

PART IV

DIGITAL APPROACHES TO CROSS DISCIPLINARY STUDIES  
OF INSCRIPTIONS



## 21. Romans 1 by 1. Documenting a population database for the Roman world

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### **Abstract**

The present article briefly documents the epigraphic division of a developing online population database for the Roman Empire, accessible at [www.romans-1by1.com](http://www.romans-1by1.com). The paper presents the motivation of constructing the database and its envisioned architecture, in relation with the various sources, while emphasizing on the steps and procedures required in order to transpose epigraphical information into an ancient population database.

**Keywords:** Epigraphy, middle classes, provincial society, occupational inscriptions, prosopography

Romans 1 by 1 database and afferent website were created for filling in an existing gap in the study of Roman-era population. The database tries to begin answering to the need of properly cataloguing all attested inhabitants of the Roman Empire. Of course, this is a tremendous task and [www.romans1by1.com](http://www.romans1by1.com) is only a first step, circumscribed for now to a very specific category of sources.

### **21.1. Motivation**

But why would an ancient population database be essential? Because a digital resource focused on individuals would reveal linkage possibilities that otherwise elude us, it would finally give us the complete and accurate image of the Roman attested population and, through codifications, it would open the way towards computer-assisted

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in-depth analyses on all relevant aspects imagined (epigraphic patterns, religiosity, migrations, onomastics, occupations, family data, etc.). A complete, aggregate database will allow a longitudinal (diachronic) view on the attested Roman population from a certain area and ideally from the whole Empire, while also opening transversal (a section in time) perspectives.

The database in itself would have three components (see below Fig. 1), following the best practices in the field (Mandemakers and Dillon 2004): the *sources database* (with “facsimile” transcription of the sources’ text), the *central database* (the complete, corrected, integrated, standardized and coded form of the sources database) and the *data releases* (destined for on-line usage, allowing easy extraction of data in view of analyses).

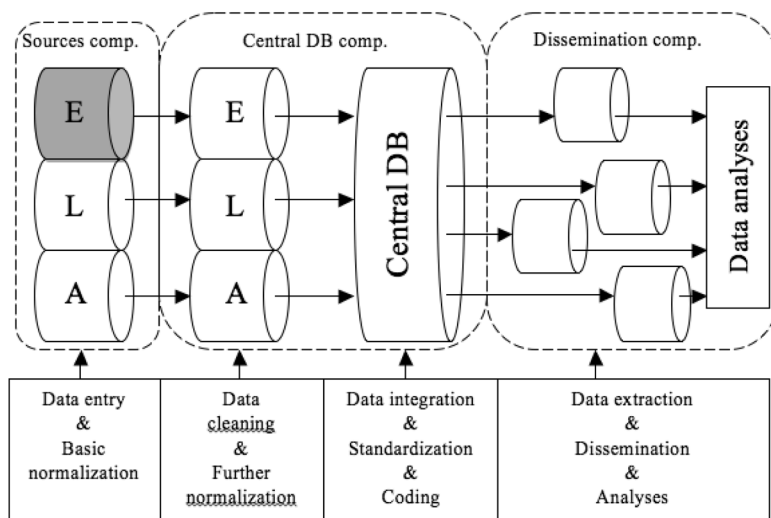


Fig. 21.1. Schema of the database.

Alongside these components, which actually represent various steps in the data preparation process, a population database for the Roman Empire should be built on three pillars, which we might call units or divisions of the database: epigraphic, literary and archaeological, each of them requiring different expertise, different approaches and different standards for the individual recording forms. In the end, of course, all three types of individual records will have to be integrated

in a central standardized component, whose structure is to be developed by merging the three aforementioned divisions; consequently, its configuration will ideally take shape only after all three units enjoy a stable architecture at least in the sources component of the database. The construction of the database will follow a series of steps imposed by best practices: creating a repository of sources; introducing, integrating, standardizing, coding and storing the information; enriching and disseminating the information. The codifications hold an essential part, not only in the individual linkage procedures, but in the analysing process as well. At the point when the database will comprise enough data, properly recorded and with all codifications undertaken, the usage of statistical software in order to identify trends and run comparisons over large scale geographical and administrative units might result in a better than ever understanding of Rome's social history.

## 21.2. The sources

Within this theoretical frame, whose amplitude implies a gradual and long-term approach, we have chosen to start by building the epigraphical division of the database. Thus, we began developing a project on the middle classes of the Low Danube provinces and their epigraphic attestations. The database created in this context together with the platform [www.romans1by1.com](http://www.romans1by1.com) represent the skeleton of the future population database of the Roman Empire. For now, we are solely focusing on characters attested epigraphically – thus on inscriptions as sources. As constructing a metadata suitable for all social and professional categories of the provincial world is very complex, our database is created for accommodating all information epigraphically provided on members of the provincial middle classes. Terminologically, we consider all those who manifest themselves epigraphically, without being members of the imperial or provincial elite, as member of the middle socio-economical layers. Likewise, we have excluded active militaries (but not their families), as their appurtenance to the army creates their social status. Regarding the data entry, we are trying to remain faithful to the source and to record, during the first phase, only the minimum of deduced information (gender, juridical status, ethnicity of the name). At the same time, we operate some conventional onomastic transcriptions (AEL will be *Aelius* from the start, etc.).

All these basic normalization procedures are being thoroughly explained and documented in the data entry manual, and the reason why we chose to apply them is to speed up data standardization, run analyses and publish results on small samples, whose standardization procedures would otherwise be overwhelmingly time-consuming in relation with the results.

### 21.3. Database architecture

The core of the database's epigraphical division is formed by a table used for recording personal individual data (labelled *Personal data*), around which the entire network of components needed to ensure proper information recording is built. However, when starting data entry, one must begin by recording information about the source in use.

The first table to be filled in is the file of the source – *Inscriptions*. First of all, each inscription gets a source code, formed of 5 digits and a symbol/acronym of the province's name (D for *Dacia*, MS for *Moesia Superior*, DAL for *Dalmatia*, etc.) – so we have, for example 00001MS. The *Inscriptions* table has text fields, as well as value lists. Then, we have text strings for: *Relevant expressions*, *Stylistic details*, *Atypical features*, *Observations*, *Place of discovery*, *Place of provenience*, *Ancient name provenience*, *Timestamp/Timeframe* and *External links*. Although we are aware that some of the data (*Timestamp/Timeframe*) could have benefited from a standardized form, at this point we opted for vaster possibilities of expression and adaptation. Other information will be filled using value lists, as standardization is more suited: *Type of inscription*, *Language*, *Material*. For these we will use the Eagle vocabularies,<sup>1</sup> because they offer an already standardized language.

The *Coordinates* table links each inscription with the latitude and longitude of its place of provenience, in order to place it on a map.

The *Inscription bibliography* was conceived so that extracting complete or selective bibliographical lists would be possible. Thus, a normalization table includes all bibliographical titles referred to and from it; through a value list, one can select the *Bibliography abbreviation*. The exact reference is presented and detailed in the *Details* and *Comments* text strings.

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<sup>1</sup> <http://www.eagle-network.eu/resources/vocabularies>.

Of course, all data are linked to the *Inscription code*, selected as well from a value list.

Only after properly documenting the source one can access the main and most complex table, *Personal data*, where basically the individual file of each person is created. At this point, each new entry represents a singular epigraphic attestation of an individual, and a unique ID is generated, which will help link the respective character throughout the various components of the database and with other database entries. The person is also manually linked to the source using a value list of the inscriptions' codes. In the event of one person being attested in multiple epigraphs, each attestation will represent a new entry, and it will be assigned a new unique ID, which will be doubled, during linkage procedures, by a common ID for all instances of the same person.

