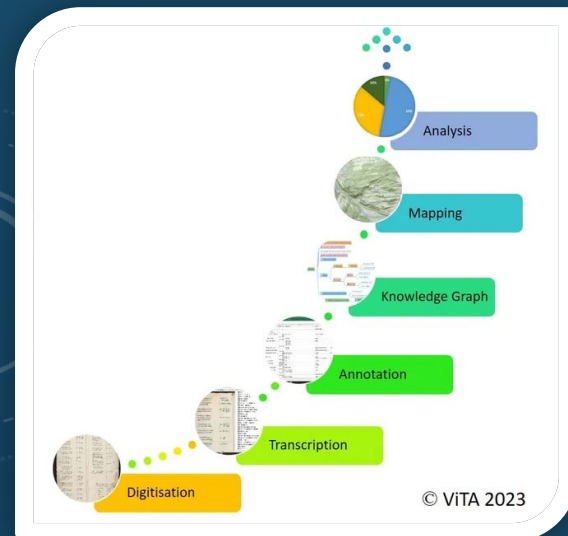




Insight into the ViTA-project – Mapping medieval property and agricultural levies in late medieval Tyrol – for application of CRMsoc/CRM++



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KEY FACTS

- Project ViTA: Manorial (economic) Networks in the Medieval Tyrol: Mapping and Visualisation
- Feb. 2023 – Feb. 2025
- Funding sponsor: Austrian Academy of Sciences
- Cooperation of the Department of Linguistics Department & the department of History at the University of Innsbruck, Austria

Project Team

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(Project Coordinator & Principal Investigator)

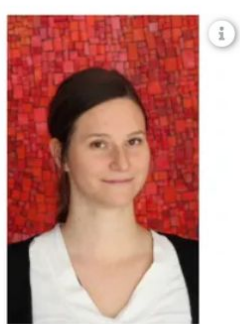


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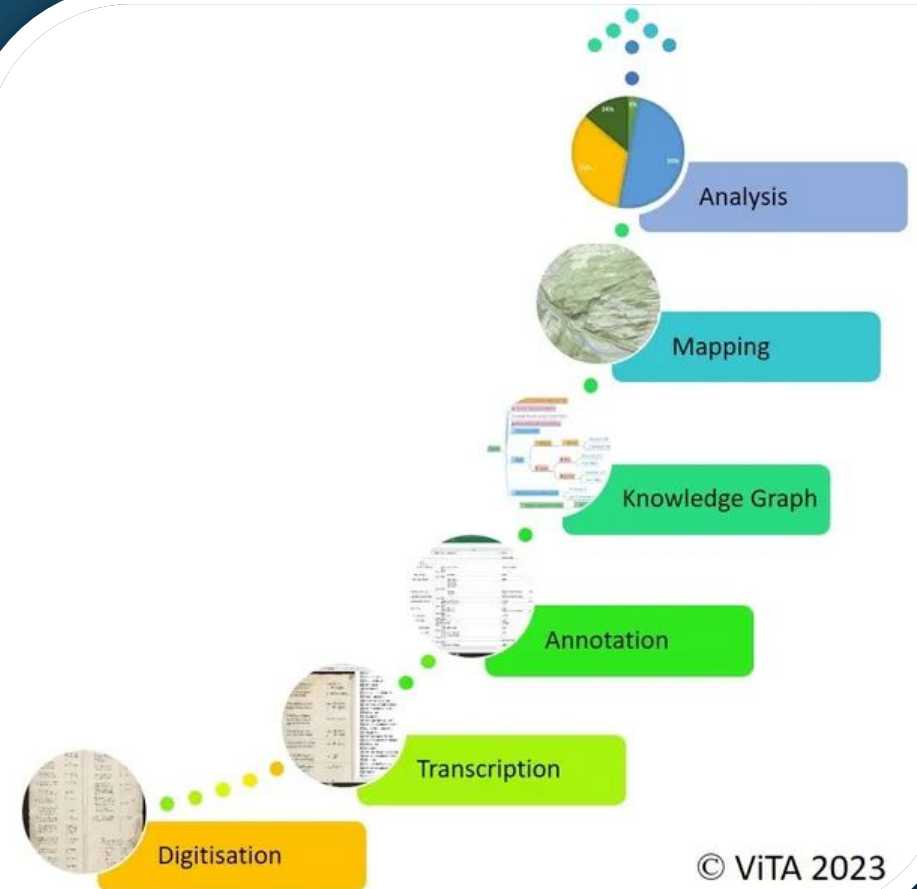
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WEBSITE

