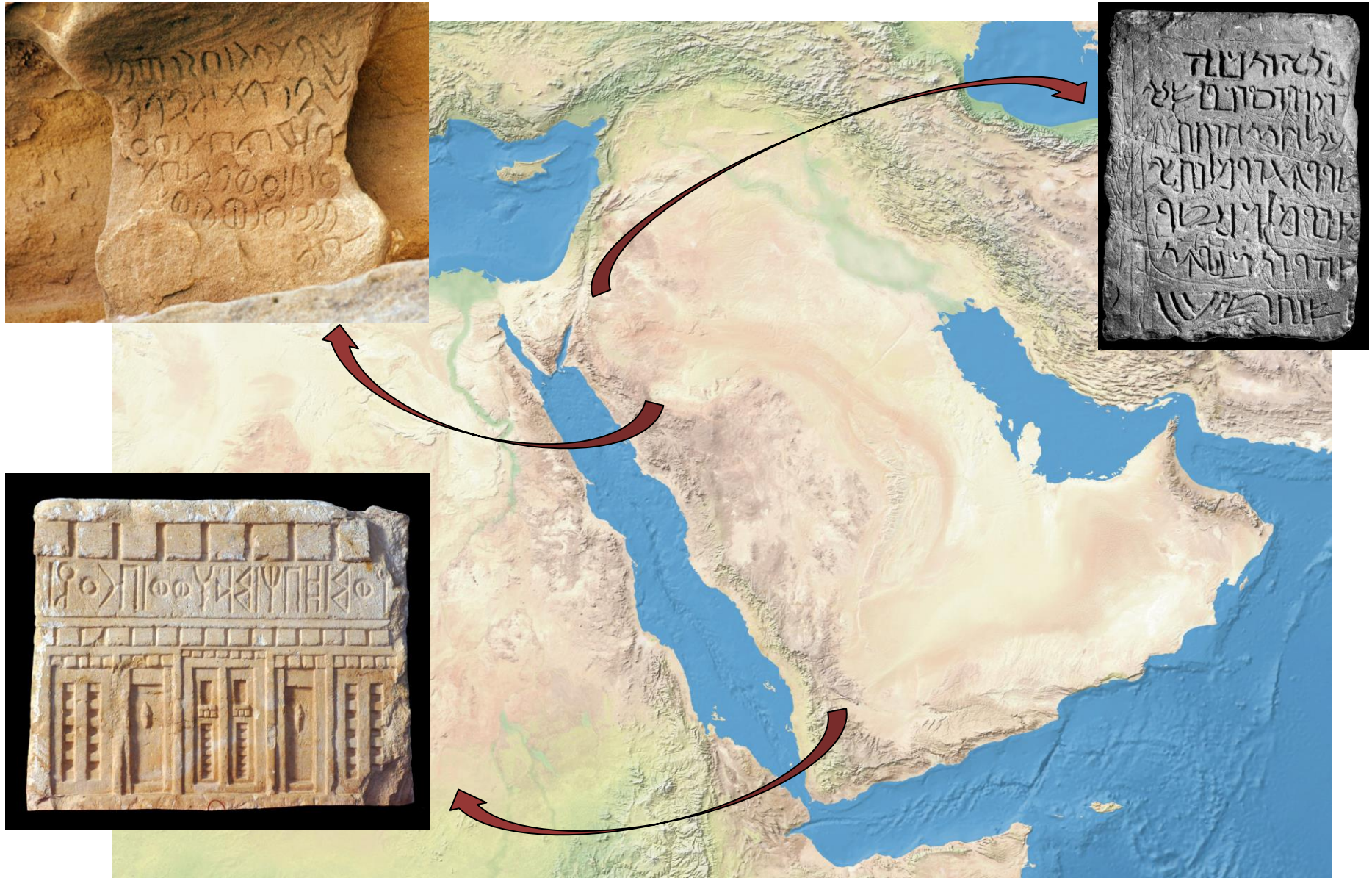


Between harmonization and peculiarities of scientific domains. Digitizing the epigraphic heritage of pre-Islamic Arabia in the project DASI

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Digital Cultural Heritage in the Ancient World
September 29 - October 1