The *Personal data* table was built to host a large variety of information offered by epigraphs, and its structure has proved, up to this day, rather stable. However, if need be, it can always be extended in order to accommodate any new kind of information. A first set of its variables are name-connected: *Praenomen*, *Nomen*, *Cognomen*/*Personal name*, *Father/Master name*, *Agnomen*, *Signum*, where each also has a drop-down associated for *Ethnicity* and the *Agnomen* and *Signum* an *Observations* string. While we believe the possibilities of actually identifying *signa* for members of the middle classes, during the Principate period, is rather reduced, we opted for facilitating their correct registration, in case they are discovered. Other data regard *Natione*, *Ethnicity*, *Origo* and *Domus* – if and how they are mentioned in the inscription. As acknowledged above, some information will be recorded, even if they are deductive and not literally written in the source: *Gender* and *Juridical status* (though the servile one often is literally recorded). For the latter, we have opted for a check box, which, if checked, opens all the available possibilities. The rest of the fields accommodate supplementary information, when and how there is the case: *Occupation*, *Collegium*, *Deities*, *Age* (at death), *Details of life/death* and *Observations*.

The *Occupation* field requires some special attention, as it has the *Occupation code* associated with it; as we are trying to propose a codification of Roman occupations/professions, based on and adapting the HISCO classification model<sup>2</sup>. While a raw classification and codification based on HISCO might only be a slight challenge, finding

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<sup>2</sup> <http://historyofwork.iisg.nl/>.

a theoretical model might prove to be a more elaborated task. What we aim at is constructing the “metadata” for the codification of Roman professions attested on stone and analyse how deep the classification can realistically go. Much alike other normalization fields present in the sources component of the database, *Occupation code* was implemented because it helps dealing faster with small and medium size samples (up to hundreds of people) in view of publishing preliminary results which are vital for dissemination and further financial support of the project. Two important variables, for statistics and working with the data, are *Dedicated by* and *Dedicated for*, which state the relation of the recorded individual with the epigraph and with other persons mentioned by it. Both appear in the simple form of check boxes.

Another particular check box, in need of supplementary explanations, is *Later*. The database was conceived for attested civilians from the middle classes, but sometimes they are associated in inscriptions with militaries or representatives of the elites. In this case, we have to register a minimum of data on the later as well, in order to build a wider image of the characters that we focus on. When checking *Later*, it opens *Status*, which at its turn opens the following options in the form of check boxes: *Senator*, *Knight*, *Local magistrate*, *Decurion*, *Imperial priest*, *Imperial slave*, *Imperial freedman*, *Military personnel*. If checked, each of these boxes opens a Details text box; additionally, *Local magistrate* and *Decurion* open a *City/Town* value list, while *Military personnel*, opens *Rank* and *Unit* value lists. While elite members and military personnel will at some point be added to the database, for the currently running project purposes, their social and professional status, together with a minimum of relevant details and relation with the recorded individuals represent enough information.

FIELD LABEL	FIELD ID	DATA TYPE
<b>Praenomen</b>	rperson_praenomen	Text
<b>Ethnicity praenomen</b>	rperson_eth_praen	Value list
<b>Nomen</b>	rperson_nomen	Text
<b>Ethnicity nomen</b>	rperson_eth_nom	Value list
<b>Cognomen/Personal name</b>	rperson_cognomen	Text



<b>Ethnicity cognomen/ personal name</b>	rperson_eth_cogn	Value list
<b>Father/Master name</b>	rperson_father	Text
<b>Ethnicity father/master name</b>	rperson_eth_fth	Value list
<b>Agnomen</b>	rperson_agnomen	Text
<b>Ethnicity agnomen</b>	rperson_eth_agn	Value list
<b>Observations agnomen</b>	rperson_remark_agn	Text
<b>Signum</b>	rperson_signum	Text
<b>Ethnicity signum</b>	rperson_eth_sign	Value list
<b>Observations signum</b>	rperson_remark_sign	Text
<b>Natione</b>	rperson_nation	Text
<b>Ethnicity</b>	rperson_nat_ethnicity	Text
<b>Gender</b>	rperson_rgender_id	Value list
<b>Juridical status</b>	rperson_jstatus	Checkbox. Opens checkboxes: Citizen, Libertus, Peregrine, Slave Veteranus (opens Unit/ Rank - valuelists)
<b>Tribus</b>	rperson_rtribus_id	Text
<b>Origo</b>	rperson_origo	Text
<b>Domus</b>	rperson_domus	Text
<b>Collegium</b>	rperson_collegium	Text
<b>Occupation</b>	rperson_occupation	Text
<b>Occupation code</b>	rperson_occ_code	Text
<b>Deities</b>	rperson_deity	Text
<b>Age</b>	rperson_age	Text
<b>Details of life/death</b>	rperson_death_details	Text
<b>Dedicated for</b>	rperson_dedicated_for	Checkbox
<b>Inscription code</b>	rperson_rinscription_ ids	Value list
<b>Later</b>	rperson_now_stat	Checkbox. Opens checkbox: Status

		Checkbox. Opens checkboxes: Senator (opens Details – text), Knight (opens Details – text) Local Magistrate (opens Details – text, City – value list), Decurion (opens Details – text, City – value list), Imperial priest (opens Details – text), Imperial lare (opens Details – text), Imperial freedman (opens Details – text), Military personnel (opens Details – text, Unit/Rank – value lists)
<b>Status</b>	rperson_status	
<b>Observations</b>	rperson_observation	Text

**Tab. 21.1.** Metadata of the Personal data table.

Based on the personal ID given to each individual, the *Relationship* table will solely name the relationship between individuals (A to B and B to A), choosing from a drop-down menu. The relationships have been encoded from the start, in order to make processing quicker; thus first-degree relationships have 10-codes (101-Husband, 102-Wife), second and third degree relations 20- and respectively 30-codes, non-family relations were given 40-codes and 50-s for the unspecified/unreadable relations. Male relations were given odd numbers and female ones – even numbers.

## 21.4. Conclusions

*Romans 1 by 1* is a first step towards a comprehensive and exhaustive electronic resource for the attested population of the Roman Empire. The following normal steps for expanding and enriching the database is elaborating the fitted metadata for provincial elites and military personnel epigraphically attested.

## Acknowledgement

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## References

- MANDEMAKERS, KEES AND LISA DILLON. 2004. "Best Practices with Large Databases on Historical Populations." *Historical Methods: A Journal of Quantitative and Interdisciplinary History* 37(1): 34–38. URL <http://dx.doi.org/10.3200/HMTS.37.1.34-38>.



## 22. Towards a Universal Facebook of the Ancient World

*Yanne Broux\**

### **Abstract**

Facebooking the past. The idea grew while developing a database of all people mentioned in texts from Greco-Roman Egypt (350 BC–AD 800). Thanks to Trismegistos' role in EAGLE, Named Entity Recognition can now be applied to almost 500,000 Latin inscriptions from the Roman Empire, and some 400,000 clusters containing personal names can be extracted. This collection of names will lead to a large-scale study of naming practices in the ancient world, and how these reflect changes in society at large.

**Keywords:** Latin epigraphy, Trismegistos, Named Entity Recognition, Social Network Analysis, Onomastics, Prosopography

### **22.1. Trismegistos: the early years**

Facebooking the past. The idea grew a couple of years ago, while developing a database of all people mentioned in texts from Greco-Roman Egypt. While probably not exactly considered Big Data by those who actually work with BIG data, the 500,000 or so attestations of individuals in Trismegistos open up some prospects for quantitative analysis, something historians still tend to shy away from. One of the approaches I have been exploring is Social Network Analysis [SNA]. SNA was developed in the 1960s in mathematics, anthropology and sociology and measures structural forms of relations between individuals, places and/or events. Over the past couple of decades, it has found its way to numerous other fields, such as physics, neuroscience, and recently also (modern) history. Within ancient history, however, SNA still needs to obtain a firm footing.

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To reconstruct proper social networks, a decent prosopography is indispensable. In a traditional scholarly setting, this implies time-consuming and painstaking manual labor. Fortunately, in a digital environment, there are other ways, and Trismegistos ([www.trismegistos.org](http://www.trismegistos.org)) forms an ideal starting point. Trismegistos grew out of a long tradition of databases and prosopographies (structured lists of people), as well as various other Ancient History projects at KU Leuven. The original idea of Trismegistos was to foster interdisciplinarity in the study of Ancient Egyptian society by creating a central database with metadata about published papyrological texts from Greco-Roman Egypt, in a first instance written in Greek, Latin and Egyptian (including hieroglyphic, hieratic and demotic). The inclusion of Egyptian soon dissolved the disciplinary boundary with epigraphy, broadened the chronological window, which was eventually set to 800 BC – AD 800, and led to the inclusion of further languages such as Coptic, Aramaic and Arabic.