<https://www.uibk.ac.at/en/projects/vita/>

INVESTIGATION AREA



14.-15.th Century: County of Tyrol

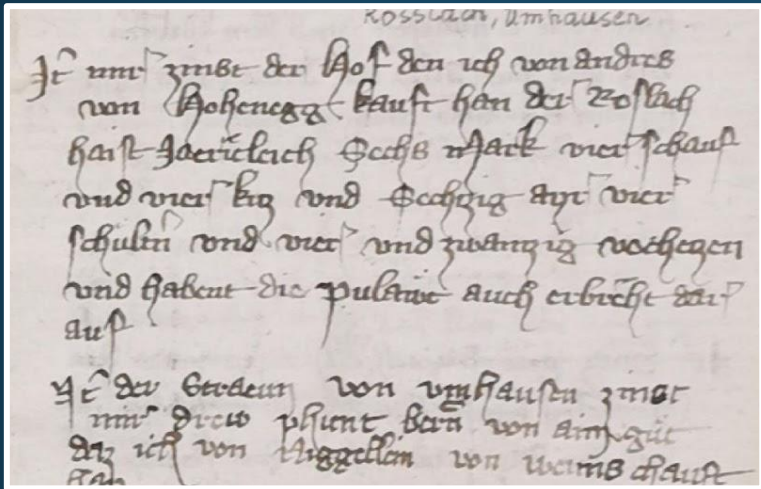


Today: Tyrol (Austria), South Tyrol (Italy)
EUREGIO (transnational co-operation between
Austria and Italy)

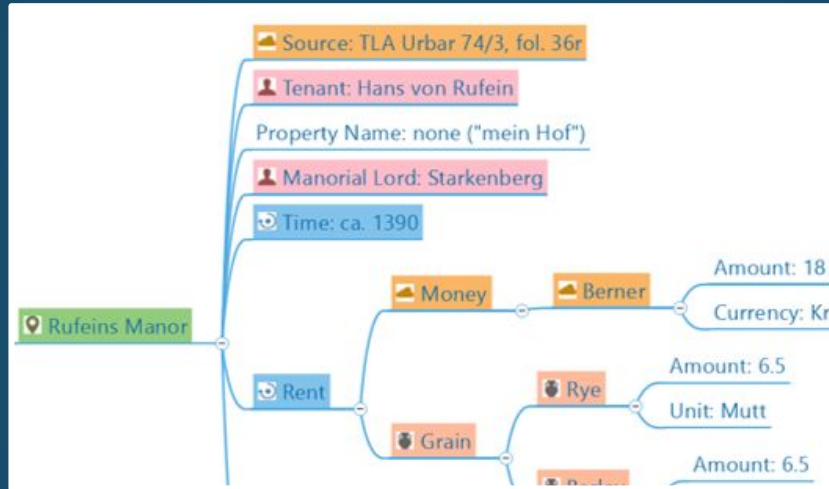
Beautiful Tyrol



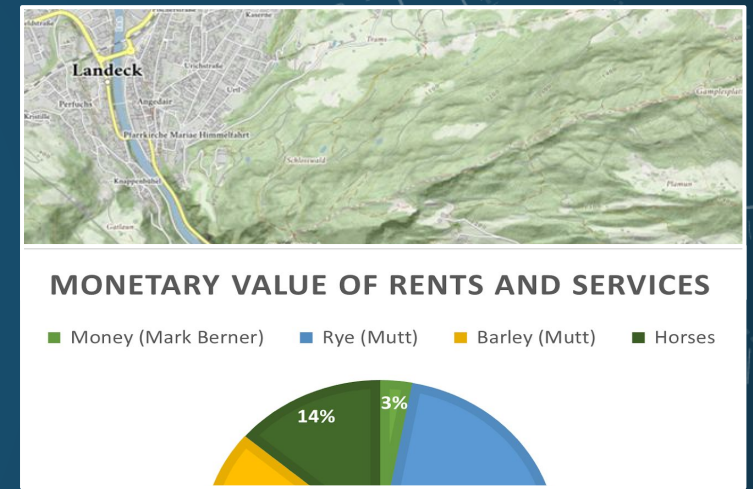
MAIN OBJECTIVES



Digitisation & transcription of medieval documents: two estate registers



Information extraction & semantic representation of the tyrolean manorial network



