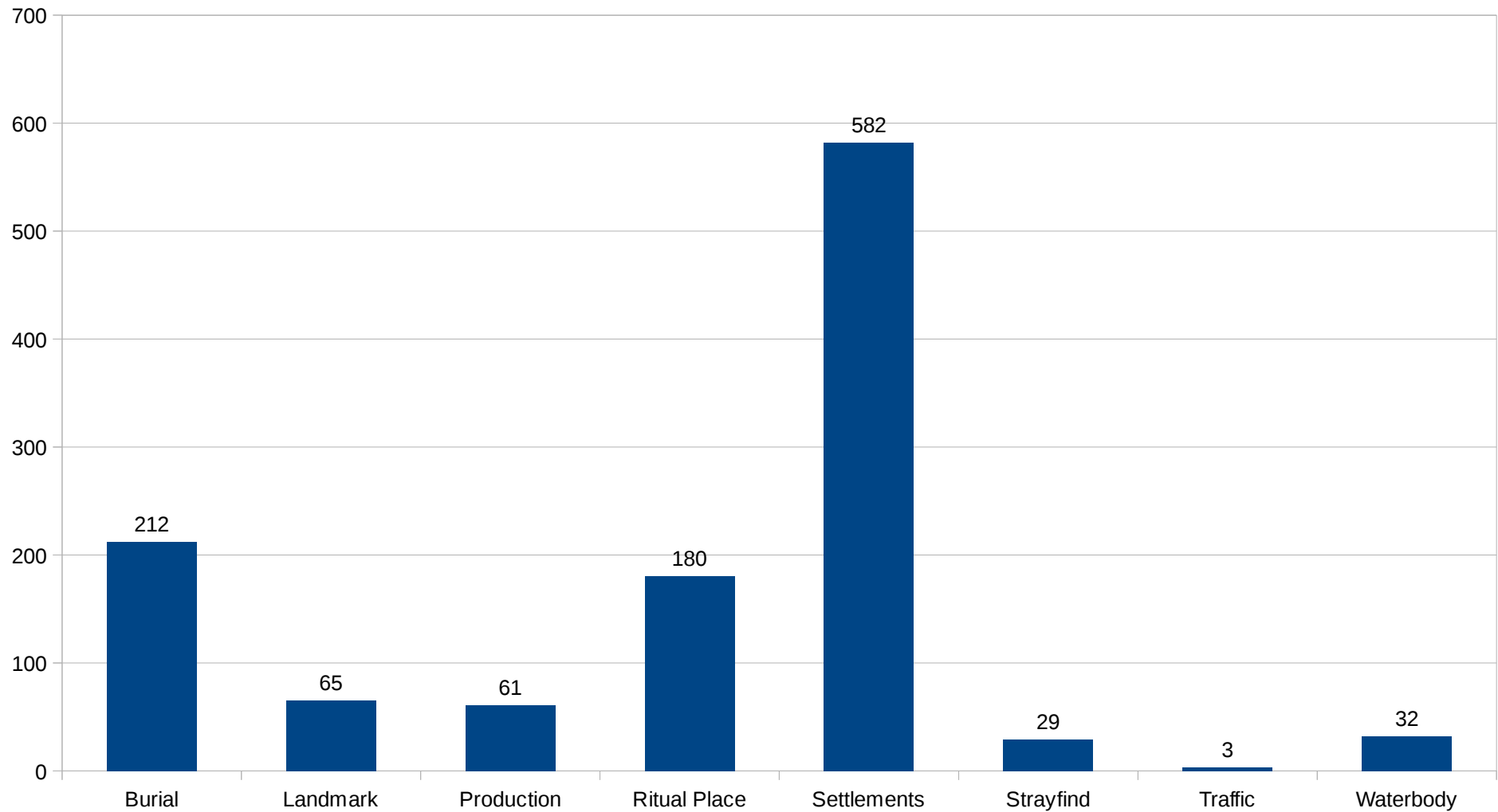


universität
wien

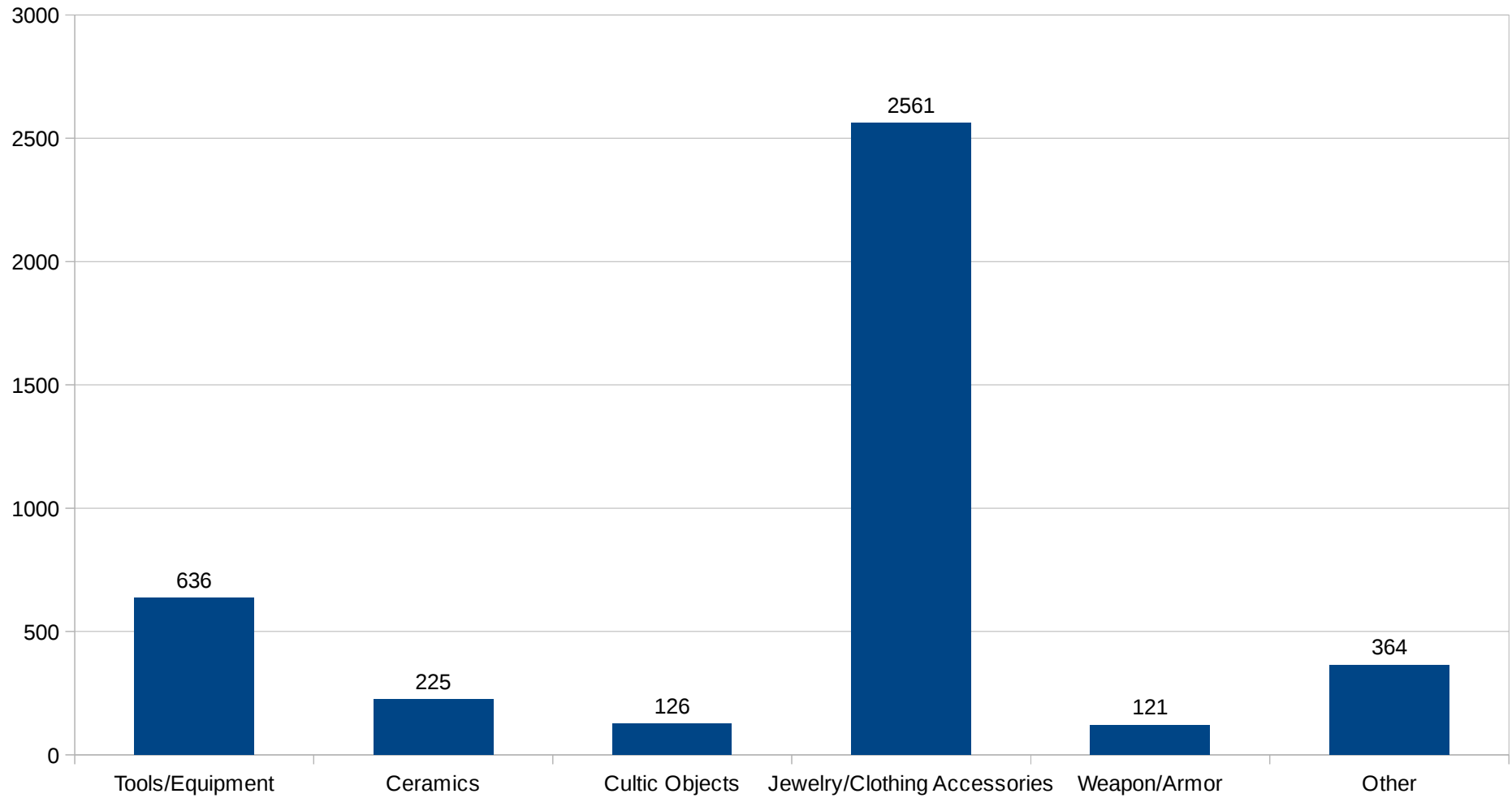


FWF Projekt Nr. P24045: The Eastern Alps revisited
Continuity and Change from Late Antiquity to the Middle