Apart from texts, since 2008 Trismegistos also intensively deals with places and people. Building on open access to the full text in repositories, Named Entity Recognition procedures are used to create lists of toponyms and anthroponyms that occur in the ancient sources. This was first applied during the socio-onomastic project ‘Creating Identities in Graeco-Roman Egypt’ (KU Leuven OT project 2008-2012), on a corpus of about 50,000 papyri and ostraca in the Duke Databank of Documentary Papyri ([papyri.info](http://papyri.info)). With the additional support of a Hercules Grant, (‘An Interdisciplinary Database of Proper Names in Late Pharaonic, Graeco-Roman and Byzantine Egypt (ca. 800 BC – AD 640)’; 2008-2014) the work on the core data could be finished in just over two years, resulting in a database with almost half a million references to people (Trismegistos People) and an additional hundred-thousand or so place names (Trismegistos Places) mentioned in texts from Egypt.

On the basis of Trismegistos People, several studies on naming practices, modes of identification and identity issues in Greco-Roman Egypt have been published. Two PhDs focused on the longstanding tradition of double names: the first dealt with the Ptolemaic period, when this form of polyonymy served to cross ethnic borders (Cousement 2016), the other with the Roman period, when the practice was adapted by the local elite to distinguish themselves from the *hoi polloi* and to resemble Roman nomenclature (Broux 2015a).

The data of the fourth century AD provided new insights into the spread of Christianity in Egypt (Depauw and Clarysse 2013). The development of a standardized identification cluster, consisting of a person's name, patronymic and metronymic (Broux and Depauw 2015), as well as the use of fixed expressions to denote illegitimacy (Broux 2015c), name change (Broux 2013b) and official identification (Broux et al. 2010), were all related to the legal reorganization of the population under the Romans and the ensuing tax reform (Broux, 2013a). Most recent studies focus on the influence of Roman socio-linguistic practices on Greek and Egyptian conventions (Depauw, 2017) and how network analysis can provide us with new insights regarding onomastic habits and what they say about cultural identity and social status (Broux 2015b).

## **22.2. Going global: an encompassing source guide for the ancient world**

### **22.2.1. Expanding Trismegistos Texts**

Like Facebook, however, Trismegistos wants to grow, and get the entire ancient world on board. To achieve this goal, Trismegistos' core database, the text database, must first be expanded by broadening its chronological and geographic horizon. Since 2013 the team has been actively working toward the inclusion of all texts from antiquity in Trismegistos. This implies including Latin and Greek inscriptions, an estimated 700,000 texts. Contacts with the Latin epigraphic database in Heidelberg resulted in Trismegistos' participation in the Europeana EAGLE project, coordinating the disambiguation across all partners. This added about 150,000 new texts to the Trismegistos database. The remaining 300,000 will be integrated from another source (Claus-Slabby: [www.manfredclaus.de](http://www.manfredclaus.de)), so that the coverage of Latin will soon be exhaustive. For Greek, good contacts have been established with the main players in the field (PHI: [epigraphy.packhum.org/inscriptions/](http://epigraphy.packhum.org/inscriptions/); DC3 [i.e. Duke, SEG, Claros]: [blogs.library.duke.edu/dctthree/](http://blogs.library.duke.edu/dctthree/)), and the aim is to become partners in a project dealing with the 250,000 or so inscriptions during the next year. At the same time Trismegistos is also working towards a complete coverage of indigenous languages and scripts, which are often separate fields, isolated from the 'classical' world. New partnerships for Etruscan have been set up, and soon also for Punic (CIP: <http://cip.cchs.csic.es/>) and South-Arabian

(DASI: <http://dasi.humnet.unipi.it/>), while for the Italic languages, for Gallic, Lepontic, Venetic, and Messapian information has already been digitized on the basis of existing corpora.

### **22.2.2. Expanding Trismegistos People**

With the experience obtained during the extraction of names from the Greek papyri, Named Entity Recognition will be applied to the Latin inscriptions incorporated in Trismegistos so far. This will result in the addition of an estimated 500,000 or more new references to names / individuals to Trismegistos People. Network analysis will be used to help with the disambiguation of individuals.

#### **22.2.2.1. Named Entity Recognition**

The collection of references to people and their names in the inscriptions will be carried out by applying Named Entity Recognition [NER] to the clusters of capitalized words extracted from the full text repositories of Greek and Latin inscriptions.

NER was originally developed by computational linguists in the 1990s to detect and classify pre-defined elements in texts, but quickly spread to other fields, such as biology and genetics, and is now gaining momentum in the Digital Humanities (Van Hooland et al. 2015). The problem with NER-systems, however, is that techniques designed for one genre or field do not necessarily work for others, due to specific text properties (some follow strict writing constraints, e.g. scientific or news articles, while others, such as email or tweets, are more informal), or due to language-related grammatical and syntactical formats.

For ancient Greek and Latin, the languages of the inscriptions under scrutiny here, there were no ready-to-use NER solutions. In a case language, proper names are more variable; the different accents on vowels make letters less easily recognizable; and in particular the onomastic system and the way people are identified is completely different from modern languages. Therefore a strategy needed to be developed to cope with the multilingualism of the sources and the declensions of the inflected languages.

Trismegistos opted for a combination of a gazetteer and a rule-based approach. For the gazetteer a three-tiered onomastic database structure was developed in Trismegistos People, dealing with names, name variants, and declined name variants respectively. The first database, NAM, currently has 34,106 entries, e.g. the name Isidoros.



Each name is connected to a set of variants in all possible languages. As a rule, only very minor dialectal or orthographical variation is allowed in the ‘native’ language, in this case Greek (e.g. Εἰσίδωρος and Ἰσίδωρος). Many of the variants are actually created by renderings of a name in other languages, e.g. Ἰsytrs, be ʒsydwrs or ʔcʔΔωρε in Egyptian and Coptic. In all there are 177,290 variants in the NAMVAR database. Finally, for each of the variants, the declined forms were created, e.g. Ἰσίδωρου) or Ἰσίδωρῳ (dative). This NAMVARCASE database is the largest with 667,677 entries, and this set is used as a gazetteer for NER. It was developed on the basis of the set of names of some 40,000 individuals with titles listed in the Prosopographia Ptolemaica (KU Leuven) and was supplemented with new names collected during the ‘Creating Identities’ project (Depauw and Van Beek 2009). Through co-operation with the Lexicon of Greek Personal Names (Oxford University) the names of some 300,000 individuals can now also be integrated.

Apart from this gazetteer, rules were developed to cope with the combination of names, or more correctly declined name variants, as well as with the combination of names with non-onomastic introductory terms (e.g. ‘son of’) in the identification of individuals. For Greek texts, this is pretty straightforward, as people were identified by their name (generally a single name, in some cases a double name) followed by genealogical identifiers (in the genitive form) only. The onomastic habits encountered in Latin inscriptions differ significantly, however. Here the majority of the individuals follow the Roman naming system. This consists of a fossilized praenomen, a nomen gentilicium (the equivalent of our family name), and a personal cognomen. Often the patronymic was inserted between the gentilicium and cognomen; sometimes even the papponymic and the voting tribe, e.g. *Marcus Tullius Marci filius Marci nepos Cornelia Cicero* (‘Marcus Tullius Cicero, son of Marcus, grandson of Marcus, [of the] Cornelia [tribe]’). A completely new set of rules is therefore being developed to apply to the Latin inscriptions.