Visualisation

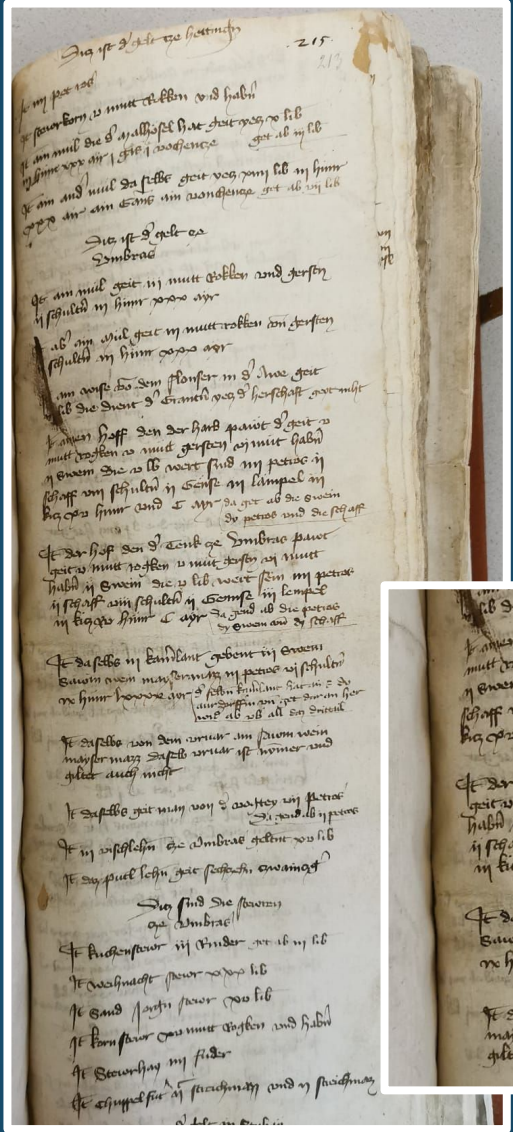
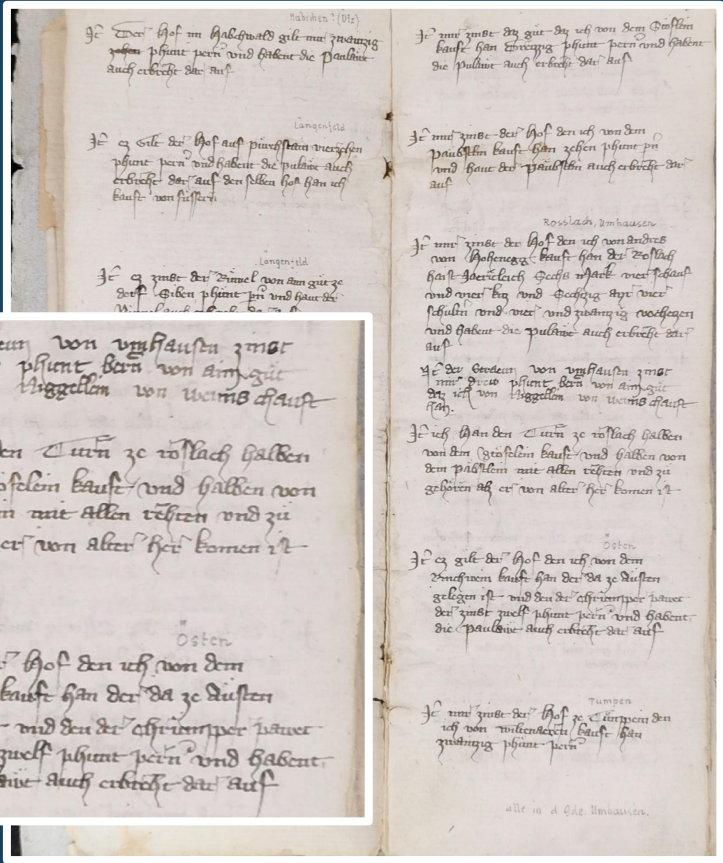
I. DIGITISATION

- Digitisation made by the Tyrolean Regional Archives
- Some minor manual adjustments and corrections
- Transfer to Transkribus for the following transcription
- Layout analysis and structural corrections

