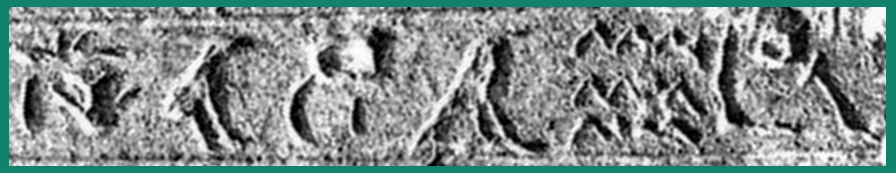
Codifying (un)certainties in an ontology for a prosopography of the Egyptian Middle Kingdom

Stela Ashmolean AN1971.5
wab-priest Auibhor

same person ? or two namesakes



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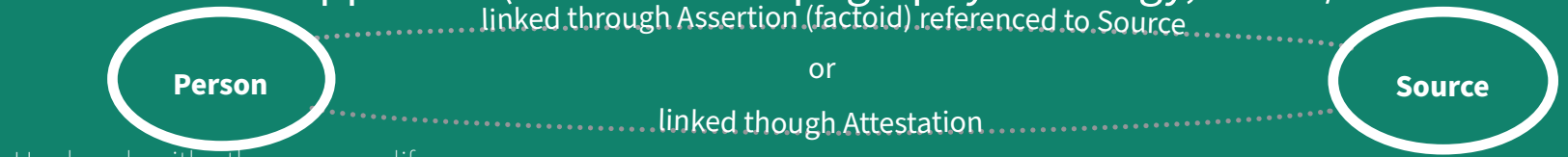
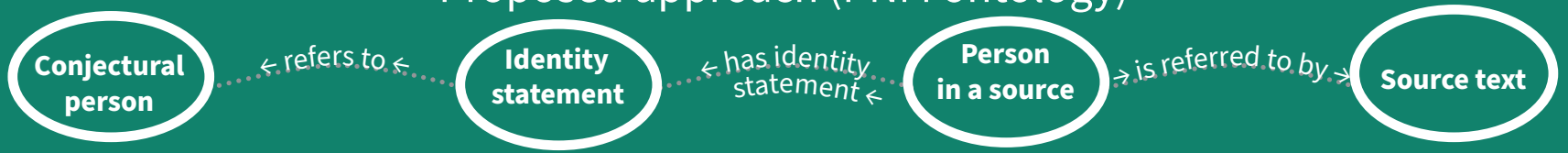
The dilemma is unsolvable, but this ambiguity is lost in formal ontologies

Common approach (Factoid Prosopography Ontology, LAWD/SNAP:DRGN)



Has bonds with other persons, life facts (mediated by sources in FPO)

Proposed approach (PNM ontology)



Has bonds with other **conjectural** persons, **conjectural** life facts

has a **status** (accepted/rejected/weak) and **reasoning** (e.g., same father, same title)

Has bonds with other persons in the **same source**, life facts as known from **the source**

Is carried by an **object**, with physical data, museum inv., archaeological context

factors of uncertainty

> few biographical and genealogical details in inscriptions and papyri
> common names (20 most popular names account for 19% of all known people in Middle Kingdom Egypt)

why codify uncertainty

> of all identifications proposed in past research, only reliable ones are suited for analyses
> data with different level of reliability suit different research objectives

links & examples

> https://pnm.uni-mainz.de/ontology
> SPARQL endpoint and web console https://pnm.uni-mainz.de/sparql
> sample person graph (Auibhor) https://git.io/JkbPy

project

Persons and Names of the Middle Kingdom (PNM)

> hieroglyphic lexicon of personal names, index of titles, prosopography
> timeframe: 2055–1550 BC
> ~9000 sources
> ~35000 name attestations
> ~5000 names, ~15000 spellings
> ~2500 dossiers with >1 source
> a one-man project; research and coding in the same hands
> planned completion Aug 2021

technologies

> relational db MS Access, MySQL doi:10.5281/zenodo.1411391
> PHP frontend https://pnm.uni-mainz.de
> interim ontology, relying on CIDOC CRM, CRMEH, Ontolex
> own R2RML mappings
> db2triples (open-source tool to convert MySQL to triples based on R2RML mappings)
> Jena Fuseki as triplestore and SPARQL-endpoint (in work)

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