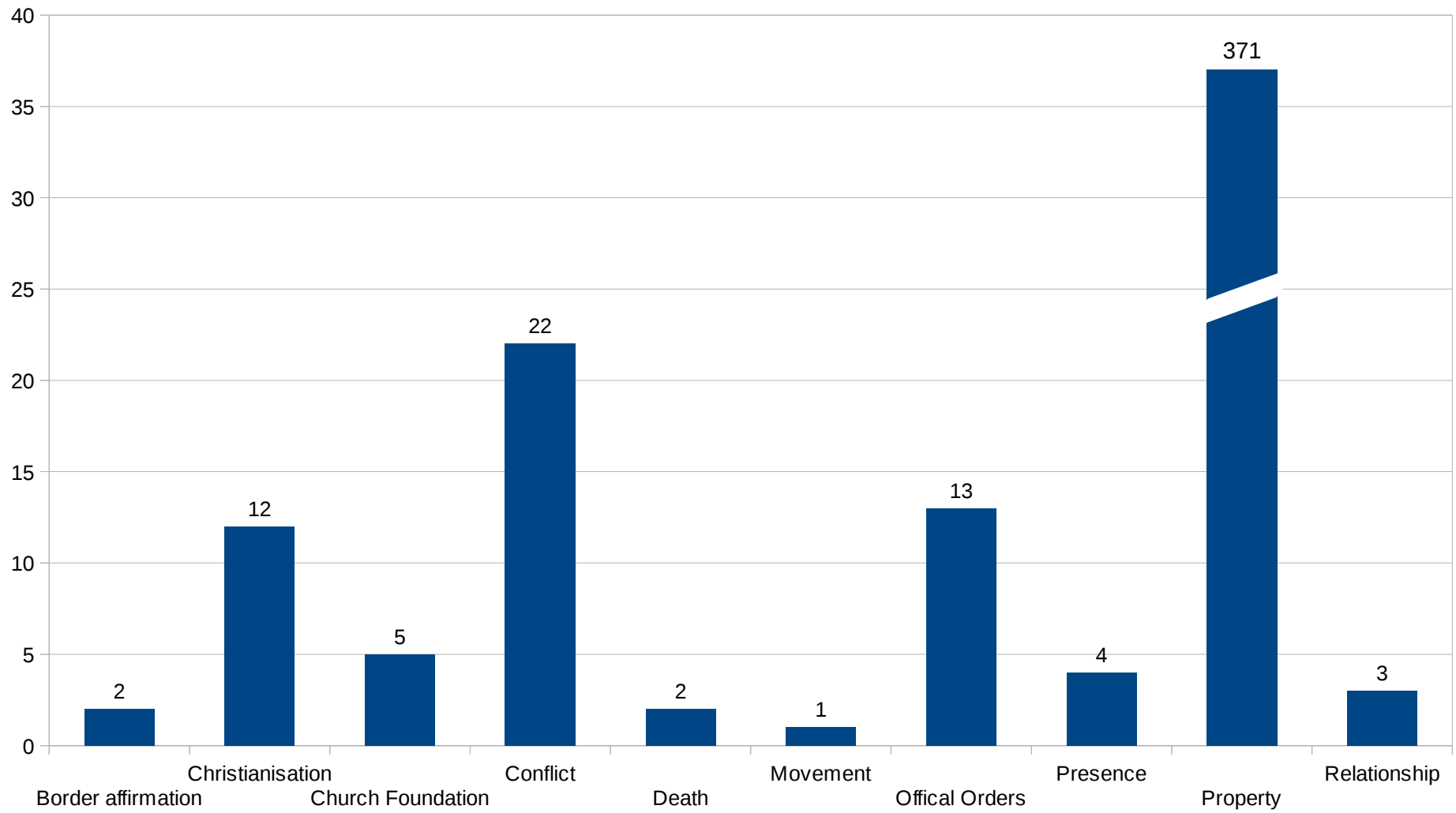




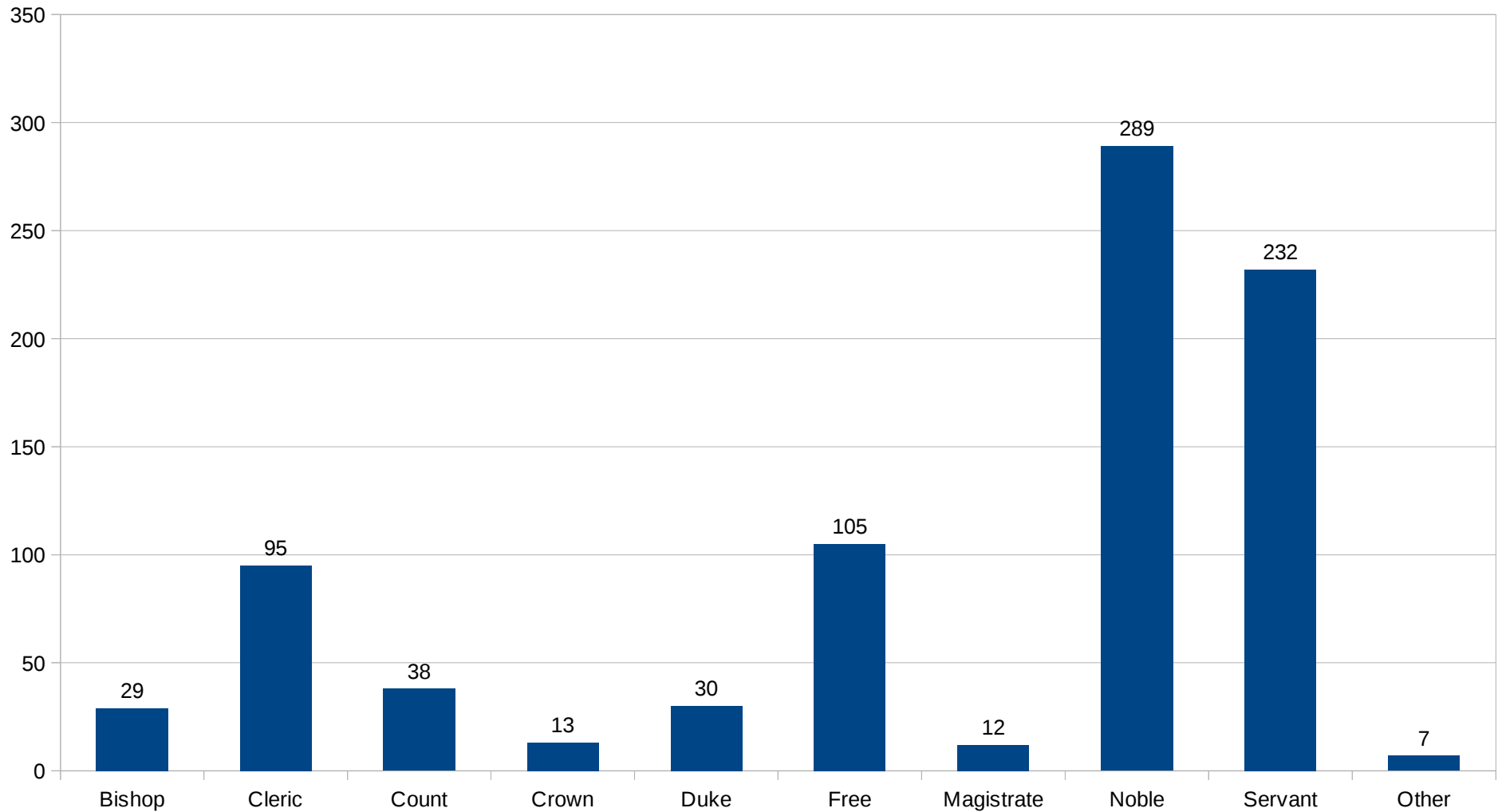
1165 Sites



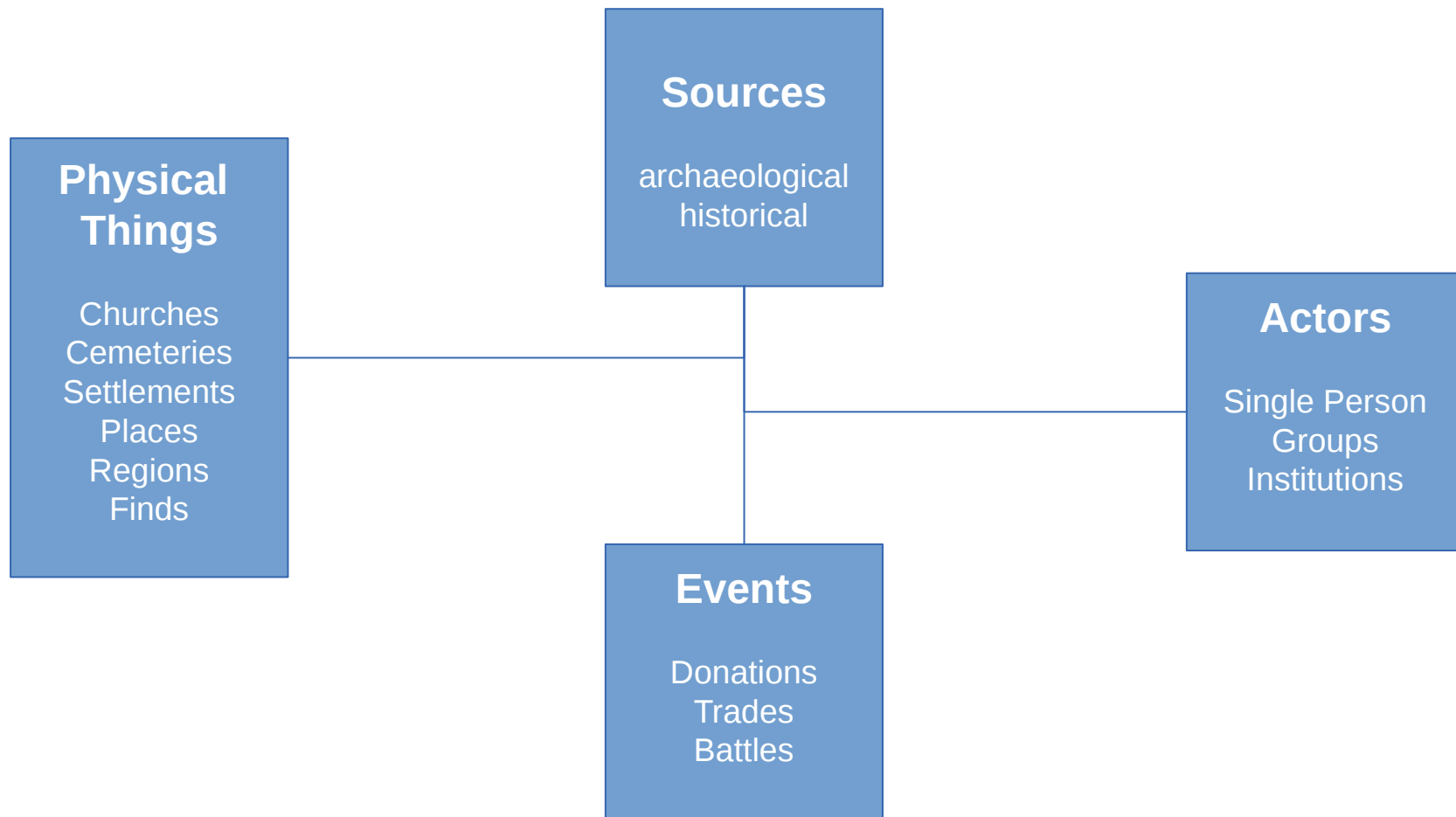
4033 Finds