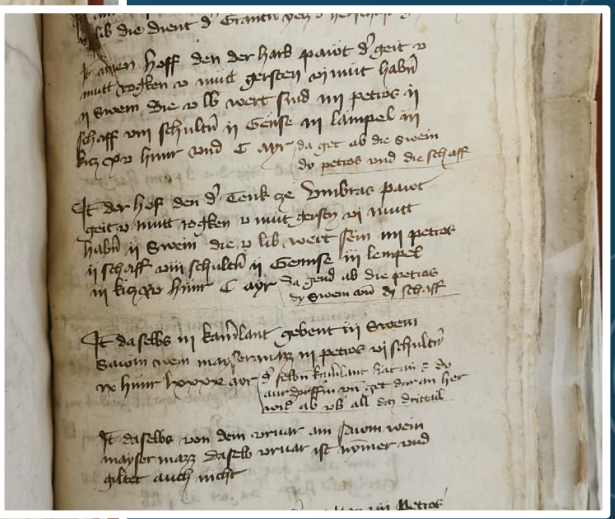
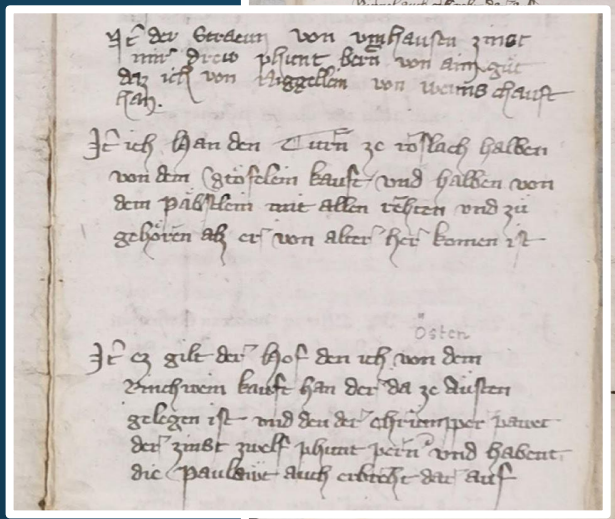


MAIN SOURCES

TLA, Urbar 74/3
approx. 1390 (49 fol.)



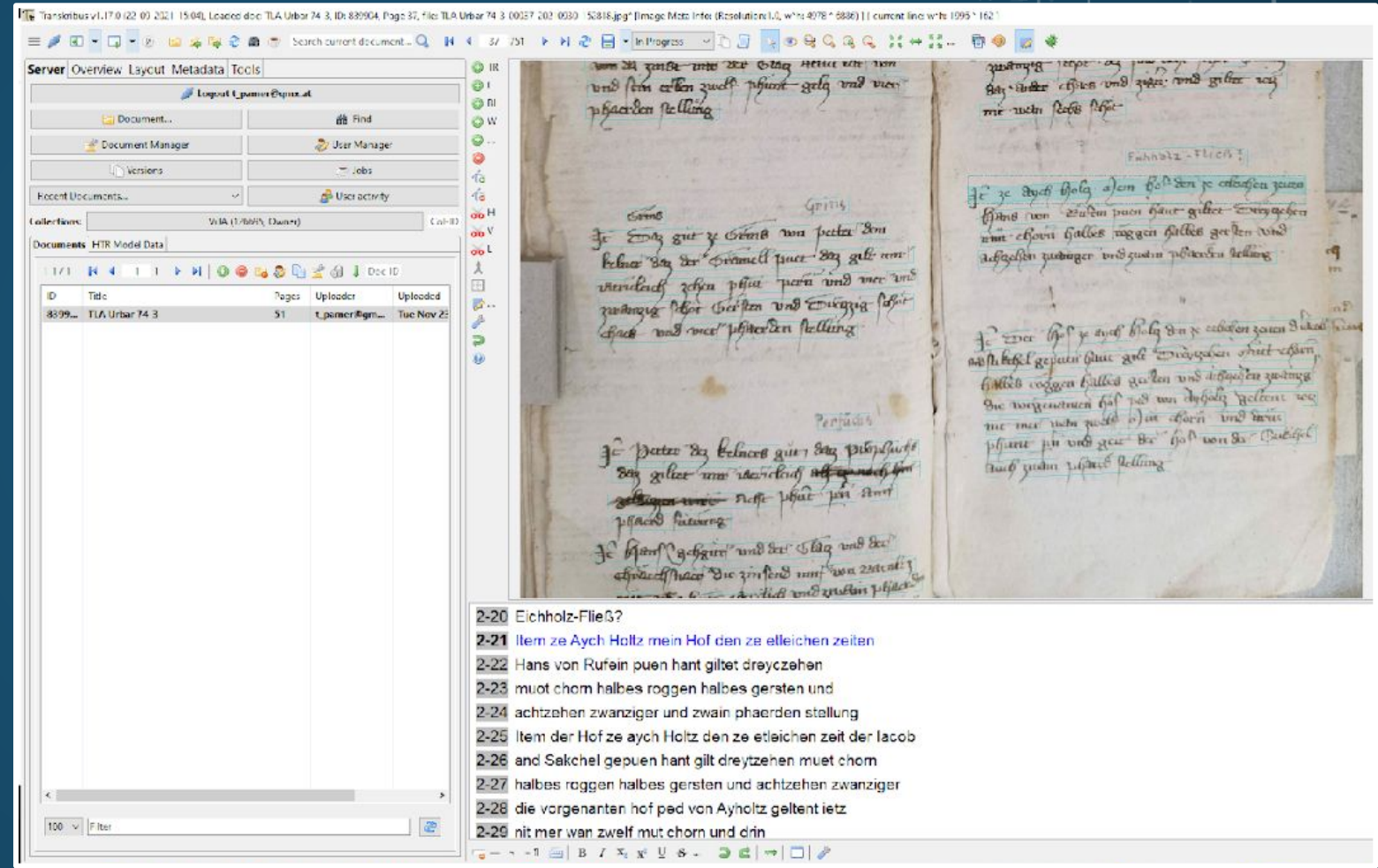
TLA, Urbar 1/2
approx. 1406 –1412 (343 fol.)



