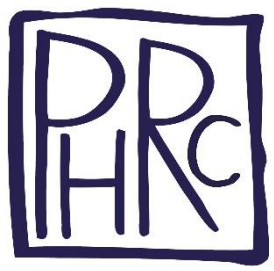


Practicalities of Hellenistic Ruler Cult (PHRC)

Towards a semantic markup of ritual action and its social underpinnings

Stefano G. Caneva

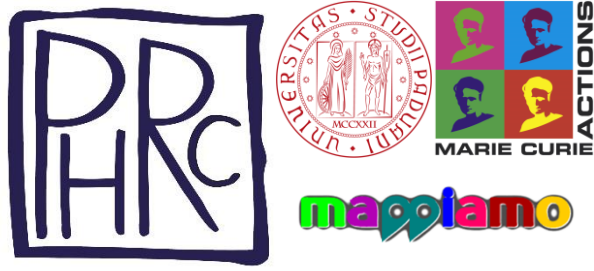
Marie Curie Piscopia research fellow, University of Padova



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University of Potsdam, February 16-17, 2017

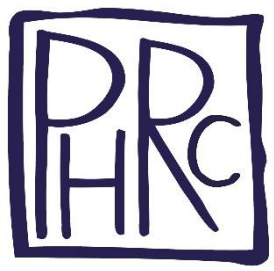
Structure of the presentation

- Introduction to PHRC
- The PHRC semantic annotation of ritual practice and agency
- An example of semantic annotation from PHRC 87: a Decree of the city of Skepsis establishing cultic honours for Antigonos the One-Eyed (OGIS 6)
- PHRC 2.0: Perspectives of further development



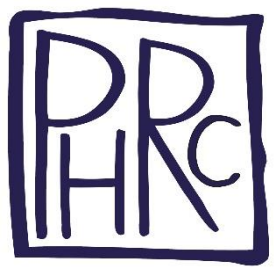
What is PHRC ?

- A project funded by a Marie Curie Piscopia scholarship, University of Padova, Italy (October 2015 – September 2017), and by the Fonds National de la Recherche Scientifique, University of Liège, Belgium (October 2017-September 2020)
- A research in Greek epigraphy, Hellenistic history, Digital Humanities
- A study of the ritual practice and social agency in cultic honours for Hellenistic benefactors
- It focuses on Asia Minor, Cyprus, Aegean Islands, from the late 4th to the 1st century BC
- It is addressed to scholars, teachers, university students



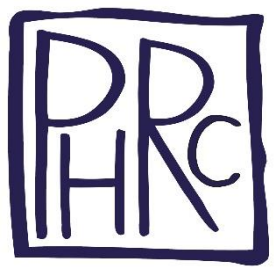
Which questions does PHRC ask to the sources?

- Which kinds of ritual action are carried out for human beings in Hellenistic communities?
- How are new cults modelled after existing ones?
- How are they embedded in the religious life of communities?
- Which social agents establish, fund, regulate, practise cultic honours for human beings?
- How do these various agents interact?



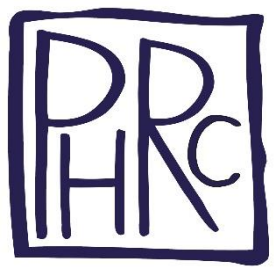
Which is the documentary corpus of PHRC?

- Religious dedications addressed to human recipients, alone or in association with traditional deities;
- Royal letters commenting upon cultic honours for members of the royal family;
- Civic decrees establishing, motivating and regulating cultic honours for human benefactors;
- Archaeological records (when available) for topographic case studies of the sacred landscape of these cults



Objectives: PHRC aims to promote research and digital learning, by providing

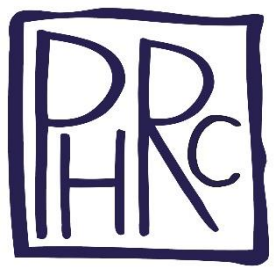
- an augmentable library of textual and visual documentation, which can be browsed via specific queries
- a brief introduction to the themes of philological and historical relevance on which each document sheds light
- fast access to further bibliography (also with direct links to online open access material)
- geo-located structured data that can be exported and embedded in larger platforms



What does PHRC deliver ?