DASI – Digital Archive for the study of pre-Islamic Arabian Inscription

✦ ERC – Advanced Grant, 7th Framework Programme

- Principal Investigator: Alessandra Avanzini (University of Pisa)
- Participants: University of Pisa – Dip. Civiltà e Forme del Sapere; Scuola Normale Superiore di Pisa



European Research Council
Established by the European Commission



UNIVERSITÀ DI PISA

✦ Main objectives

- Digitizing and publishing pre-Islamic Arabian inscriptions
- Enhancing Arabian studies and stimulating the protection of the epigraphic Arabian heritage
- Exchanging best practices of digital epigraphy



SCUOLA
NORMALE
SUPERIORE





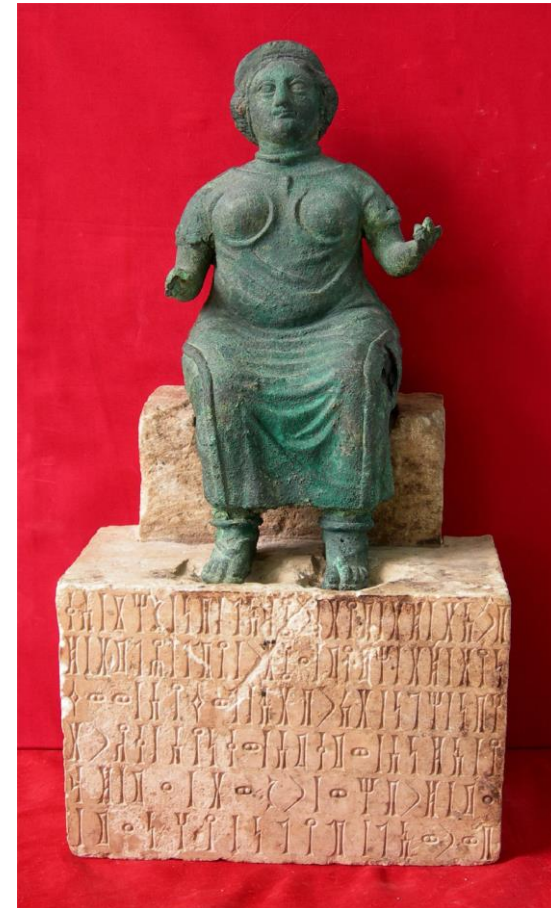
Focus

✦ Description of the dual nature of inscriptions

- Textual
- Physical

✦ Creation of networks

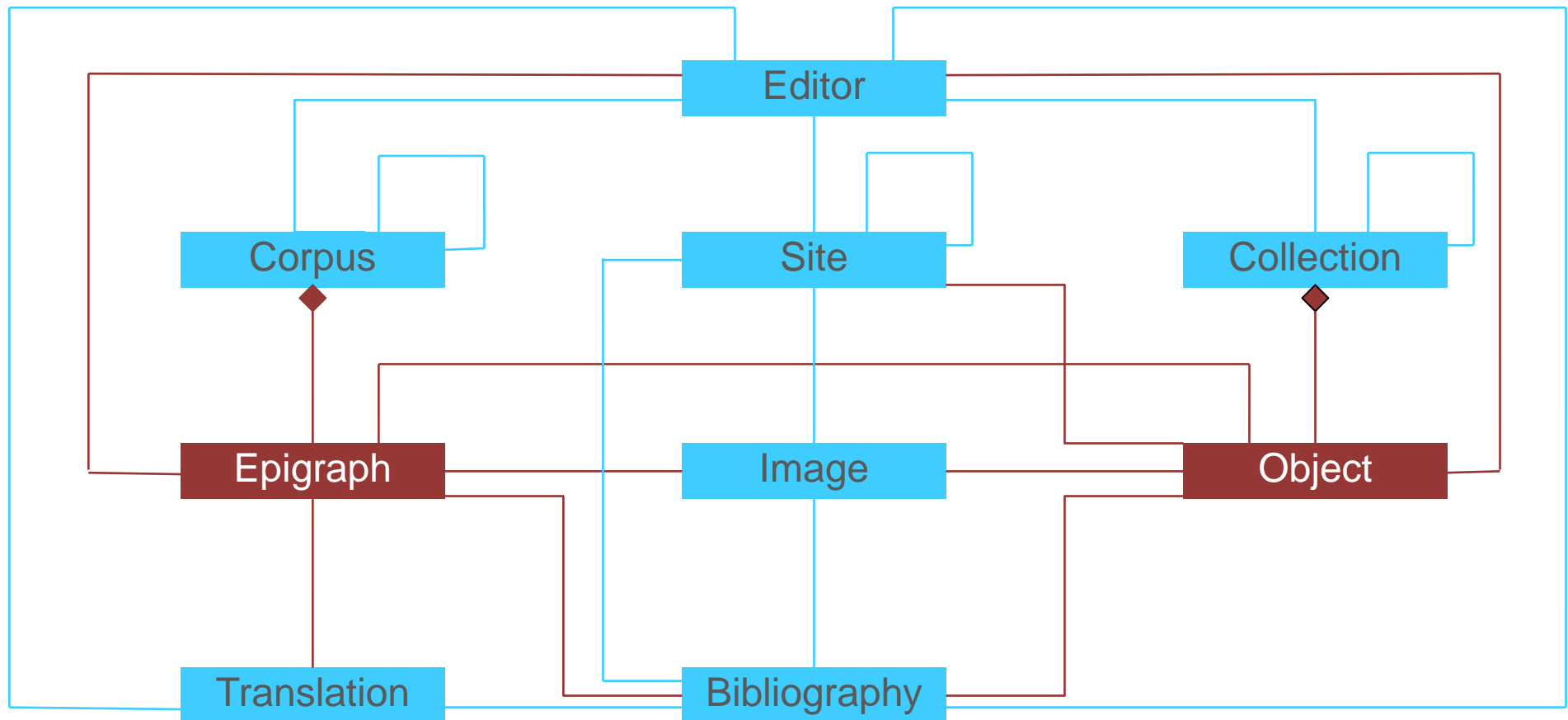
- Need for harmonization of contents
- Standardization of outputs and interoperability






1. Dual nature of inscriptions

Conceptual Model of DASI






1.a - Focus on text

**DASI** DIGITAL ARCHIVE FOR THE STUDY OF PRE-ISLAMIC ARABIAN INSCRIPTIONS

[DASI](#) [Home](#) [Projects](#)

TOOLS

- [Map](#)
- [Help](#)
- [Editorial Criteria](#)



DASI

Digital Archive for the Study of pre-Islamic Arabian Inscriptions

DASI is a five-year project directed by prof. Alessandra Avanzini of the University of Pisa, which has been funded by the European Community within the Seventh Framework Programme "Ideas". Specific Programme "ERC – Advanced Grant".


DASI seeks to gather all known pre-Islamic Arabian epigraphic material into a comprehensive online database, with the aim to make available to specialists and to the broader public a wide array of documents often underestimated because of their difficulty of access.