Estate registers represent records of the ownership of farms and estates, contain services and levies claimed by the landlords and give an insight into manorial structures and agricultural resources.

II. TRANSCRIPTION

- Manual transcription of the documents using Transkribus
- Besides: generating ground truth for a HTR-Model

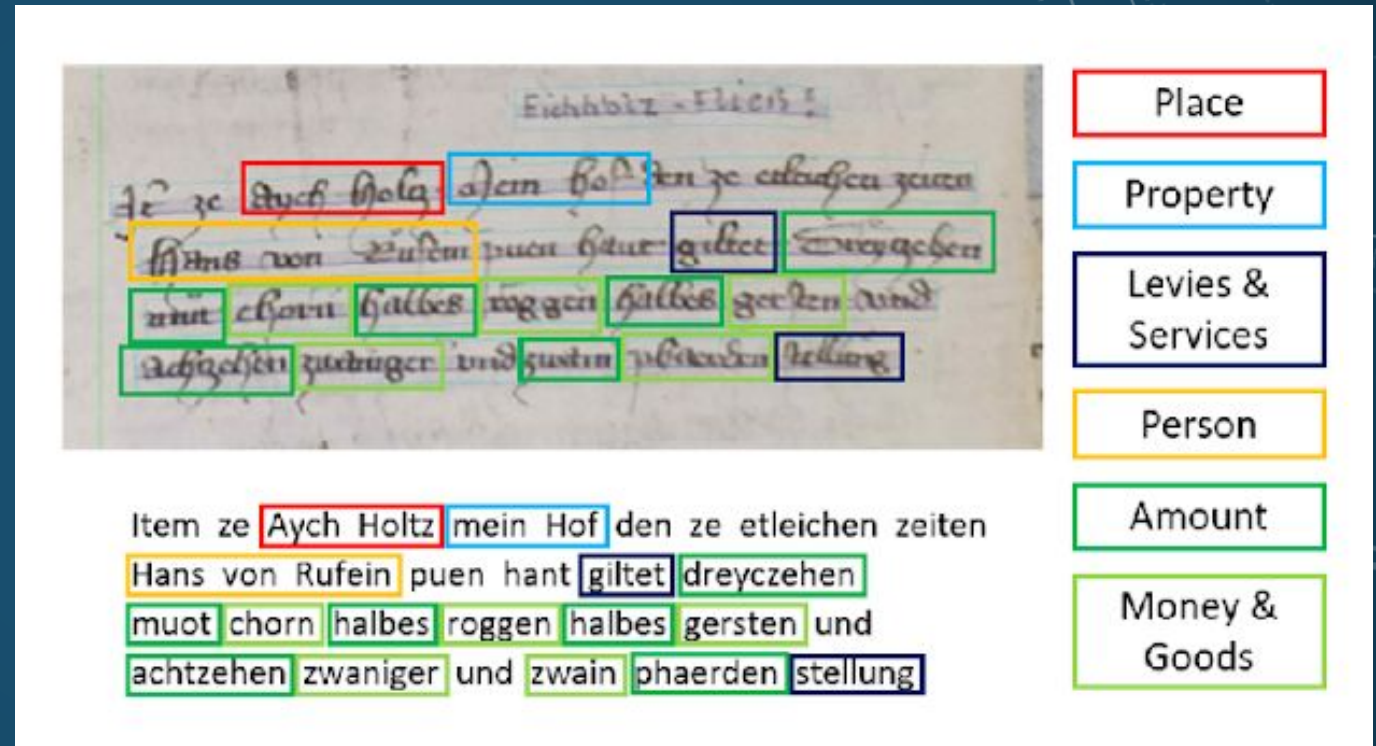



The screenshot shows the Transkribus web interface. On the left is a navigation sidebar with options like 'Document Manager', 'User Manager', and 'Jobs'. The main area displays two pages of a handwritten document. The right sidebar contains a list of transcription items:

- 2-20 Eichholz-Flie3?
- 2-21 Item ze Aych Holz mein Hof den ze etleichen zeiten
- 2-22 Hans von Rufein puen hant giltet dreyczehen
- 2-23 muot chorn halbes roggem halbes gersten und
- 2-24 achtzehen zwanziger und zwain phaerden stellung
- 2-25 Item der Hof ze aych Holtz den ze etleichen zeit der Iacob
- 2-26 and Sakchel gepuen hant gilt dreytzehen muet chorn
- 2-27 halbes roggem halbes gersten und achtzehen zwanziger
- 2-28 die vorgeantent hof pad von Aycholtz geltent ietz
- 2-29 nit mer wan zwelf mut chorn und drin

III. SEMANTIC ANNOTATION & INFORMATION EXTRACTION

- Annotation of specific entities within the historical text to extract the annotated entities
- Chosen entities for the estate registers are place, person, date (if existing), amount, service and levy
- Extracted data will be structured and imported into a database



Eichholz - Fliche

Item ze Aych Holtz mein Hof den ze etleichen zeiten
Hans von Rufein puen hant gildet dreyczehen
muot chorn halbes roggem halbes gersten und
achtzehen zwaniger und zwain phaerden stellung

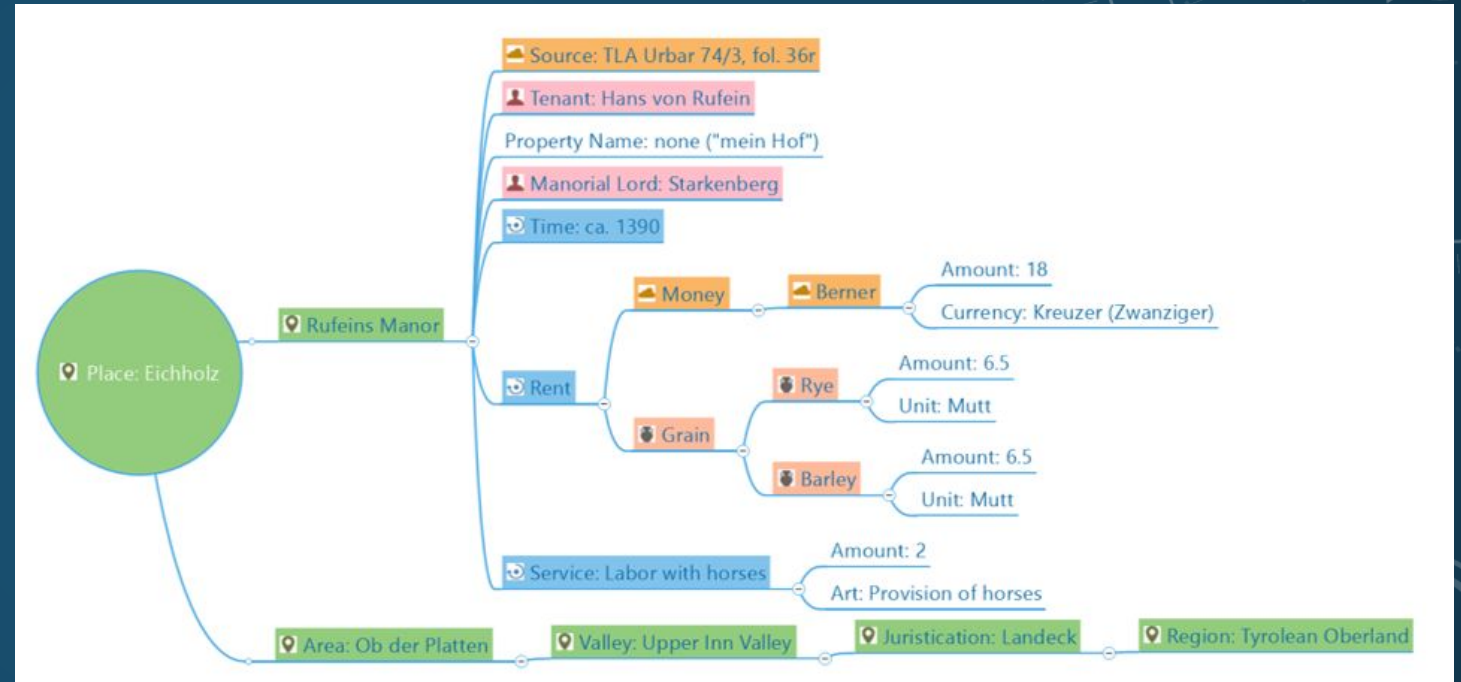
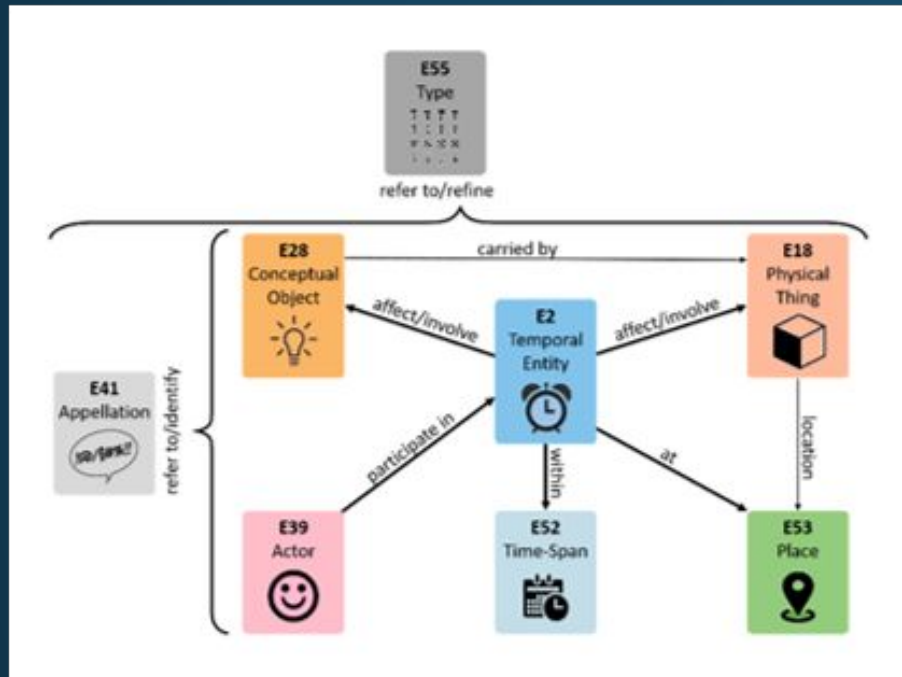
Place
Property
Levies & Services
Person
Amount
Money & Goods