#### 22.2.2.2. Human quality control and prosopographical identifications

Once the clusters of capitalized words have been extracted and have been matched to the onomastic gazetteer and rules for name combinations, a human check will be performed. This includes tasks which are not easily automated: interpreting declined name variants as attestations of a specific case where the mere form is ambiguous;

deciding whether some ambiguous entries are toponyms or anthroponyms; and reviewing the results of the cluster interpretation rules and adding relevant information where necessary.

All this could be labeled 'quality control', but we will also rely exclusively on humans for the logical next step when developing a prosopography: the identification of namesakes as attestations of the same person. Since the systematic review will be performed text per text, only intratextual identifications can be implemented at this stage.

### 22.2.2.3. Social Network Analysis

Social Network Analysis [SNA] was developed in the 1960s in mathematics, anthropology and sociology and measures structural forms of relations between individuals. It has huge potential for future historical research, not only by applying 'traditional' network analysis for the study of social interaction, but also by developing new, non-conventional techniques.

In the wake of the automatic extraction of individuals from Greek papyri during the 'Creating Identities' project, people appearing in more than one text could not be identified and were therefore entered in Trismegistos People under multiple records. The identification of these doubles is a difficult and time-consuming process, not in the least because of the high degree of homonymy: in village communities, similar names were common, and in families, names were often passed down every other generation. This makes it difficult to distinguish between one person and another. Broux and Vanbeselaere therefore developed a new procedure to identify individuals with the help of graph visualization and SNA (Broux and Vanbeselaere forthcoming). By linking people based on co-occurrence in the same texts, an overview of all the data is presented in a single network, where one can "zoom in" on specific individuals and compare their "surroundings". When specific clusters of names reappear, these are likely the same individuals mentioned in different texts (see Fig. 1: each circle [or 'node'] represents an individual; some of these need to be merged, since they actually refer to the same person).

Additionally, the developed identification method enables us to discern family components. Mapping genealogical relationships is often problematical, especially when individuals are attested in different capacities. Someone who is mentioned as the father of an athlete in a victory list is not easily recognized as the state official in a petition.

In other words, social and professional links do not always overlap with family ties, and these need to be synced to provide a complete picture and to prepare the data for the next step: analyzing networks of names.

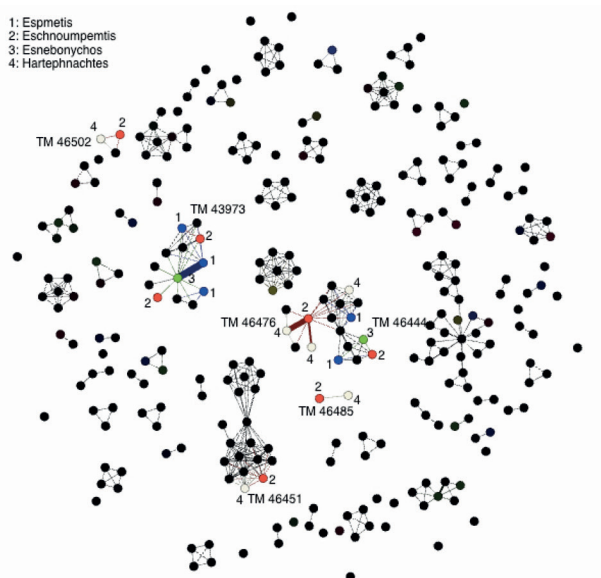


Fig. 22.1. Visualizing individuals co-occurring in texts.

The application of SNA to onomastics is another avenue that has not yet been explored. By linking names on the basis of genealogical relations (since names are the result of conscious choices made by parents), the co-occurrence of names in communities can be mapped, which opens up new possibilities for quantification and interpretation (Broux 2015b). A name's popularity can be calculated by means of its in-degree (i.e. how many other names point to it), while the density of the network, the number of reciprocal links and the weight of these links can tell us something about the social motives behind these naming patterns. For the local elite of Roman Egypt, for example, descent was of prime importance, since membership was strictly hereditary, and by limiting themselves to a specific collection of names, they could express family and community ties. Moreover, networks like these can help us evaluate the perception of names in antiquity, as well as determine the linguistic origins of undefined names, on the basis of their location in the graph.

## **22.3. Goals**

### **22.3.1. Study of naming practices**

The collection of names from across the entire Mediterranean will lead to a large-scale study of naming practices in the ancient world, and how these reflect changes in society at large. A major transition point is of course the steady integration of regions and states across the Mediterranean and Western Europe into the Roman Empire. The focal point will therefore be the impact of the Roman occupation on traditional naming and identification conventions in different provinces. Regions where pre-Roman material is also available (e.g. Gaul, Magna Graecia, Asia Minor) are especially significant when mapping aspects of continuity and change chronologically. Moreover, results from both eastern and western provinces will be compared to study uniformization, whether imposed from above or spread out from below.

### **22.3.2. Towards a Facebook of the ancient world**

Eventually, the goal of Trismegistos is to recreate a prosopography of the Greco-Roman world. Reconstructing social networks of the past will help us gain a better understanding of the mechanisms of interaction in the ancient Mediterranean, not only on the micro level (individuals), but also on the mesa (communities) and even macro (regions, empires) levels. At the same time connections and communication across these different levels can be analyzed: how individuals, as members of local communities, were integrated into larger political structures (top-down approach), and how these communities responded to impositions from above (bottom-up approach). Social models, such as the six degrees of separation theory, can be tested, to check whether our 'small world' perception is indeed the result of present-day technology and mass-communication, or if similar structures of interconnectivity existed, and, if so, what the conditions for this ancient globalization were back then. Mark Zuckerberg out. Enter Trismegistos.

## References

- BROUX, YANNE. 2013a. "Creating a New Local Elite: The Establishment of the Metropolitan Orders of Roman Egypt". *Archiv für Papyrusforschung und verwandte Gebiete* 59 (1): 143–153. <http://www.degruyter.com/view/f/apf.2013.59.issue-1/apf.2013.59.1.143/apf.2013.59.1.143.xml>.
- . 2013b. "Explicit Name Change in Roman Egypt." *Chronique d'Égypte* 88: 313–336. <http://dx.doi.org/10.1484/J.CDE.1.103760>.
- . 2015a. *Double Names and Elite Strategy in Roman Egypt*, volume 54 of *Studia Hellenistica*. Leuven: Peeters. [http://www.peeters-leuven.be/boekoverz\\_print.asp?nr=9490](http://www.peeters-leuven.be/boekoverz_print.asp?nr=9490).
- . 2015b. "Graeco-Egyptian Naming Practices: A Network Perspective." *Greek, Roman and Byzantine Studies* 55: 706–720. <https://lirias.kuleuven.be/handle/123456789/485372>.
- . 2015c. "Re: Apatores. Identification Issues and Loss of Status in Roman Egypt". *Zeitschrift für Papyrologie und Epigraphik* 194: 212–214. <https://lirias.kuleuven.be/handle/123456789/481814>.
- BROUX, YANNE, SANDRA COUSSEMENT, AND MARK DEPAUW. 2010. "Καὶ ὡς χρηματίζει and the Importance of Naming in Roman Egypt." *Zeitschrift für Papyrologie und Epigraphik* 174: 159–166. <http://www.jstor.org/stable/41291026>.
- BROUX, YANNE AND MARK DEPAUW. 2015. "The Maternal Line in Greek Identification. Signalling Social Status in Roman Egypt (30 BC-AD 400)." *Historia: Zeitschrift für Alte Geschichte* 65: 467–478. <https://lirias.kuleuven.be/handle/123456789/436714>.
- BROUX, YANNE AND SILKE VANBESLAERE. 2017. "Identifying Individuals through Network Visualization." In *Spaghetti Monsters At Dente*, edited by Y. Broux. Leuven: Trismegistos Online Publications. <http://www.trismegistos.org/top.php>.
- COUSSEMENT, SANDRA. 2016. *Because I am Greek: Polyonymy and the Expression of Ethnicity in Ptolemaic Egypt*, volume 55 of *Studia Hellenistica*. Leuven: Peeters,. <https://lirias.kuleuven.be/handle/123456789/349966>.
- DEPAUW, MARK. 2017. "Roman Influence on Rituals of Identification in Egypt." In *Imperial Identities in the Roman World*, edited by W. Vanacker and A. Zuiderhoek, London – New York: Routledge: 176–198. <https://www.routledge.com/Imperial-Identities-in-the-Roman-World/Vanacker-Zuiderhoek/p/book/9781472440815>.
- DEPAUW, MARK AND WILLY CLARYSSE. 2013. "How Christian was Fourth Century Egypt? Onomastic Perspectives on Conversion." *Vigiliae Christianae* 67(4): 407–435. <http://booksandjournals.brillonline.com/content/journals/10.1163/15700720-12341144>.