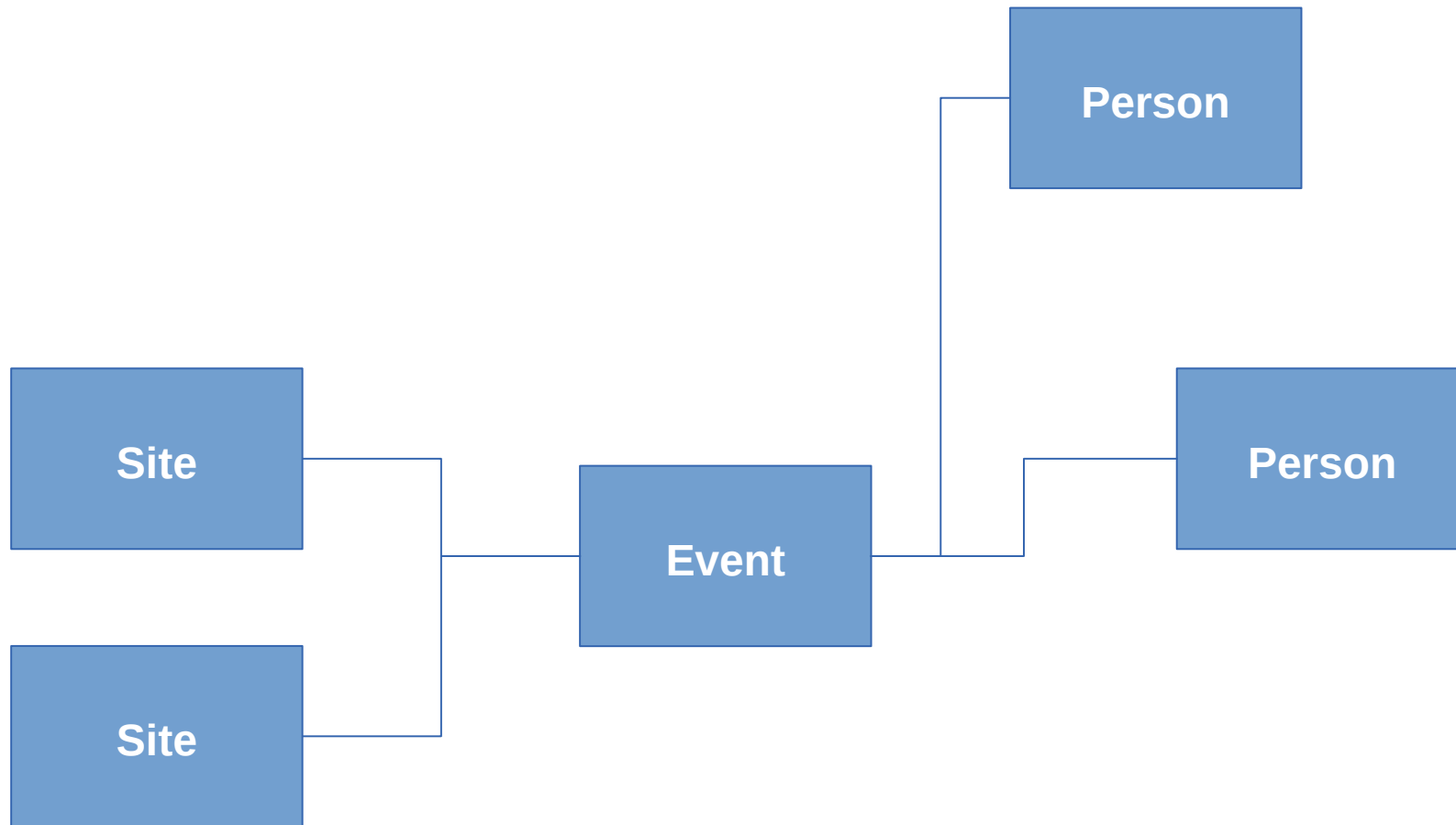


435 Events mentioned in Charters (550-1000 AD)



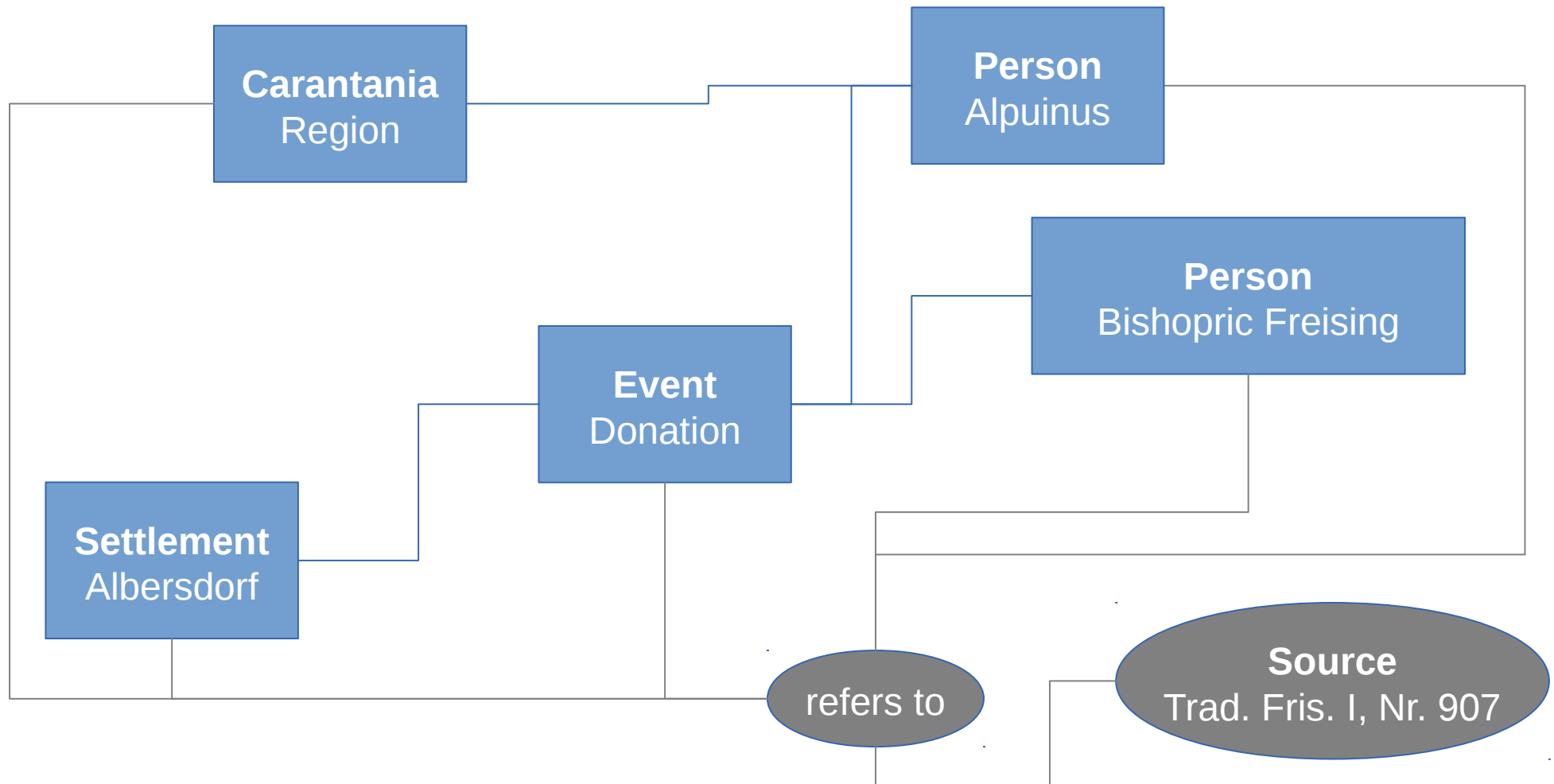
850 Actors mentioned in Charters (550-1000 AD)