Current tagset: *place, possession, person, transaction, social_status, granted_rights*, levies, levies_type, amount, measuring, goods, currency, animals, services, date, etc.*

Obersant	vita_poss_000002	Hof	pulāwt	vita_pers_000015		erbreht	gilt		zway drizzig phunt perner	zway drizzig		phunt perner
Nider Sant	vita_poss_000003	Hof	pulāwt	vita_pers_000016		erbreht	zinst		fünifzig phunt	fünifzig		phunt
Nider Sant	vita_poss_000003	Hof					zinst		ain phünt für geding	ain		phünt
Nider Sant	vita_poss_000003	Hof					zinst		ain und zwainzg cräuczer für smalcz	ain und zwainzg		cräuczer
Nider Sant	vita_poss_000003	Hof					zinst		ain schaaf	ain		schAAF
Perchhof	vita_poss_000005	Hof	Perchtold von Hohenegg	vita_pers_000017	kauf							
Perchhof	vita_poss_000005	Hof	pulāwt	vita_pers_000101		erbreht	gilt		drizzig phunt	drizzig		phunt
			Perchtold von Hohenegg	vita_pers_000101			aus rihten		zehen phunt	zehen		phunt
hof im Neslach	vita_poss_000006	Hof	Maerclin	vita_pers_000018	kauft					ains und zwainzg		phünt perner
hof im Neslach	vita_poss_000006	Hof	pulāwt	vita_pers_000152		erbreht	gilt		ains und zwainzg phünt perner	ains und zwainzg		phünt perner
Mitterhof	vita_poss_000007	Hof	pulāwt	vita_pers_000019		erbreht	gilt		vierczig phunt perner	vierczig		phunt perner
Mitterhof	vita_poss_000007	Hof	Rüdigeren von Zwiselstain	vita_pers_000361	kauft							
hof im Habchwald	vita_poss_000008	Hof	paulāwt	vita_pers_000020		erbreht	gilt		zwainzig zehen phunt perner	zwainzig zehen		phunt perner
hof auf Pürchstain	vita_poss_000009	Hof	pulāwt	vita_pers_000021		erbreht	gilt		vierzehen phunt perner	vierzehen		phunt perner
hof auf Pürchstain	vita_poss_000009	Hof	Füssern	vita_pers_000060	kauft							
güt ze dorf	vita_poss_000010	Hof	Rümel	vita_pers_000225		erbreht	zinst		siben phünt perner	siben		phünt perner
hof ze Winkel	vita_poss_000011	Hof	pulāwt	vita_pers_000022		erbreht	zinst		sechs mark	sechs		mark
hof ze Winkel	vita_poss_000011	Hof					zinst		zwen kastran	zwen		kastran

Screenshot of the current table used for manual annotation (TLA Urb. 74/3).