- DEPAUW, MARK AND BART VAN BEEK. 2009. "People in Greek Documentary Papyri. First Results of a Research Project." *Journal of Juristic Papyrology* 39: 31–47. [http://www.trismegistos.org/ref/depauw\\_vanbeek.pdf](http://www.trismegistos.org/ref/depauw_vanbeek.pdf).
- VAN HOOLAND, SETH, MAX DE WILDE, RUBEN VERBORGH, THOMAS STEINER, AND RIK VAN DE WALLE. 2015. "Exploring entity recognition and disambiguation for cultural heritage collections." *Digital Scholarship in the Humanities* 30: 262–279. <http://dsh.oxfordjournals.org/content/30/2/262.abstract>.

## 23. Epigraphy and onomastics in the Hesperia databank

*Noemí Moncunill,\* Javier Velaza\*\**

### **Abstract**

The first part of this work provides a general overview of the features and advantages of the digital epigraphic corpora on the basis of the experience gained in the last years within the Hesperia project. The second part of the paper provides a detailed presentation of the new sections available in the Hesperia databank devoted to indigenous personal names and divinity names.

**Keywords:** Hispania, epigraphy, onomastics, digital corpora, Palaeohispanic languages and writings

### **23.1. Introduction**

The aim of this work is to do a general overview of the computer-based epigraphic corpora, to think about their features and advantages, taking the experience gained in the last years within the Hesperia project as a starting point.<sup>1</sup>

The first thing that necessarily needs to be highlighted is that traditional epigraphic corpora have certain limits that are imposed by their morphology and format. If summarizing, there are three main and most evident limitations:

- a) One-dimensional format. The monument's description, the textual edition, the critical apparatus and remarks are displayed one

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after another, with no wider possibility to link one to another than through some indices, which by the way are rarely detailed enough. Not even in the most extended indices, as those in CIL, the connexions between inscriptions through such relevant data as their date, palaeography or onomastics are set clear. Obviously, those connexions can be made by the users in their mind, but when the corpus displays thousands or tens of thousands of inscriptions, it looks too optimistic to take for granted that most readers will have the aptitude such work takes.

- b) Ephemeral usefulness. It looks also obvious that a traditional corpus will necessarily be always ephemeral for many reasons: new inscriptions cannot be added, mistakes cannot be corrected, text editions cannot be improved and modifications based on new evidence or knowledge cannot be introduced, among other limitations. Of course some of these problems have hardly been solved by publishing some supplements, but it is widely known that these are partial solutions only.
- c) Authoritative work. In a traditional corpus, editors impose their knowledge in a large range of features, and thus they interfere in the utility of other views, to the extent of depreciating them too much. When it comes to an epigraphic corpus that is written in a wide-known language, such as Latin, this *auctoritas* becomes particularly powerful regarding the reading of the epigraphic text, its checking being not possible all the time for users, particularly for those who are not experts on the subject. But when it comes to fragmentary languages, with very low or even no language deciphering at all, and with many doubts on decoding, the truth is that the influence of the editor is extremely high and involves some risks that they do not always come to terms with successfully.

In our opinion, these limitations can be solved or, at least, diminished by a proper and efficient use of the tools IT puts to our disposal. Although this is no longer anything of new, many attempts to use them so far have brought to an output too close to the traditional, non-innovative epigraphic corpora, considering the features of such new tools. To get over one-dimensional formats, an open, adaptable digital structure must be created that shall take the most out of every single datum in the database. Besides, getting over an ephemeral usefulness requires the possibility not just to keep adding new data, but also



to connect the database with any other tool with a similar structure and to extend the platform with any new or advisable features. Finally, the authoritative temptation must be also avoided, particularly through systems that shall bring to users the possibility to take their own decisions in certain issues of an open debate and, at the end of the day, to customize their own corpus.

Along with the above-said, some other advantages any digital edition shall bring must be taken into account, although it looks unnecessary to discuss them: for instance, an online building of the corpus shall allow cooperation and simultaneous work of interdisciplinary teams that will not only contribute to speed up the work and check the achievements, but also to enrich the views in such studies and the analysis of the monuments and their texts. The open-access format of the corpus means also a big leap for research in this field, along with an important service of transferring knowledge to society. However, it must be recalled that every corpus shall be adapted to the specific features of the documents and their epigraphic culture (and other sources, eventually) has left to us. And such terms require a constant dialogue between epigraphists and technicians since the very beginning of the project, in spite of the fact that they do not always come to understand each other. Those projects that had any of these groups prevailing at the start of the project have proved to have insuperable lacks through their stages.

## 23.2. The Hesperia project

All above-mentioned principles have been taken into account in Hesperia project, its main goal being to gather all linguistic evidences from Palaeohispanic languages, that is, pre-Roman languages in the Iberian Peninsula<sup>2</sup>. First of all, we need to recall these are very different materials as for their quantity, quality and reliability. Ancient Hispania left us epigraphic texts in at least four languages: Tartessian, Iberian, Celtiberian and Lusitanian — the possibility there are also some texts in Palaeobasque language is still *sub iudice*<sup>3</sup> —, mainly written in four epichoric writing systems — Tartessian, southeastern-Iberian, northeastern-Iberian and Greek-Iberian script.

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<sup>2</sup> General presentations of the project can be found in Orduña forthcoming, Orduña and Luján forthcoming, and Velaza 2014.

<sup>3</sup> Concerning this subject, see Velaza 2009.

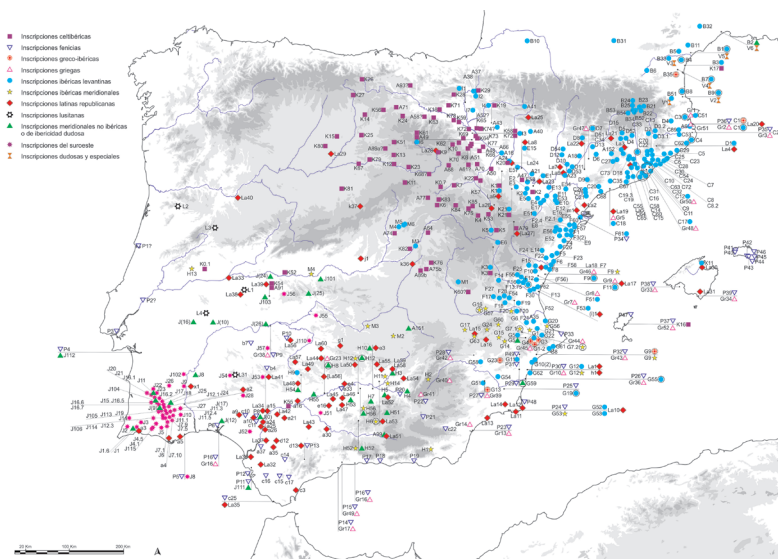


Fig. 23.1. Map of the Palaeohispanic inscriptions attested in the Iberian Peninsula.

The current knowledge of each of these scripts is in very different stages, just as when it comes to their languages deciphering. Along with the epigraphic texts there are also other evidences, as those from onomastics — anthroponymy and theonymy preserved in Roman inscriptions found in these territories, and toponymy from Classic sources — and some notes transmitted by several authors.

Hesperia was born as a natural successor in the digital era of the main corpus for Palaeohispanic languages, that is *Monumenta Linguarum Hispanicarum*, published between 1975 and 2001 by Jürgen Untermann. The project conception is due to Javier de Hoz and its digital platform has mainly been developed by Eduardo Orduña. Nowadays it is coordinated by an interdisciplinary and interuniversity team with researchers from the Universidad Complutense de Madrid, the Universidad del País Vasco, the Universidad de Zaragoza and the Universidad de Barcelona. There are currently several sections open for searching (<http://hesperia.ucm.es/>).