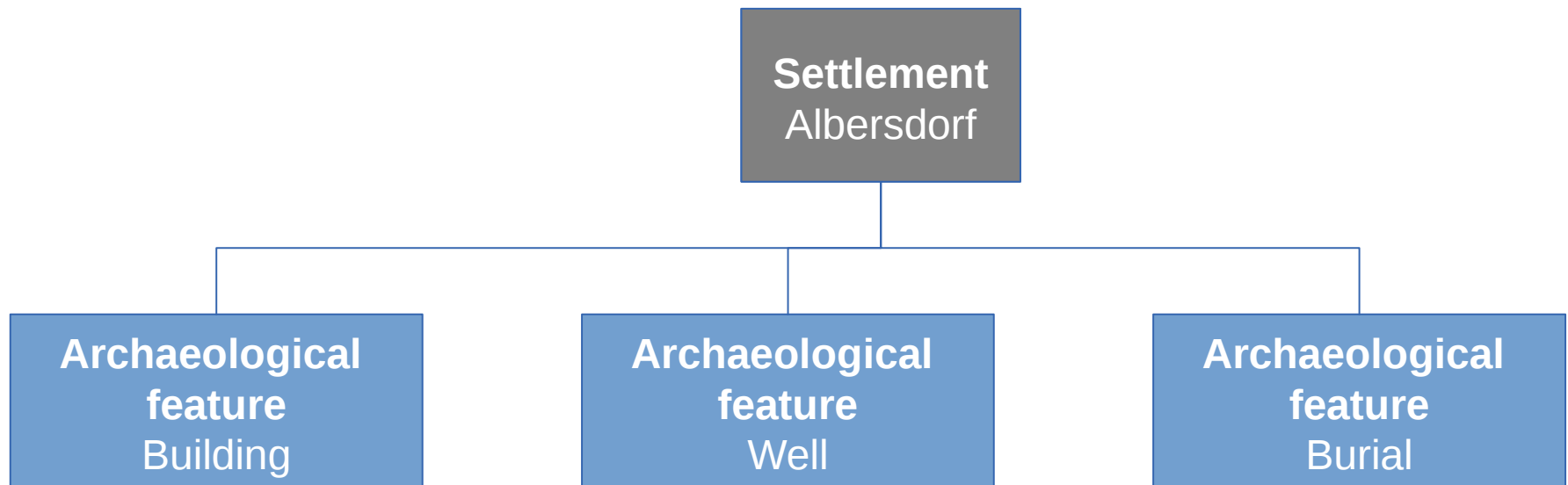


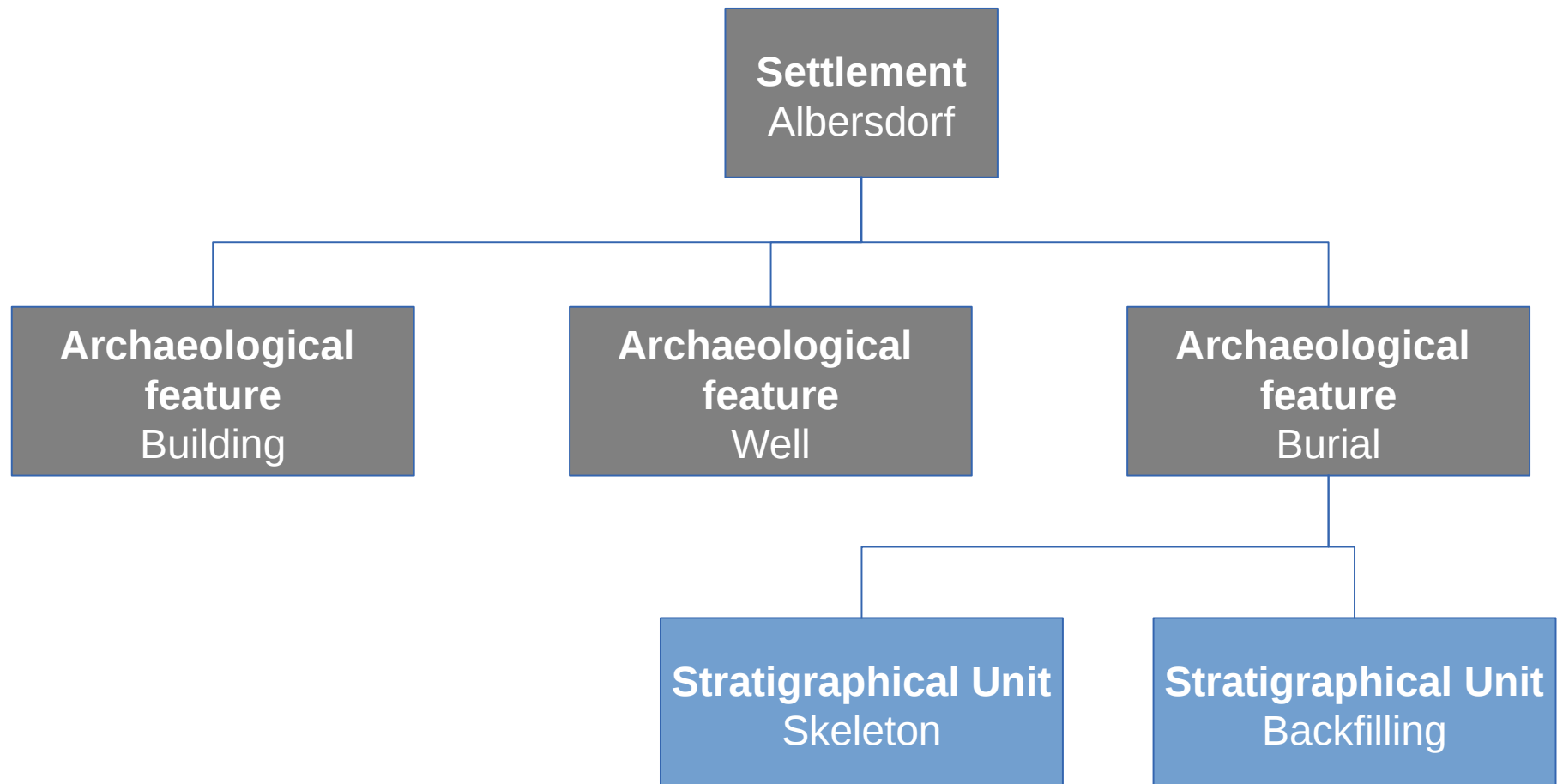


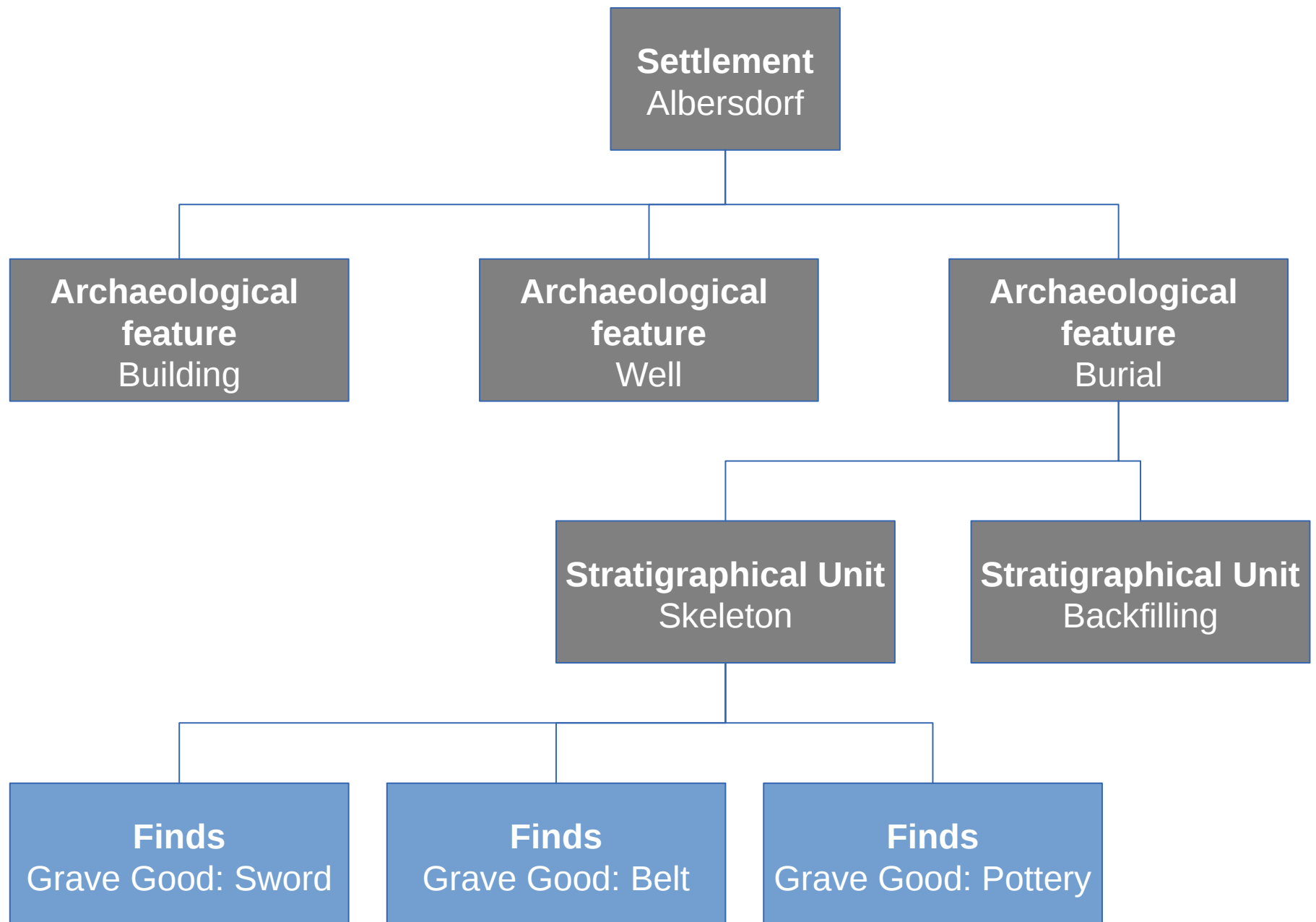
„Alpuinus de Carantania“ donates his „curtis“ to the Bishop of Freising (870-875)
Trad. Fris. I, 907 (Ed. Bitterauf)