- Scientific papers
- PHRC vocabulary and taxonomy for ritual action and agency
- PHRC database of about 150 xml-encoded inscriptions with metadata, images, English commentary, English and Italian translations
- PHRC geo-blog developed with the open-source geoCMS #Mappiamo (based on the geocoder Nominatim, nominatim.openstreetmap.org)
- PHRC/#Mappiamo open-source xml-to-JSON convertor

The PHRC IPR policy is fit for open knowledge: CC-BY-SA 4.0 International license for data and metadata; open APIs; images according to the policy of the owners of the digital assets



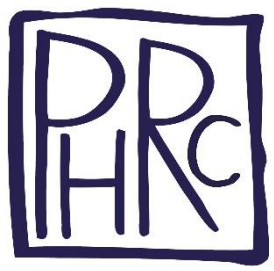
What kind of information is associated with PHRC items?

- Individual identifier for each textual source
- Position on map
- Images
- Metadata: description of support, text type, history (time; original location, finding place, present repository, with coordinates), bibliography and external links
- Summary of content with keywords
- Xml-encoded Greek text with semantic markup
- Apparatus
- Translations: English, Italian (French in the future)
- Brief commentary focusing on ritual action for benefactors, with internal and external links for further research



PHRC is searchable via queries based on Greek lemmata and via the following indexes:

- Text number
- Geo-located places
- Persons
- Deities
- Type of support
- Type of text
- Type of structures related to ruler cult
- Types of action (related to ritual practice and to regulation/administration/funding of cults)
- Time
- Region
- Bibliography

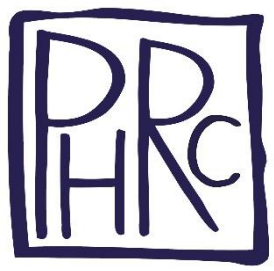


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The PHRC semantic annotation

Objectives

- Creating a consistent, flexible and augmentable vocabulary and taxonomy for ritual practice and social agency
- Embedding semantics into xml encoding



The PHRC semantic annotation

Who? → human and divine; individuals, groups, institutions; information on geographical origin and social status of agents

Types of action → ritual; non-ritual

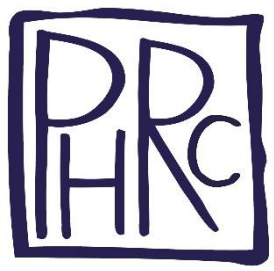
What? → animals, vegetables and derived products used in ritual practice; human-made objects and structures dedicated as part of religious honours

Where? → geographical names; other geo-located points of interest

When ? → date; occasion; frequency; duration

Why? → motivation

How? → relation; quality; measures



PHRC (Padova/Liège) builds upon the semantic annotation of the project *Collection of Greek Ritual Norms* (Liège)

<http://cgrn.ulg.ac.be>

Collection of Greek Ritual Norms provides a taxonomy of ritual action, encoded into xml with the element `<name type=" ... "> ... </name>`

- PHRC combines ritual action with agency → more information must be embedded in the xml code
- Entity = `<w, x, y>` → `<name type=" ... " subtype=" ... " ana = " ... "> ... </name>` (also `<persName>`)

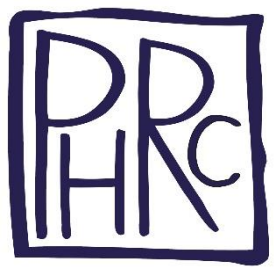
@type = characterizes the element in some sense, using any convenient classification scheme or typology