By means of a digitization process through a hybrid data entry/xml system developed by the Scuola Normale Superiore di Pisa according to international encoding standards, DASI gives access at present to the nearly 6,000 Ancient South Arabian inscriptions recorded by the University of Pisa team under the direction of Prof. Alessandra Avanzini.

Thanks to the fruitful collaboration with other two major European centres for the study of the epigraphic documentation of the Arabian Peninsula, also sections of the two corpora of Ancient North Arabian inscriptions (supervision by Mr. M.C.A. Macdonald, University of Oxford) and Aramaic inscriptions (supervision by Dr. Laila Nehmé, UMR 8167, CNRS-Paris) are being prepared for consultation.

[Project details](#)


Projects



Corpus of South Arabian Inscriptions

The ASA (Ancient South Arabian) corpus is one of the most interesting collections of epigraphic documents of the Semitic world, first and foremost for its vastness. With its over 15,000 inscriptions, it is the first-hand, written documentation of the culture that flourished in South Arabia from the late second millennium BC to the sixth century AD. At present, CSAI contains a collection of some 6,000 texts digitized by the team of the University of Pisa directed by prof. Alessandra Avanzini.


[go to project](#)



Online Corpus of the Inscriptions of Ancient North Arabia

The Online Corpus of the Inscriptions of Ancient North Arabia (OCIANA) is a project of the Khalili Research Centre of the University of Oxford, directed by Prof. J. Johns and Mr. M.C.A. Macdonald. It aims to present an easily updatable, online edition of all known Ancient North Arabian inscriptions: Taymanitic, Dadanitic, Hasaitic, Sataitic, Himsaitic and Thamudic.