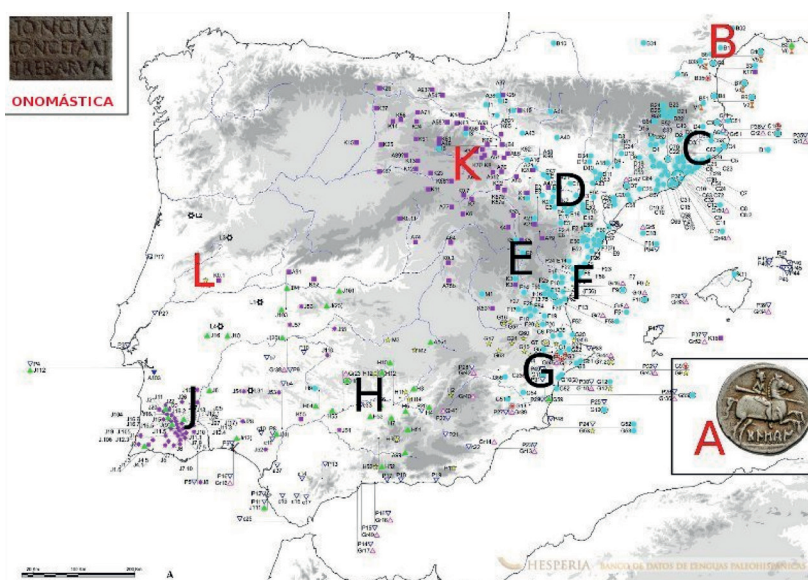


Fig. 23.2. Dispersal areas of Palaeohispanic inscriptions and sections available in Hesperia databank.

- I. Partial epigraphic corpora from B zone (Iberian inscriptions from the south of France), K zone (Celtiberian inscriptions) and L zone (Lusitanian inscriptions). All of them follow the same data form made of six tabs corresponding to “general features”, “text”, “epigraphy and paleography”, “pictures”, “archaeological context” and “bibliography”. The databases are linked between them through a powerful engine for simple and complex searches, and pdf documents as well as maps can be created with the resulting outcomes. Work is currently being focused on C and D zones (Iberian inscriptions in Catalonia), which is scheduled to be open for search by the end of 2016.
- II. A numismatic database with its specific four-tab structure: “general features”, “inscription”, “language and writing” and “bibliography”, where all Paleohispanic mints are gathered, no matter their scripts or languages.
- III. An onomastic database, with a specific search engine allowing combined searches with any of the elements from the identified onomastic formulae.

Beyond finishing, checking and updating the already-open sections, the team currently works on transversal fields, such as lexicon, as well as on creating several kinds of tools, as the possibility of displaying the corpus according to alternative readings — which turns out to be essential in epigraphic contexts with a lower level of decoding, as in Tartessian, although its applicability to other fields is still being tested —.

Besides, the team has also decided to consider the potential applicability of this corpus structure to other cultures of the western Mediterranean. With such aim, prof. Francisco Beltrán leads the AELAW (Ancient European Languages and Writings), with the participation of researchers from ten different countries to build in future a single corpus with the evidences from all fragmentary languages documented in the western Mediterranean for the Ancient times.

### 23.3. The new sections on onomastics

The Hesperia databank has been recently extended with a new resource on indigenous onomastics.<sup>4</sup> More specifically, the new sections now available are devoted to the anthroponymy and theonymy, leaving for the near future the data referring to toponymy and ethnonymy, which are not yet available in open access.

In this new section we have compiled all the pre-Roman personal names and divinity names attested both by direct and indirect tradition. This represents, so far, a total of nearly 6,000 records. Names attested in direct sources are those that can be identified in epichoric epigraphies; the second group, in its turn, contains the names that can be identified in the so-called colonial epigraphy, as well as in literary sources. Regarding the chronology of the epigraphic material, the oldest texts are the Iberian, which can be dated back to the 5th century BC, whereas the most recent ones are the Latin inscriptions from the high-imperial age. Thus, the processed information can be classified into one of these groups:

- Indigenous names in Iberian inscriptions
- Indigenous names in Celtiberian inscriptions
- Indigenous names in Lusitanian inscriptions
- Indigenous names in Greek inscriptions
- Indigenous names in Latin inscriptions
- Indigenous names in ancient authors

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<sup>4</sup> See Vallejo 2016 and Moncunill 2016.

The Greek and Latin epigraphy group mainly contains inscriptions from the Iberian Peninsula; nevertheless there are also a few exemplars coming from outside this territory, but which clearly refers to individuals of Palaeohispanic origin. The most significant document that fits into this category is the Ascoli bronze, which displays a long list of Iberian equites to which the Roman citizenship was given. As a matter of fact, this artefact has become the most important document for the study of Iberian personal names.

As said above, the database contains about 6,000 records so far; each of them reports a divinity name and/or the whole onomastic formula of individuals whose complete name presents at least one indigenous element. This means that each item is devoted to a concrete person, whose onomastic formula might be composed by several indigenous names. The information of each record is completed with a bibliographical apparatus, and the find-spot coordinates, together with a map. Moreover, the database allows using this geographic information to create new linguistic maps, which represents one of the main strengths offered by this new tool of the Hesperia databank.

The following (Fig. 3) could be a good example of one of the above-described records. This Latin inscription from southern Spain mentions a woman with a Latin nomen, *Aelia*, followed by an Iberian cognomen, *Belesiar*, as well as the name of an indigenous divinity, *Betatun*. Thus, a single table records an indigenous personal name together with an indigenous god. The lower part is reserved for the bibliographical references, the geographic information and, last but not least, the map.

ANTROPONIMIA Y TEONIMIA (CORPUS)

Secuencia onomástica: **Aelia Belesiar**

Teónimo: **Betatun {Betatun}**

Nomen: **Aelia** Cognomen / Nombre único: **Belesiar**

Filiación:  Unidad suprafamiliar:

Bibliografía: (Pase el cursor sobre las zonas en azul para ver la referencia completa)

**Ordúña 2009, 359-362**

Localidad: **Fuente del Rey (J)**

Provincia: **J**

Observaciones:

Mapa:

Primero  
Último  
Siguierte  
Anterior  
Buscar  
Generar PDF

Filtrar:

Registro actual: 1338 de 9841

Fig. 23.3. Personal-names and divinity-names record in Hesperia databank.





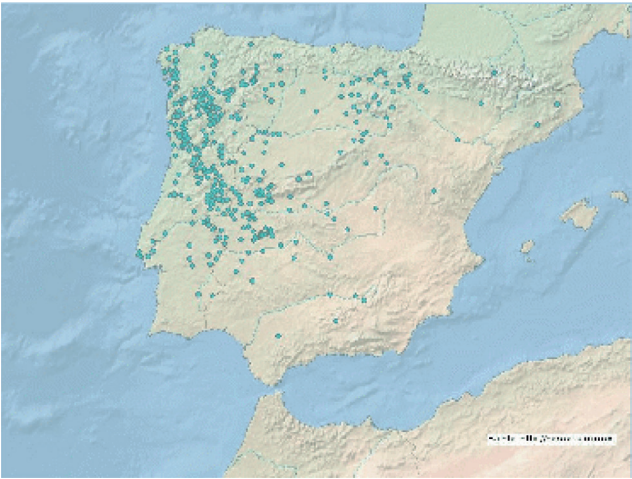


Fig. 23.6. Dispersal area of indigenous divinity names.