@subtype = provides a sub-categorization of the element, if needed

@ana = (analysis) indicates one or more elements containing interpretations of the element on which the ana attribute appears

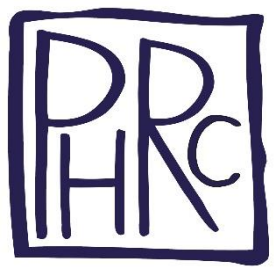
- Describing social entities in interaction: $E = \langle w, x, y \rangle ; E^{int} = \langle z \rangle$
- `<name type=" ... " subtype=" ... " ana = " ... " n="agent/recipient/benefiting" > ... </name>`

@n = gives a number (or other label) for an element, which is not necessarily unique within the document



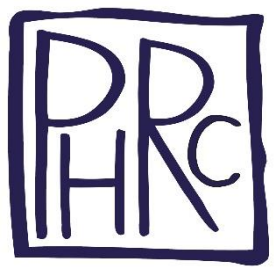
Values of @type: identifying agents

- Title: indicates that the social entity is an individual holding an official title formally identifying his/her status
(e.g. strategos, king, gymnasiarchos)
- Group: indicates that the social entity corresponds to a formally recognized social group, without being identifiable as a governmental body
(e.g. citizens, foreigners, members of an association)
- Institution: indicates that the social entity is an institutional agent acting as a distinctive governmental body
(e.g. polis, demos, boule, phyle)



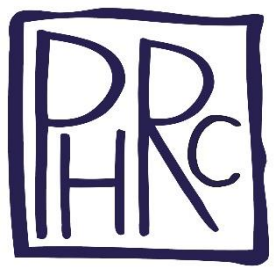
Values of @subtype: contextualizing: polis – kingdom - across systems

league	royal (royal house)	profession (professional associations)
polis	royalHierarchy (royal official, member of court, philos, etc.)	ritual (religious associations)
partition (a subsection of a polis)		army
foreign (non-resident inhabitants of the polis)		



Values of @ana: examples of conventional triplets

Social entity/species	Type	Subtype	Ana
βασιλεύς	title	royal	
ἄρχων (city)	title	city	
πρεσβευτής	title	city OR league OR royalHierarchy	communication
ἱερεὺς (city)	title	city	ritual
γυμνασίαρχος	title	city	partition
πολίται (also πάντες)	group	city	
νέοι	group	city	age
θίασος	group	ritual	
Βασιλισταί (on Thera)	group	army	ritual
ξένοι	group	foreign	
δῆμος	institution	city	
φυλή	institution	city	partition



Values of @ana: examples of fine-grained annotation

- strategos (civic military commander) = <title, city, army>
- phrourachos (royal garrison commander) = <title, royalHierarchy, army>

From semantic tagging to multiple queries

1-key query	2-key query	3-key query	4-key query
type	subtype	ana	agent



PHRC 87: a Decree of the city of Skepsis establishing cultic honours for Antigonos the One-Eyed (OGIS 6)

Lines 20-26: ἀφορίσαι | αὐτῷ τέμενος καὶ βωμὸν ποῆσαι καὶ ἄγαλμα | στῆσαι ὡς κάλλιστον

“to delimit for him a sacred precinct, to build an altar, and to erect a cult statue as beautiful as possible.”

```
<lb n="20"/> <name type="curation"><w lemma="ἀφορίζω">ἀφορίσαι</w></name>
```

```
<lb n="21"/> <w lemma="αὐτός" ref="persons.xml#Antigonos1">αὐτῷ</w>
```

```
<name type="building" ref="space.xml#precinct"><w lemma="τέμενος">τέμενος</w></name>
```

```
καὶ <name type="structure" ref="space.xml#altar"><w lemma="βωμός">βωμὸν</w></name>
```