IV. SEMANTIC REPRESENTATION



CIDOC CRM and necessary concepts of CIDOC CRM extensions (<https://cidoc-crm.org/crmsoc/>) are used to model the information extracted from the sources

As tabular data or directly embedded through a SPARQL-Endpoint, this data will be integrated into a GIS and for public visualisation into a WebGIS

TAGS AND ATTRIBUTES MAPPING: CHALLENGES AND POSSIBILITIES

E21_Person

- **Name** (E41_appellation): first name, last name (unstable, unclear boundaries)
- **Gender** (E55_type(?)): m, f
- **Origin** (E53_place): impossible to pin down whether the information refers to residence, family origin or something else. It forms part of a person's name for specification. E.g. *Hans der smit ab der Mills* (Hanns the smith from Mils), *Haincz von Faflaer* (Heinz von Pfafflar)
- **Occupation**: profession or function. *Smid ab der Milles* (smith from Mils), *Phrarrer von Maerlingen* (Priest from Merling), *Peter der kelner* (Peter the cellarer). The profession is rather bound to the person while the function of a person may depend on the context within a person is mentioned.
- **Social status**: in Urb. 74/3 only "serf" is explicit mentioned, but nobleman, clergy, burgess, and similar are also possible.
- **Family relations**: sometimes a person is not mentioned by its own proper name (indirectly), but in his/her relation to someone else. E.g. *Hainczen aiden pei dem pach* (male relative by marriage from Heinz who lives near the stream). Further, family relations are expressed using generational difference: *Hans der alt Auster von Umbst* (Hans the Old Auster from Imst), *Hanslin der jung Auster* (Hans the young/younger Auster)

Possessions (E72_legal object, E70_thing (?))

The estate register TLA Urb. 74/3 mentions landed property and other types of possessions in the regions, districts and settlements ruled by the lords of Starkenberg.

In addition, the text provides information regarding the claimed levies and specific rights granted by the landlord (e.g. law of succession)

These could be defined as... or E55_type:

- Land and agricultural parcels: field, apline pasture, garden, plot of land, meadow, farm and vineyard – E27_site, E26_physical feature ?
- Buildings: Farm, House, Mill, Tower – E26_physical feature ?
- Services: transport, journey – E9_move, E7_activity, E89_propositional object ?
- Money: tithe, or other types of (debth) payment – E30_Right, E89_propositional object ?
- Person(s): serf – E21_person ?
- Rights: free passage, grazing rights (to let his life stock feed in a specific field), and so on– E30_right ?

Transactions (E7_Activity, E5_Event (?))

Events related to the possessions that happened previous to the E65_creation of the E31_document estate register.

- Purchase: the landlord has bought a possession – E96_purchase
- Transfer of custody/ownership: the person in charge of a possession dies or was unable to fulfil the obligation so the possession returns to the land lord. Exchange of possessions, granting a possession to someone – E10_transfer of custody?

Granted rights (E3o_right (?))

These are separated in two categories:

- `possession_granted_rights`: strictly bound to the landed property, and refer to the kind of use permissions the beneficiary/vassal has. E.g. Hereditary fief, loan, lease, or similar.
- `granted_rights`: other benefits that the landlord grants. Such as permission to pay less or some kind of tax reduction, grain, money given to a monastery or church, etc.

Levies_type (E28_conceptual object (?))

This class comprises the different payments/taxes types. Eventhough they are usually related to the type of possession, there are also „personal taxes“ not related to any possession at all.

E55_type (?)

- Levies to the lord of the manor
- Loan
- Alms
- Tithe
- Laudemium

Levies (E70_thing, E28_conceptual object, E72_legal object, E7_activity (?))

All the payments listed in the estate register. Apart from annotating the amount, they are classified in E55_type

- Money
- Service: working days, transport, horse stabling
- Livestock
- Goods: grain, meat, food, wine

WEBSITE

<https://www.uibk.ac.at/en/projects/vita/>

THANK YOU FOR
YOUR ATTENTION