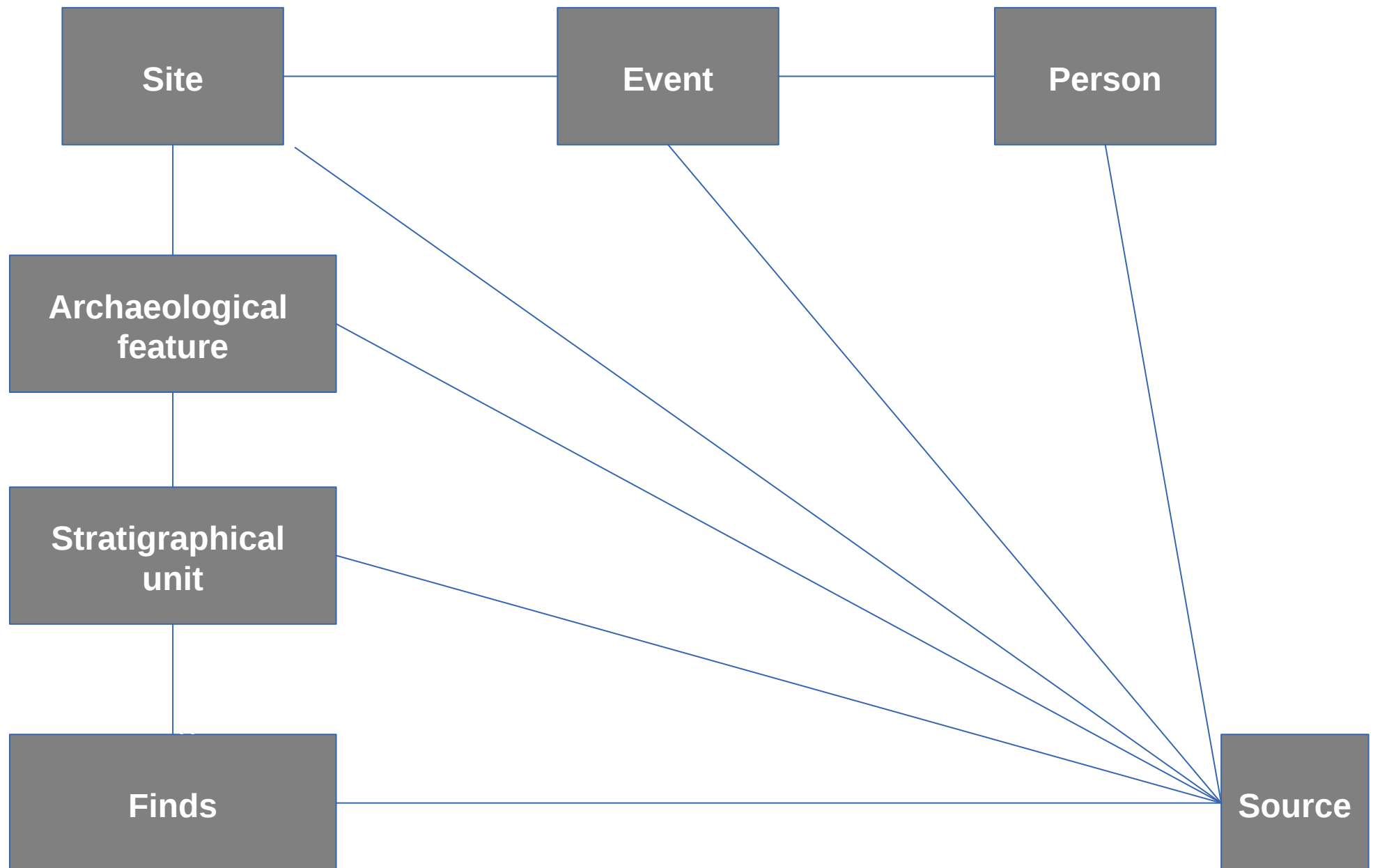
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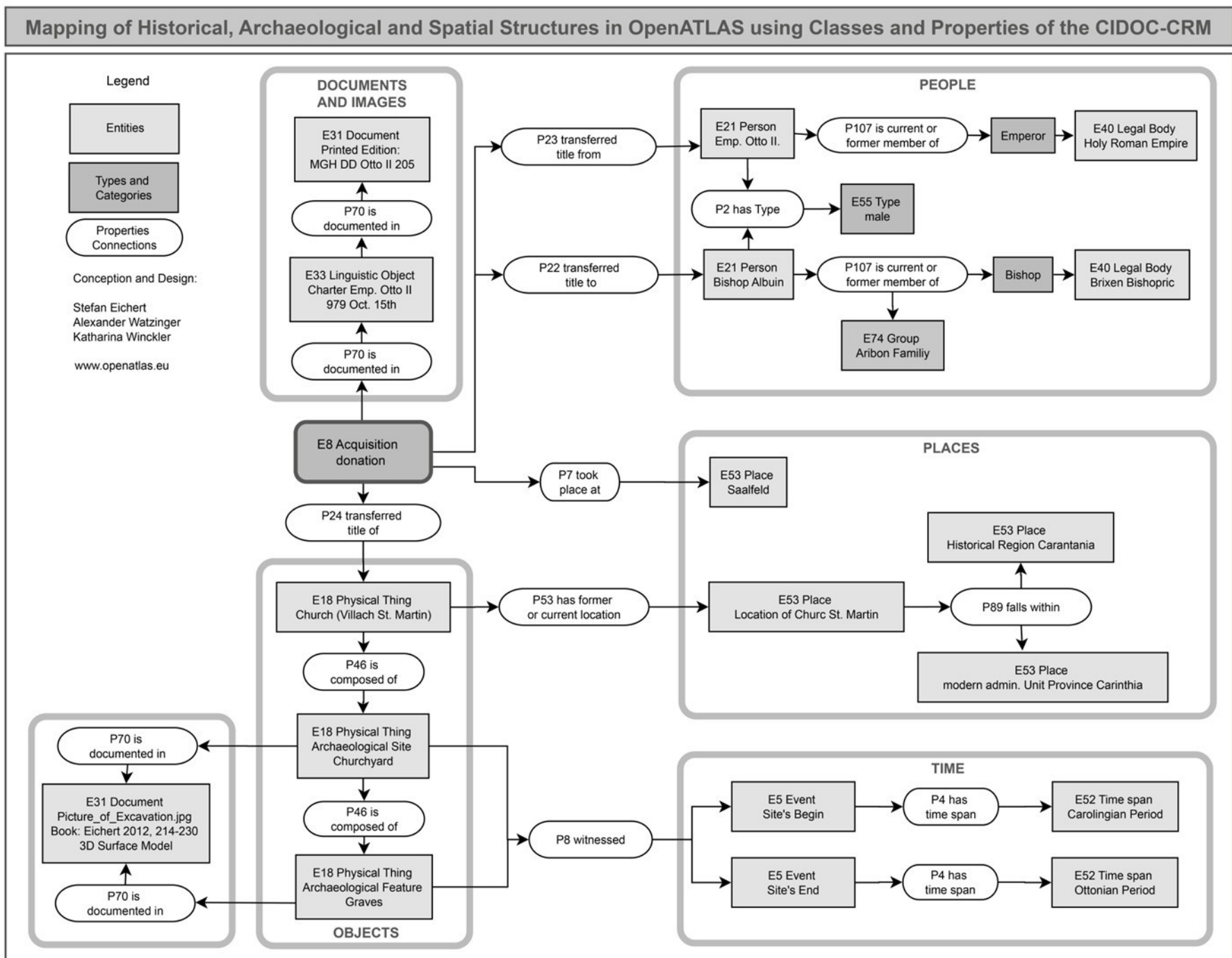