[go to project](#)



Corpus of Aramaic Inscriptions

The Corpus of Aramaic inscription on DASI will comprehend the Nabataean inscriptions. This task will be accomplished thanks to the agreement with the CNRS laboratory UMR 8167 – Mondes Sémitiques, under the scientific supervision of Dr. Laila Nehmé. For the moment, the corpus contains no data.

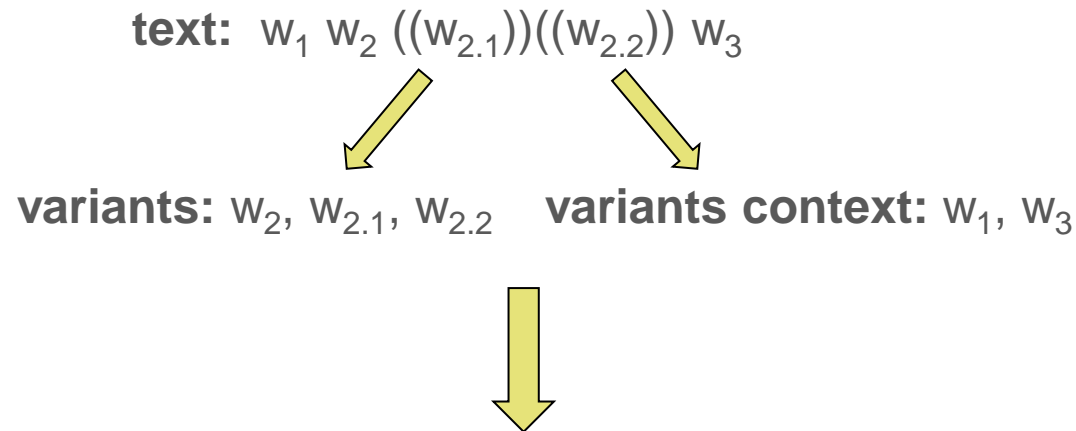




1.a - Focus on text

Variants search: problem

Search for variants: not only as single words, but also in a specific context



Possible versions of the text:

text1: $w_1 w_2 w_3$

text2: $w_1 w_{2.1} w_3$

text3: $w_1 w_{2.2} w_3$





1.a - Focus on text

Variants search: example of encoding

text: ... b mlk((ml'))((mr')) hw ...

encoded: ... b<milestone unit="clitic"/><app><lem>mlk</lem>
<rdg>ml'</rdg><rdg>mr'</rdg></app> hw ...

indexed: ...<w n="15" norm="mlk" pos="07733,004,002" lv="0" vid="158"
name=""><app brk="1"><lem>mlk</lem></app></w><w n="15" norm="mla{"
pos="07733,004,003" lv="1" vid="158" name=""><app
cont="1"><rdg>ml'</rdg></app></w><w n="15" norm="mra{"
pos="07733,004,004" lv="2" vid="158" name=""><app cont="2"
end="1"><rdg>mr'</rdg></app></w>...





1.a - Focus on text

Variants search: rules

- ✘ The variants of a specific text portion compose a group (vid)
 $\{\text{mlk}, \text{ml}', \text{mr}'\} \rightarrow \text{vid}=158$
- ✘ Each variant within a specific group adds a level (lv) to the text of the epigraph
 $\text{mlk} \rightarrow \text{L0} \quad \text{ml}' \rightarrow \text{L1} \quad \text{mr}' \rightarrow \text{L2}$
- ✘ Each word in each text level has a sequential number (n)
 $\text{b} \rightarrow \text{n}=14 \quad \text{mlk} \rightarrow \text{n}=15 \quad \dots$
- ✘ The first word in each variant level has the same number
 $\text{mlk} \rightarrow \text{n}=15 \quad \text{ml}' \rightarrow \text{n}=15 \quad \text{mr}' \rightarrow \text{n}=15$
- ✘ The search combines the variants of all levels with the level 0:
 $\text{text1} \rightarrow \text{b mlk hw}$
 $\text{text2} \rightarrow \text{b ml}' \text{ hw}$
 $\text{text3} \rightarrow \text{b mr}' \text{ hw}$