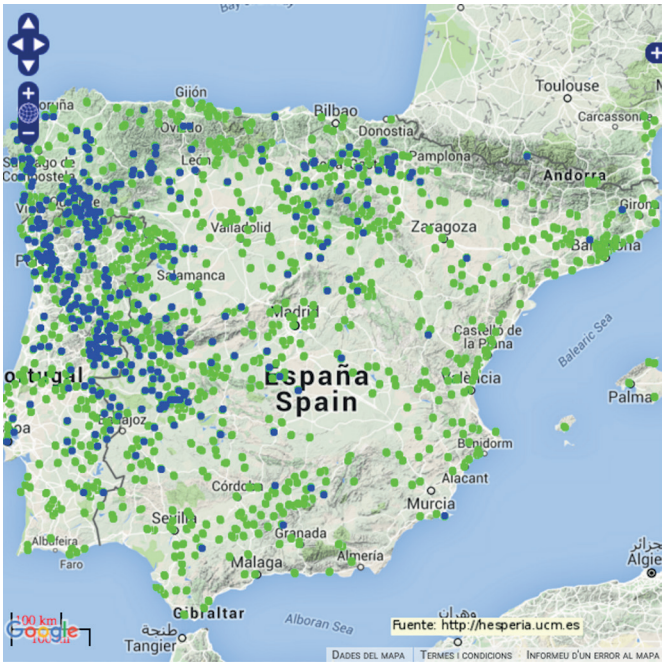


Fig. 23.7. Dispersal areas of indigenous divinity names and personal names.

Thanks to the search engine, all these points can then be redistributed into smaller groups to draw linguistic areas or isoglosses, on the basis, for instance, of the attestation of a well-known anthroponymic element or the dispersal area of significant phonetic features. In the following maps it is displayed, in the first place (Fig. 8), the attestation area of names containing the element *biur*, which clearly corresponds to the Iberian area, that is, the non indo-European half of the Iberian peninsula; and, in the second place (Fig. 9), it is displayed the dispersal area of the name *Tancinus*, which clearly corresponds to the indo-European part.

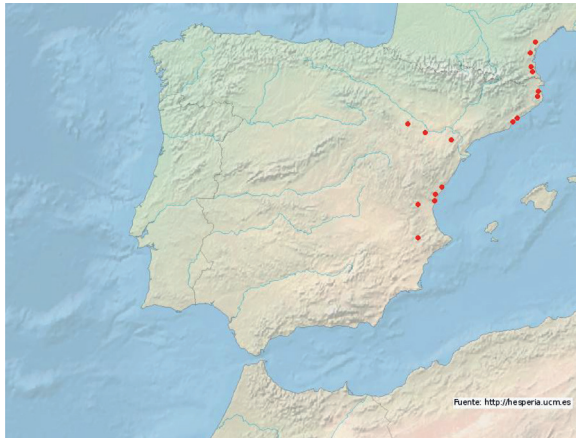


Fig. 23.8. Dispersal area of the anthroponymic element *biur*.

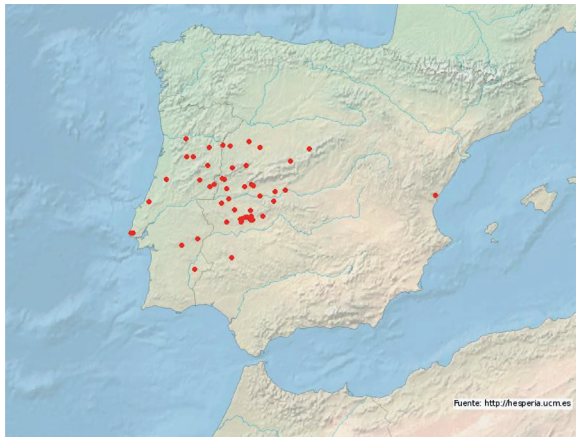


Fig. 23.9. Dispersal area of the name *Tancinus*.



It must be pointed out that the Hesperia project is, in general terms, following the main standards for epigraphic databanks and text editing, and we are now exploring ways to interact with the linked open data ecosystem (tagging persons for compatibility with SNAP, places for compatibility with Pelagios/Pleiades, text references for compatibility with IDEs, citations with CTS, object metadata with EAGLE, etc.).<sup>5</sup>

The example below could provide an easy way to show to what extent the interrelationship between different open-access databanks might be useful even in the present stage of the Hesperia project, where prosopography and toponymy have not yet been fully developed.

The following file (Fig. 10) contains information on a person's or god's name observed in an Iberian rock inscription in the Pyrenees. Nevertheless, the structure of the word as well as its phonetic features show no possible interpretation in Iberian. In consequence, other possibilities have to be considered, such as it could actually be an adaptation of a Greek name. As a matter of fact, the same name is attested as a mythological character in literary sources (Parthenius of Nicaea XXX 1; Ovid, *Ibis* 434), as well as recorded as a personal name in open-access databanks such as LGPN (V5a-20577) or Trismegistos (Per 222620). Therefore, in this particular case, the linking between open-access data could be helpful for the linguistic analysis itself.

The screenshot shows a web form titled 'ANTROPONIMIA Y TEONIMIA (CORPUS)'. It contains several input fields and buttons. The 'Secuencia onomástica' field is filled with 'teleus'. Below it, 'Nombre:' and 'Cognomen / Nombre único:' are both filled with 'teleus'. To the right, a vertical menu has buttons: 'Primero', 'Último', 'Siguiendo', 'Anterior', 'Buscar', and 'Generar PDF'. Below the form, there is a 'Bibliografía:' section with a link to 'Abelant 1976, 81'. A map of the Iberian Peninsula is shown on the right, with a red dot indicating the location. Below the map, it says '(Click para ampliar)'. At the bottom, a note states: 'No parece ser un antropónimo propiamente ibérico. ¿Quizás adaptación del griego (cf. LGPN 5a, 20577; TM Per. 12612)? Según una interpretación dual, sería teleus.'

Fig. 23.10. Record of a possible Greek name attested in an Iberian inscription.

A similar consideration might also apply, for instance, to another important document in the Palaeohispanic epigraphic landscape, namely the III Botorrita Bronze plaque, written in Celtiberian language

<sup>5</sup> We thank Gabriel Bodard for his observations at this regard.

and script but containing a considerable amount of foreign names, such as Latin or Greek.<sup>6</sup> This could be the case for *markos* (*Marcus*), *bolora* (*Flora*), *kinbiria* (*Cimbria*), *antiokos* (*Antiochus*), *bilinos* (*Philinus*), *bilonikos* (*Philonicus*), *tais* (*Thais*), *tiokenes* (*Diogenes*), and so on. We could finally mention, in this same regard, the Gaullish names observed in some Iberian inscriptions from southern France: *ásatile* (*Adsedilus*, CIL III 5373), *tesile* (*Tessillus*, CIL III 14368.28), *uasile* (*Vassil(l)us*, CIL XII 2286), *katubaře* (*Catumarus*, CIL 3, 4263), etc.

To sum up, the new dynamic sections of Hesperia provide an essential boost to a field of study, the detection of anthroponymic areas, which, thanks to the previous work by M. Gómez Moreno and J. Untermann, has been proved to be very productive for the comprehension of the linguistic diversity of the ancient Iberia. The study of the indigenous languages on the basis of the distribution of their personal names is actually essential, sometimes even the only available means, for the definition of these areas that remained anepigraphic in pre-Roman times (see the map in fig. 2, with the dispersal areas of Palaeohispanic inscriptions). Obviously, one of the main advantages of the digital format is that it offers the possibility to regularly update the corpus with new data. However, the most remarkable difference from a traditional corpus is that it allows the user to connect and freely cross the information, and to project the results automatically on a map, which makes this a powerful resource for new research and new results.

CTS = Canonical Text Services (protocol to cite digitally-available texts in a canonical way).

EAGLE = The Europeana network of Ancient Greek and Latin Epigraphy:  
<http://www.eagle-network.eu/>

IDEs = Integrating Digital Epigraphies project.

LGPN = The Lexicon of Greek Personal Names:  
<http://www.lgpn.ox.ac.uk/>

Pleiades = A community-built gazetteer and graph of ancient places:  
<http://pleiades.stoa.org/>

SNAP = Standards for Networking Ancient Prosopographies project:  
<http://snapdrgn.net/>

Trismegistos = Interdisciplinary portal of papyrological and epigraphical resources formerly Egypt and the Nile valley (800 BC-AD 800):  
<http://www.trismegistos.org/>

<sup>6</sup> Vid. Untermann's proposal in MLH IV, K.1.3.