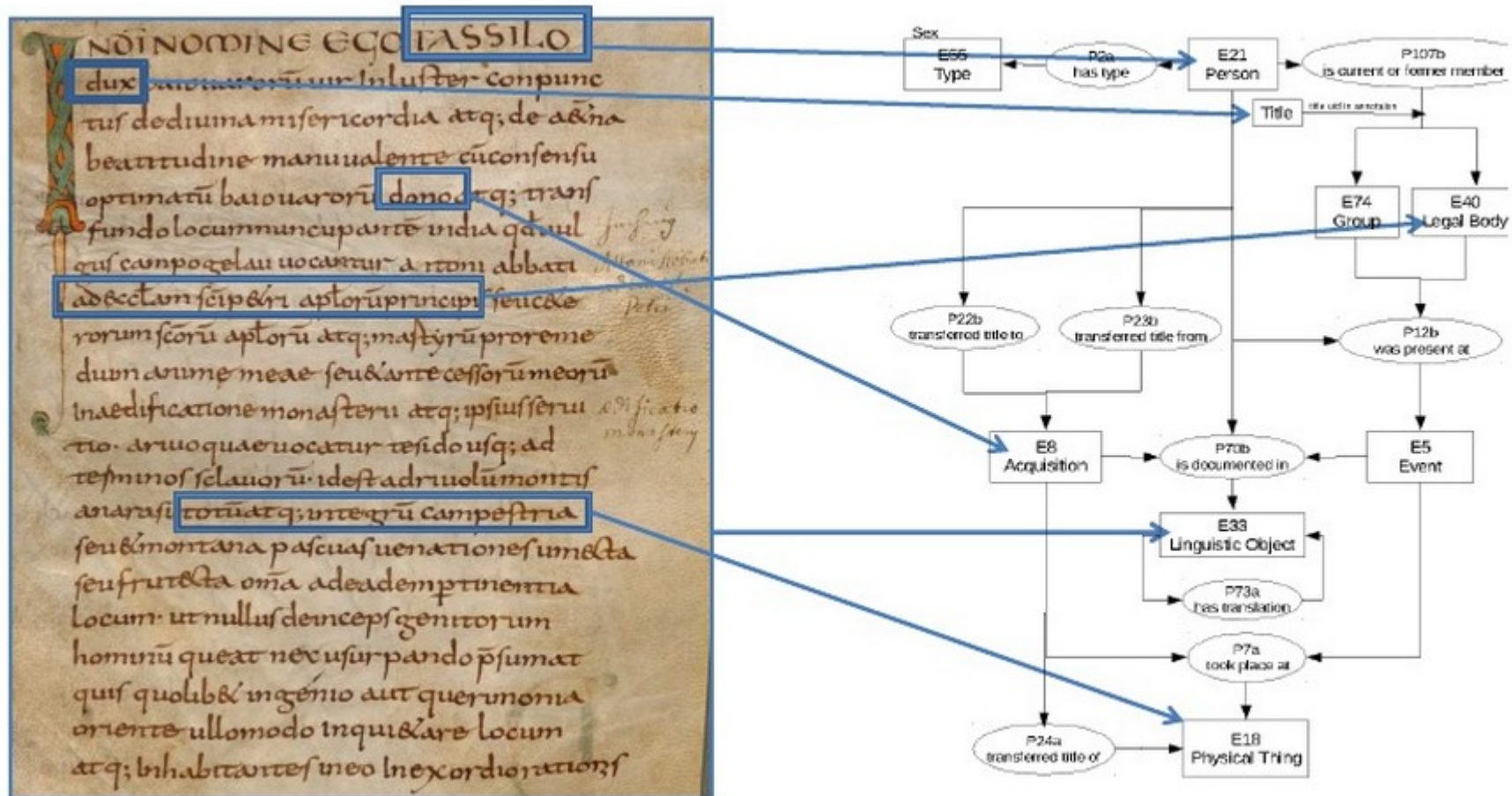


Standard definitions and formal structure for describing the implicit and explicit concepts and relationships used in cultural heritage documentation

<http://www.cidoc-crm.org/>

OpenAtlas uses classes and properties from the CIDOC Conceptual Reference Model (CRM)