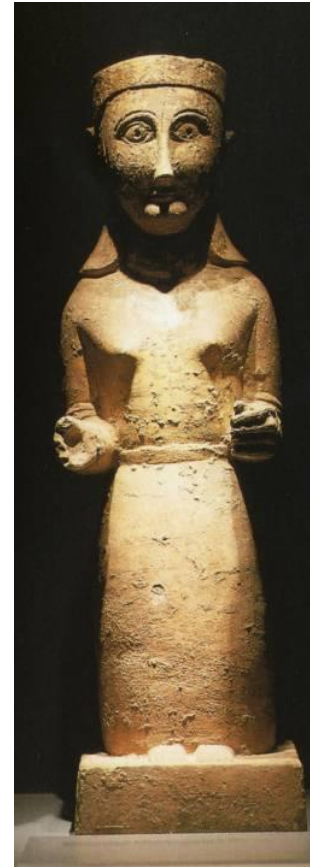




1.b – Focus on support



epigraphic objects

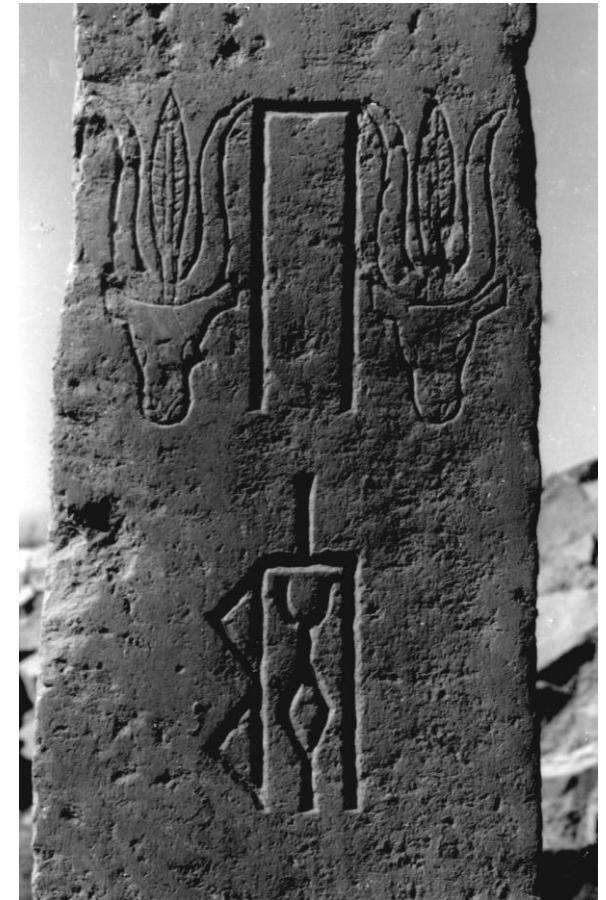
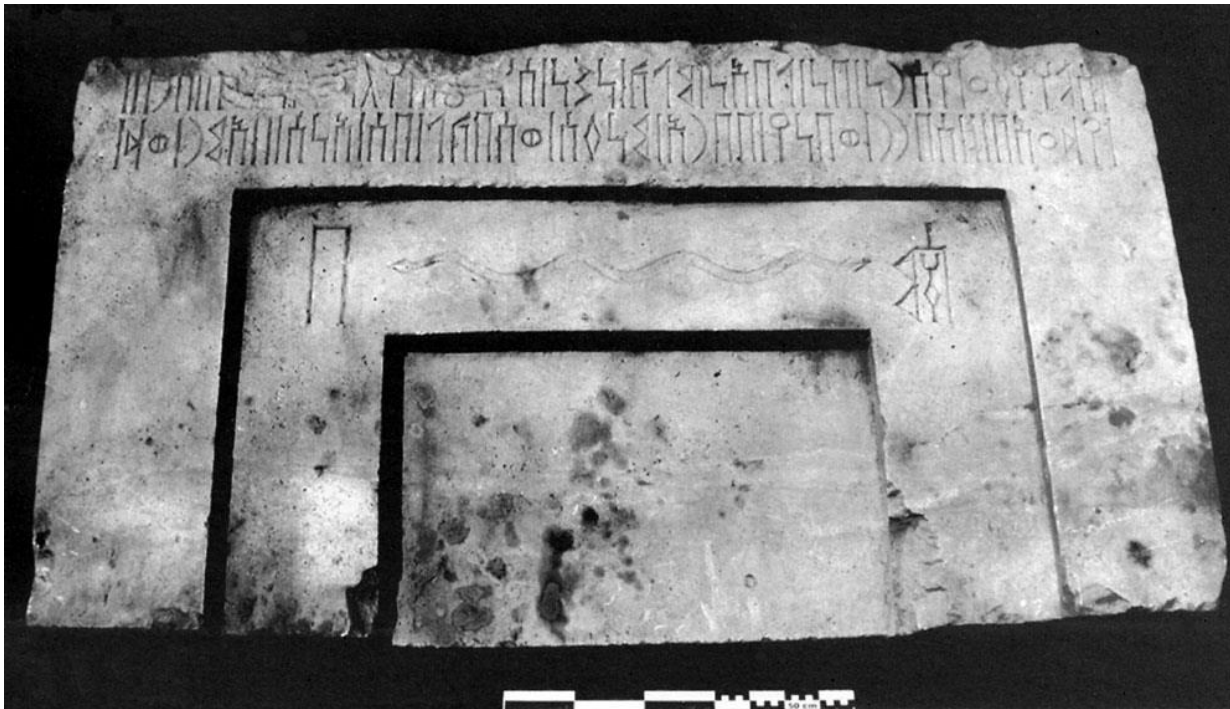