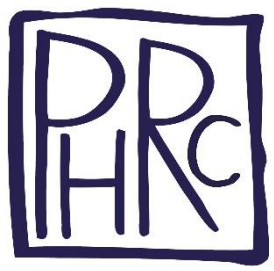
```
<name type="curation"><w lemma="ποιέω">ποῆσαι</w></name>
```

```
καὶ <name type="structure" ref="space.xml#cultStatue"><w lemma="ἄγαλμα">ἄγαλμα</w></name>
```

```
<lb n="22"/> <name type="curation"><w lemma="ἵστημι">στῆσαι</w></name>
```

```
<name type="quality"><w lemma="ὥς">ὥς</w>
```

```
<w lemma="κάλλιστος">κάλλιστον</w></name>
```



Lines 41-43: ἐπ[ιμελη]θῆναι δὲ τὸν γραμ|ματέα· δοῦναι [δὲ] καὶ εἰς ταῦτα τὸ ἀνάλω|μα τὸν ταμίαν

“The secretary shall supervise (this); the treasurer will provide the funds for these (expenses)”

<lb n="41"/> <name type="management">

<w lemma="ἐπιμελέομαι">ἐπ<supplied reason="lost">ιμελη</supplied>θῆναι</w></name>
δὲ τὸν <name type="title" subtype="city"><w lemma="γραμματεύς">γραμ

<lb n="42" break="no"/> ματέα</w></name> :

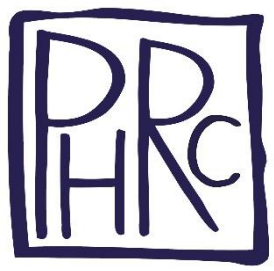
<name type="management"><w lemma="δίδωμι">δοῦναι</w></name>

<supplied reason="lost">δὲ</supplied> καὶ <w lemma="εἰς">εἰς</w> <w lemma="οὔτος">ταῦτα</w>

τὸ <name type="funding" subtype="city"><w lemma="ἀνάλωμα">ἀνάλω

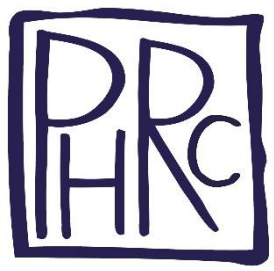
<lb n="43" break="no"/> μα</w></name>

τὸν <name type="title" subtype="city"><w lemma="ταμίας">ταμίαν</w></name>

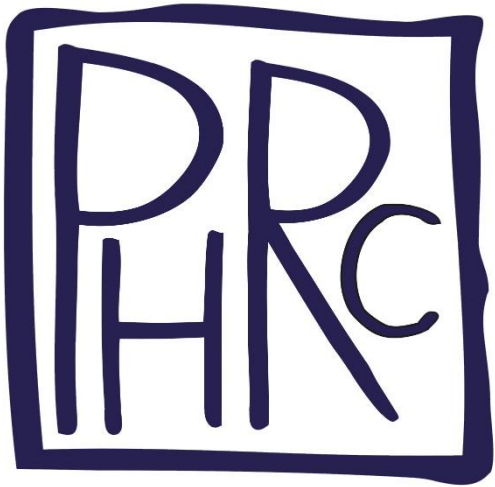


Further developments: PHRC 2.0

- FNRS, University of Liège (October 2017 – September 2020)
- Consolidation of the vocabulary and taxonomy → collaboration with similar projects to co-design a more abstract and portable ontology of ancient Greek and Roman polytheisms
- More documents (about 250)
- New areas: the Levantine Coast, Egypt, Cyrenaica, mainland Greece
- New supports: Greek papyri and ostraka
- Outreach agenda: citizen science and cultural tourism
- Development of a PHRC bot for the free messenger app Telegram for *in situ* mobile browsing



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www.phrc.it (release scheduled in October 2017)

[Epipap](#) – Laboratorio di Epigrafia Antica e Papurologia, Padova

<https://github.com/mappiamo>

Contact: ste.caneva@gmail.com