Name * Winterfell

Site * i Settlement

Alias +

Date Show

Begin	600	12	24	comment
	610	mm	dd	
End	700	12	31	comment
	yyyy	mm	dd	

Easting -83.79409790039062

Northing 80.89480279363455

Situated within

Administrative i Change

Historical i Change

Description

+

-

100 km

100 mi

Leaflet | © Thunderforest Landscape

Insert

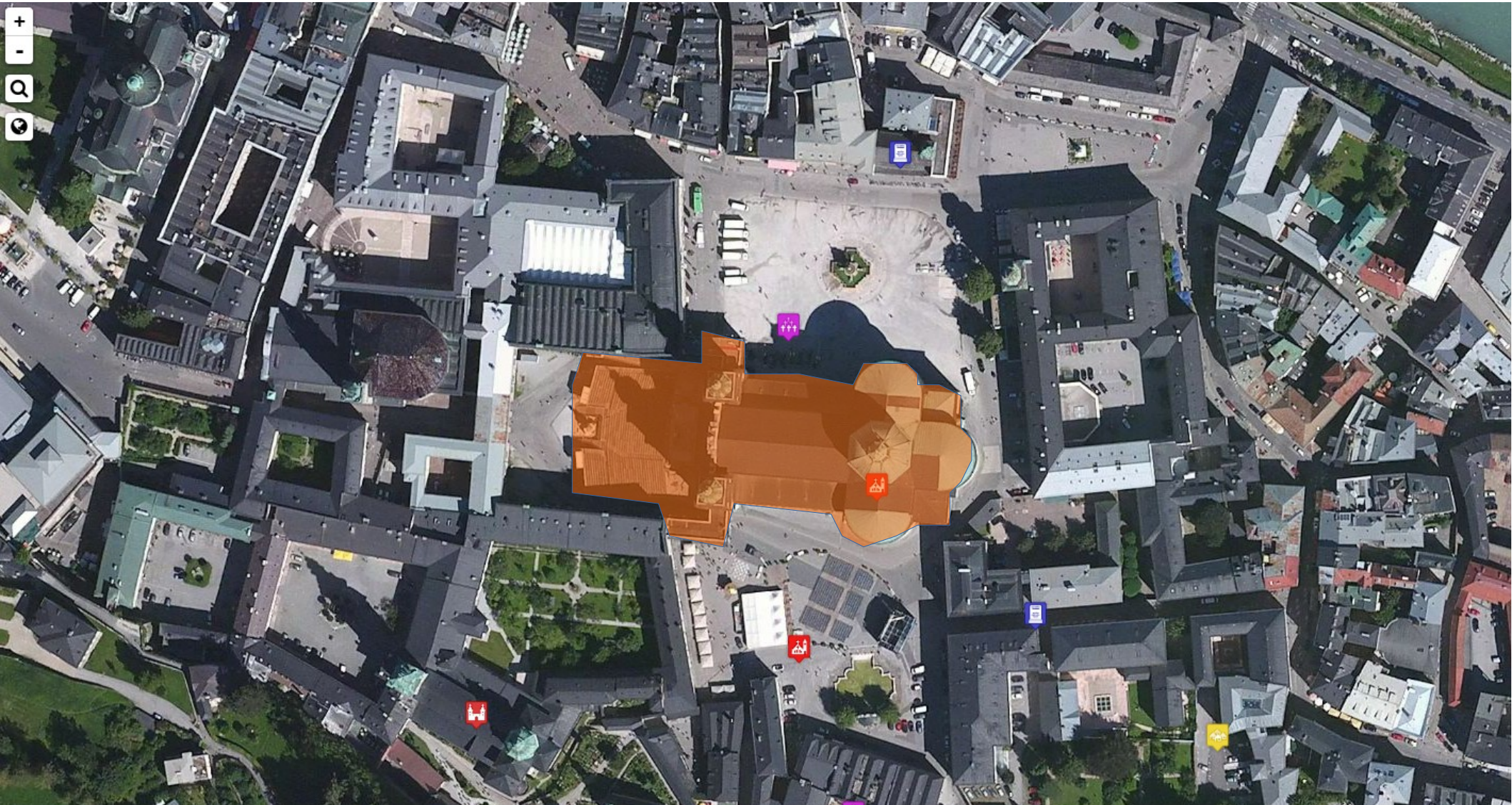
Insert and continue

Begin	600	12	24	comment
	610	mm	dd	
End	700	12	31	comment
	yyy	mm	dd	

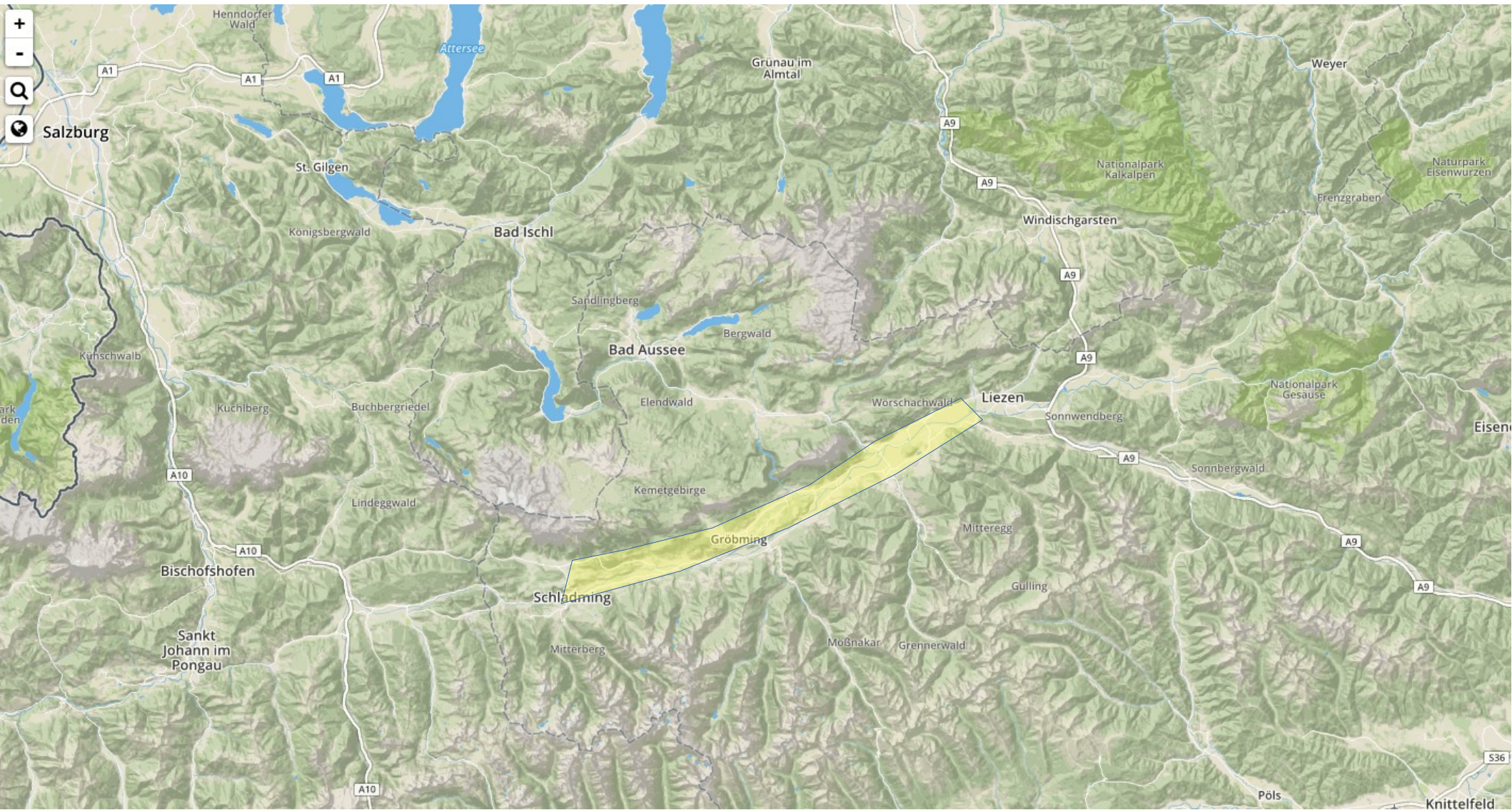
Known Spot



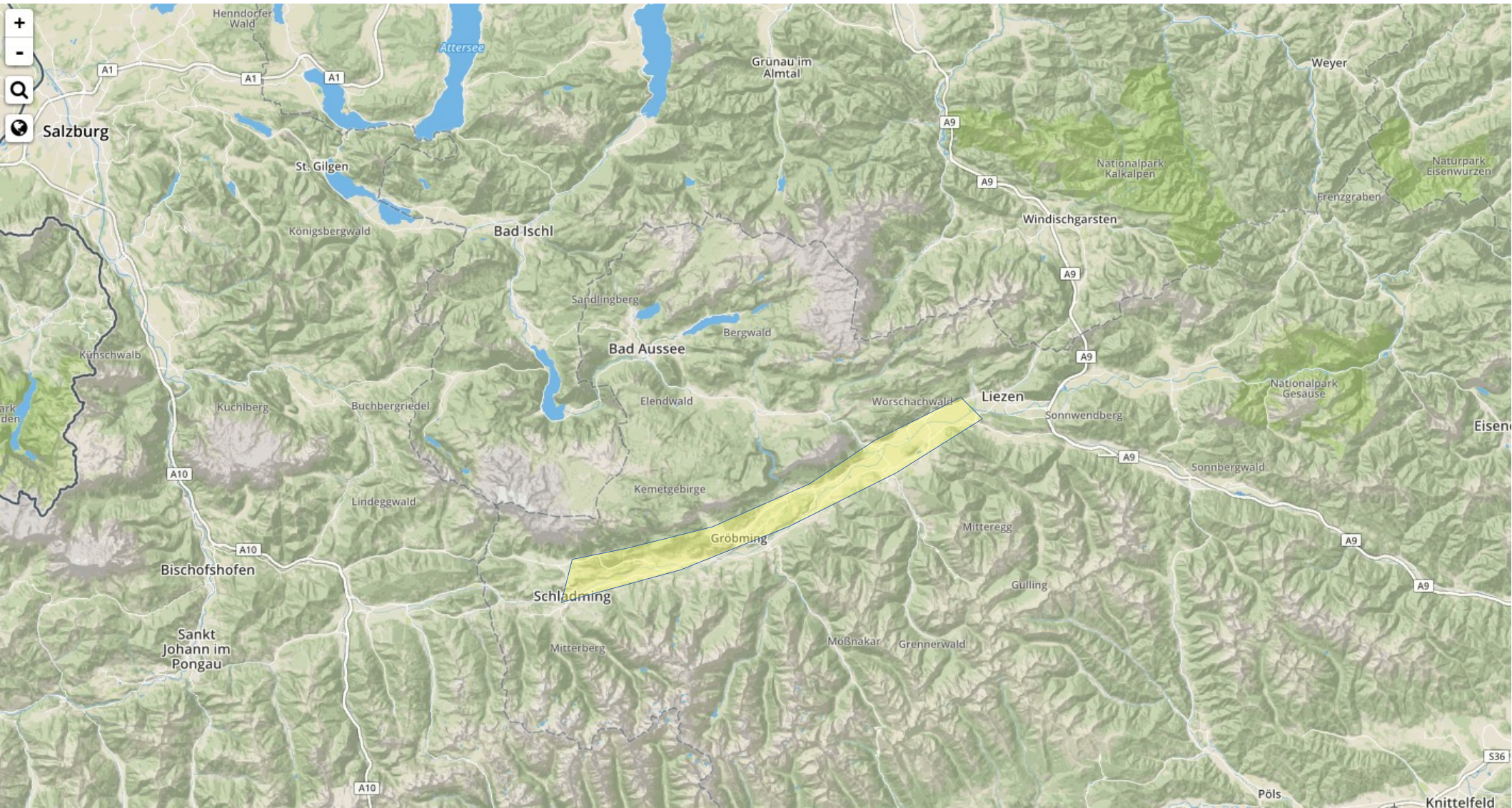
Known Shape



Known Area

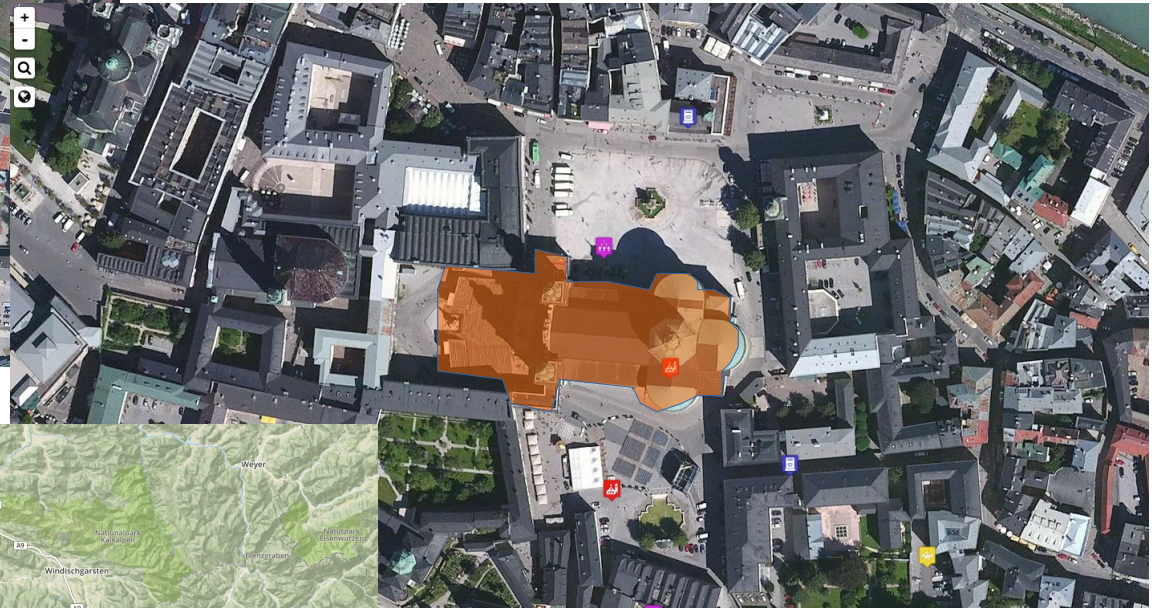


Known Area



+ Known Administrative Unit

+ Known Historical Region

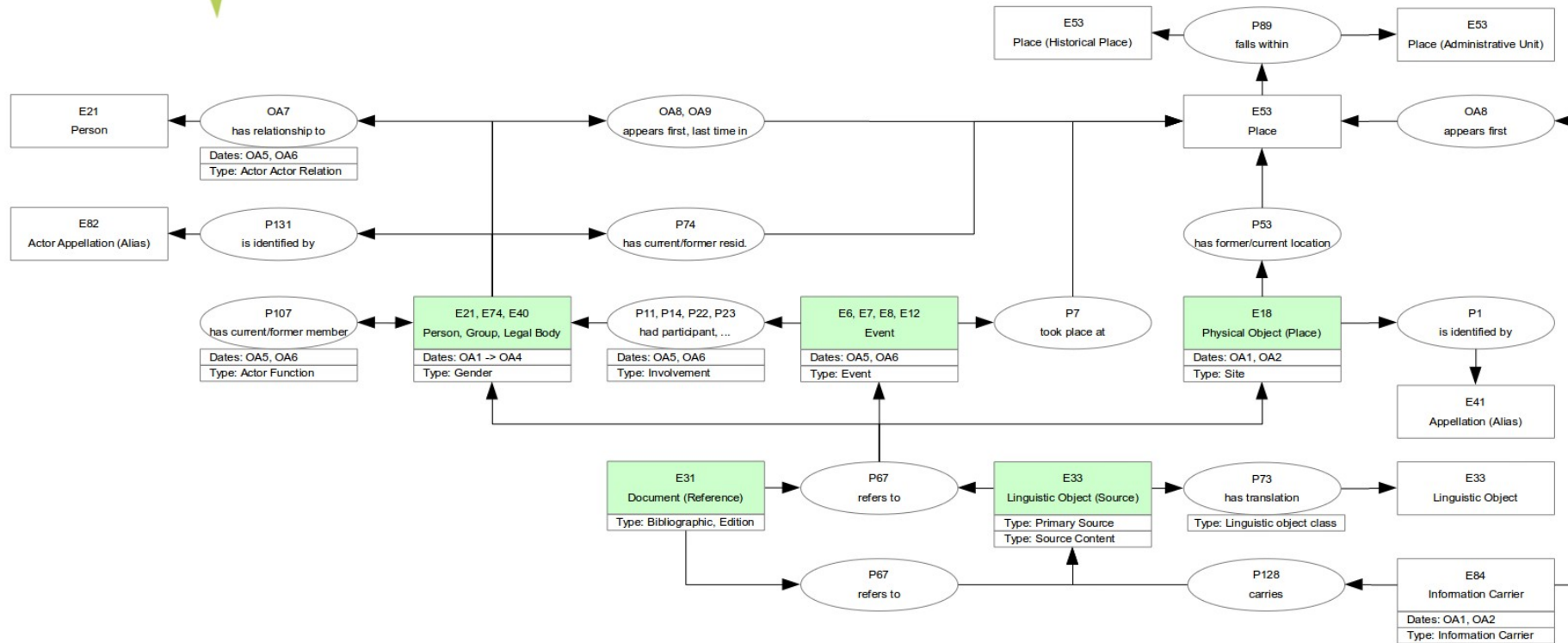


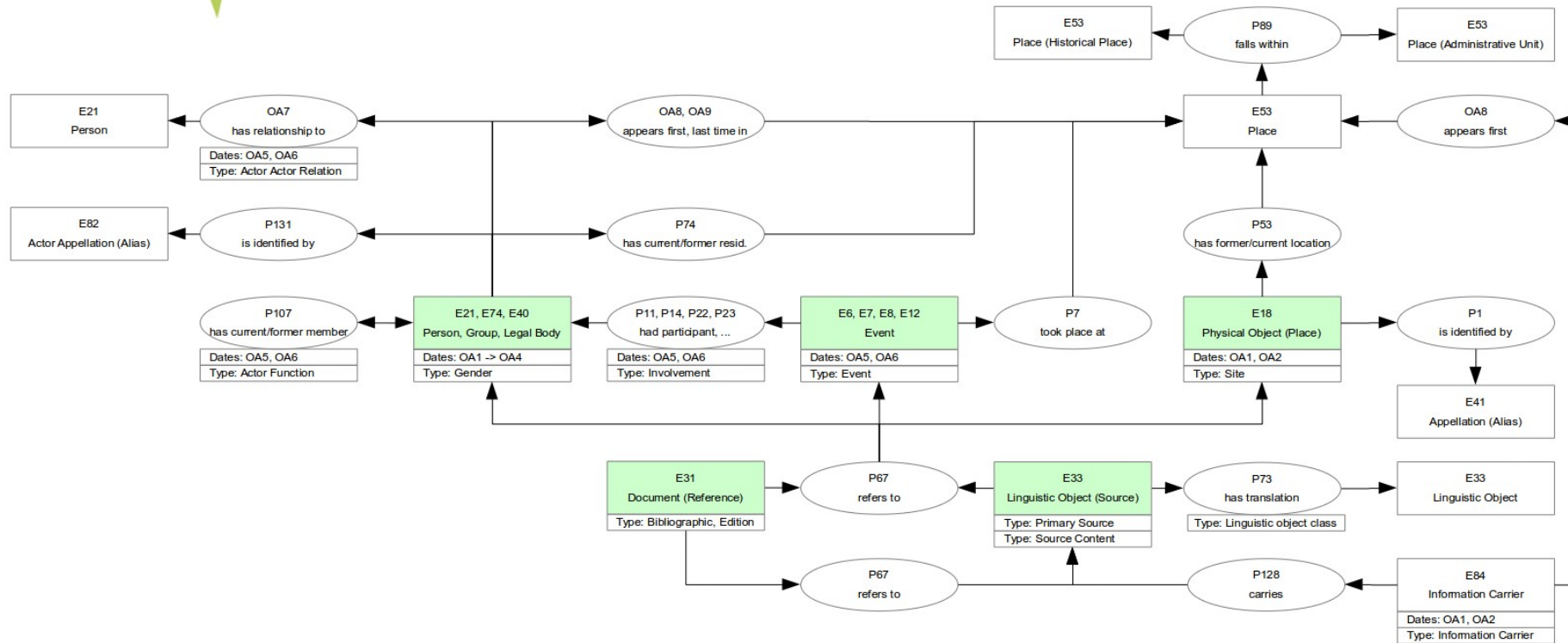
In any Combination



Challenges creating the OpenAtlas webinterface

- Creation of a database for the CIDOC-CRM
- Maintaining flexibility
- Dealing with data uncertainty
- Reconciling research specific requirements
- Simplifying the UI





Overview Source Event **Actor** Place Reference Hierarchy FAQ

Actor > King Arthur

Info

Events (1)

Relations (3)

Sources (2)

Member of (1)

References (1)

Places

Edit

Delete

Bookmark

King Arthur

Required open-source software



PHP 5.6
Programming language



Apache 2.4
Webserver



PostgreSQL 9.5
Database



PostGIS 2.1
Support for geographic objects



Zend Framework 1.12
Web application framework

Included JavaScript Libraries



jQuery 2.1.4
Cross-platform JavaScript library



Leaflet 0.7.7
Library for interactive maps



TinyMCE 4.3.2
Browser-based WYSIWYG editor



vis.js 4.9.0
A dynamic visualization library

Project Infrastructure



Project Website
<http://openatlas.eu>



GitHub
Hosting of the open-source software
<https://github.com/craws/OpenAtlas>



Redmine
Wiki and issue tracker
<http://redmine.craws.net/projects/uni/wiki>



Demo
<http://openatlas.craws.net/>