anepigraphic objects





1.b – Focus on support



monograms





2.a – Vocabularies

CSAI

archive of text-oriented XML files



DASI

relational database & web-based data entry system

vocabularies that ensure uniformity of data:

- Language
- Writing Technique
- Textual Typology
- Support Type
- Object Material
- Decoration





✕ Methodology

1. Analysis of the sample collected in CSAI

2. Creation of provisional list

since the pre-Islamic Arabian culture is a young research field among the ancient Near East studies, the classification of its several aspects is at the very beginning

3. Survey of existing terminologies in the domains of epigraphy, art and architecture

4. Comparison and attempt at mapping





DASI ENTRY	DEFINITION	MATCH
Construction text	text posted on public or private structures, reminding who constructed or restored them (eventually in order to indicate their possession); the text typically includes verbs meaning “build”, “found” (bny, ḥḏt)	Bauinschrift
Dedicatory text	dedication of an object or a person to the divinity for different purposes, the text including the verb “dedicate” (hqny, sʿl')	RT Weihinschrift
Writing exercise	text related to scribal practice (copies of sample texts, lists of grammatical forms, etc.)	
Ritual text	text reminding religious rituals	

«Textual typology» **vocabulary.** Mapping test with EAGLE – Type of Inscription





DASI TERM	SUB-TERM	DEFINITION	MATCH
Incense burner	circular	objects used to burn aromatic substances, with circular shape	AAT: incense burner [ID: 300198817]
	squared	the censer has a squared shape, sometimes placed on four angular legs	
	with truncated pyramidal base	characterized by a censer placed on a base of truncated pyramidal shape	
	with splayed foot	short cylindrical censer on a splayed foot	
Stela	aniconic stela	typical of the Qatabanian area, they are constituted by an inscribed base supporting an upper and plain slab. The top can be either convex or concave	AAT: stelae [ID: 300007023] EAGLE: Stele [http://www.eagle-network.eu/voc/objtyp/index.php?tema=250]
	with eyes or stylized face	particular and homogeneous group from the Jawf area and few samples from Qataban, representing eyes or a schematic facial outline	
	with figure in relief	isolated human or animal figures, usually realized in high relief	
	with narrative scene	decorated by narrative scenes, usually composed by multiple elements depicted in low relief	
	with framework	refined by a decorated framework in low-relief with abstract-figurative elements or with geometric motifs, associated in various and different combinations	

«Support type» vocabulary. Mapping test with Getty – AAT and EAGLE – Object Type





Squared
incense
burner

UAM 12

Circular

A-20-18

truncated
pyramidal base

Ja 862

splayed foot

BM 132904



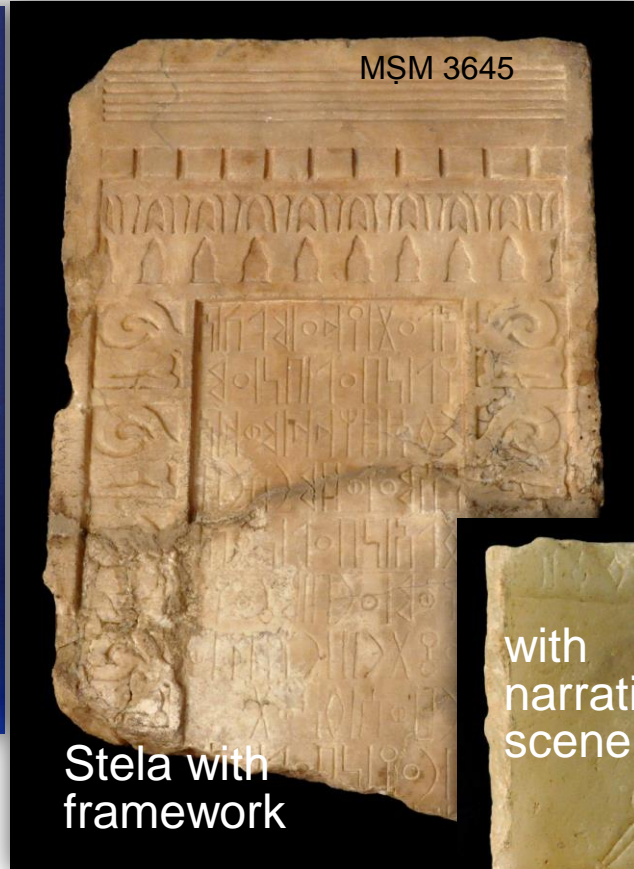
AAT: incense burner





Aniconic
stela

UAM 486



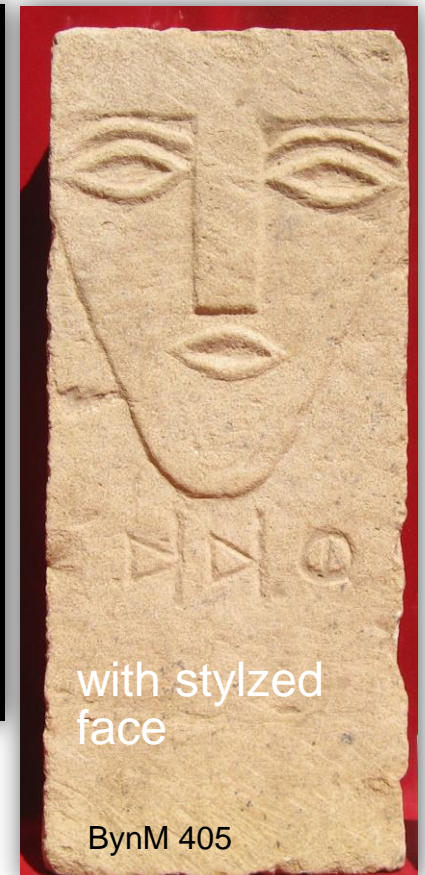
MSM 3645

Stela with
framework



RES 3902 N° 43

with
figures in
relief



with stylzed
face

BynM 405



with
narrative
scene

MSM 201



EAGLE: stela
AAT: stelae





✕ Even though general and specialized vocabularies, thesauri and taxonomies are already available, they do not allow to represent the peculiarities that the materials collected in DASI show



✕ DASI has decided to create independent vocabularies, not to import existing ones, in order to maintain the wealth of data for specialist users





2.b – Standards

Since the enhancement of knowledge of the ancient Arabian civilization is one of the main objectives of DASI, the future steps are intended to improve the potential interoperability:

- ❶ harmonizing DASI vocabularies
each term will be matched with existing concepts if possible
- ↓
- ❷ export of records in several standard formats, such as EpiDoc, and mapping to other metadata schemas, e.g. EDM





Moreover...

presently DASI vocabularies are simple lists of concepts

if the scientific community expresses interest:

- ③ enhancement of vocabularies with a higher level of granularity by adding definitions, bibliography and examples
- ④ publishing in formal language
- ⑤ and contributing to general terminologies





Thank you for your kind attention!

DASI

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