## References

- MONCUNILL, NOEMÍ. 2016. "Novecientos antropónimos ibéricos." *Palaeohispanica* 16: 81–94. <http://ifc.dpz.es/recursos/publicaciones/35/76/06moncunill.pdf>.
- ORDUÑA, EDUARDO AND EUGENIO R. LUJÁN. Forthcoming. "Philology and technology in the Hesperia databank." *Journal of History, Literature, Science and Technology*.
- ORDUÑA, EDUARDO AND EUGENIO R. LUJÁN. Forthcoming. "Implementing a database for the analysis of ancient inscriptions: the Hesperia electronic corpus of Palaeohispanic inscriptions." In *Methods and means for digital analysis of ancient and medieval texts and manuscripts*, edited Tara Andrews and Caroline Macé. Leuven: Peeters.
- UNTERMANN, JÜRGEN AND DAGMAR WODTKO. 1975-1997. *Monumenta linguarum hispanicarum*, Wiesbaden: L. Reichert.
- VALLEJO, JOSÉ MARÍA. 2016. *Banco de Datos Hesperia de Lenguas Paleohispánicas (BDHESP)*. III. *Onomástica paleohispánica*. I. *Antroponimia y teonimia*. 1. *Testimonios epigráficos latinos, celtibéricos y lusitanos, y referencias literarias*. Vitoria: Universidad del País Vasco.
- VELAZA, JAVIER. 2009. "Epigrafía y literacy paleohispánica en territorio vascón: notas para un balance provisional." In *Acta Palaeohispanica IX. Actas del Coloquio sobre lenguas y culturas paleohispánicas*, volume 9. Zaragoza, 2009 611–622. URL <http://ifc.dpz.es/recursos/publicaciones/29/54/40velaza.pdf>.
- VELAZA, JAVIER. 2014. "Hesperia: un nou concepte de corpus epigràfic online". *Auriga* 73: 44–45.



## 24. The Power of Images at Aphrodisias: How Digital Resources Can Transform our assessment of Palaeography

*Abigail Graham\**

### **Abstract**

This paper will consider how the publication of a large digital corpus The Inscriptions of Aphrodisias Reynolds et al. (2007) has shaped the assessment of inscriptions, particularly regarding palaeography and the dating of inscriptions. A case study of dedicatory inscriptions from the Temple of Aphrodite at Aphrodisias will explore how our approach to palaeography and dating has evolved with digital resources, identifying areas where challenges remain and considering how improvements could be made in both our approach to and in publication of epigraphic materials.

**Keywords:** Dating, Palaeography, Ordinatio, Letter forms, Aphrodisias, Context, Recarving

### **24.1. Introduction**

#### **24.1.1. Caveat Lector: Defining Palaeography and traditional approaches**

As the co-ordinator and lecturer on three graduate level courses of Roman Epigraphy, I am invariably asked the same question: how do you use letterforms to date inscriptions? My answer is always the same: “very carefully”. Studying palaeography within the discipline of ancient epigraphy can be a journey into thorny hedge where one can easily “fall into that category of human endeavor known as stylistic attribution and inevitably involve subjectivity”.<sup>2</sup> Stephen Tracy advises that palaeographic surveys should be carried out with caution:

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<sup>2</sup> Tracy 1995, 3-4.

"Caveat Lector must needs be our motto". The study of palaeography is problematic, as demonstrated by W. Eck and C. Roueché during the conference, on a number of levels, both in the way it is defined and the ways in which it is employed. Many scholars dismiss lettering as a means of dating and they make an important point: dating by a single criterion, especially a stylistic one, is somewhat precarious. When studied in isolation, letterforms present stylistic variations that may be characteristic of a specific individual, workshop or an urban area. While observations about carving techniques can be helpful in specific case studies, they are more problematic when applied generally on a broader scale (e.g. to larger geographical areas or time frame) where archaisms, local styles, and variations can create distortions.<sup>3</sup> Similar caution would be applied in dating a sculpture on the basis of a hair fragment. Analysis of statues considers a number of factors, material, hairstyle, drapery and/or context. Inscriptions are doubly difficult, as they fall into categories of both text and an object. While there is potentially more information, there is also a greater chance that it will be contradictory. Thus the use of lettering, an "imprecise science", is better used in combination with a number of different factors.<sup>4</sup> Despite the aforementioned limitations, a number of informative palaeographic studies have been produced. The success of these is based on detailed commentaries on a specific corpus of material, a transparent methodology and the incorporation of numerous high quality images.<sup>5</sup>

A second issue in the study of palaeography involves the access and publication of epigraphic materials. Access to large corpora of inscriptions has traditionally been limited to a small audience of scholars and site visitors. Apart from a few museum collections, which happen to have inscriptions arranged in roughly chronological order,<sup>6</sup> there are few places where one can visually experience the development of carving styles over time. For the lucky few who attain access (and permission)

<sup>3</sup> Susini 1973; Petrucci 1993; Di Stefano Manzella 1995, 163-181; Cooley 2012, 433; Bruun and Edmondson 2015, 122-125.

<sup>4</sup> Harris 1989, 26-9; Bodel 2001, 3-5; Di Stefano Manzella 2007, 393-418 and Cooley 2012, 432-435.

<sup>5</sup> For example: Gordon and Gordon 1957 offers more than 50 plates and figures, Di Stefano Manzella 1987 provides 218 illustrations, Tracy 1990, 1995, 2003 uses over 60 plates and figures in each volume.

<sup>6</sup> Perhaps the finest example of a museum in which one can gain an understanding of palaeography (and inscriptions as whole) is the Museo Epigrafico Nazionale, Roma.

to study a large corpus of inscriptions, publishing these texts with supporting images can be challenging and expensive. Studies of palaeography in ancient inscriptions have often been, by necessity, selective with images making it difficult for both the author and readers to develop a detailed understanding of carving trends and practices. In this traditional format, inscriptions were also separated from their archaeological context and the accompanying artwork while the reader, viewing only the lettering, was often removed from the visual elements of the inscription (e.g. the type of stone, use of spacing and decoration, letter size). This is a suboptimal way of assessing epigraphic evidence. The advent of online corpora have increased both the access and the development of discussions regarding epigraphic monumentality, including new methodologies, approaches as well as attempts to redefine genre classifications and terminology.<sup>7</sup> A number of recent studies have used changes in the appearance of inscriptions over time, such as the use of different media, decorative and paratextual elements<sup>8</sup> (e.g. ivy leaves as interpuncts (*hederae distinguentes*)),<sup>9</sup> abbreviations<sup>10</sup> and spacing between words<sup>11</sup> alongside lettering, as dating criteria.<sup>12</sup> Panciera's recent article, in particular, advocates the significance of the public context and visibility of inscriptions.<sup>13</sup> In this vein, it is worth considering how the physical characteristics of an inscription belong within a broader assessment of a culture of writing. Is palaeography the study of letterforms alone? Was a focus on letterforms a deliberate choice or a product of the traditional constraints in accessibility and publication of epigraphic materials? The following case study from Aphrodisias will explore these questions further.

<sup>7</sup> Woolf 1996, 22-39, Eck 2010, Panciera 2012, 1-10, Graham 2013, 1-17. For a recent collection and analysis of epigraphic databases, see Elliott 2015, 78-85.

<sup>8</sup> On marks in the text see Susini 1973, 26 and Cooley 2014, 143-155.

<sup>9</sup> Hommel 1970, 293-303.

<sup>10</sup> Gordon and Gordon 1957, 111.

<sup>11</sup> On using space to reconstruct inscriptions see Alföldy 1995, 195-226, Grasby 2002, 151-176.

<sup>12</sup> For an extensive list of dating conventions cf. Di Stefano Manzella 1987, Chapter 20.

<sup>13</sup> "I would propose to regard as an 'inscription' any particular type of written human communication of the sort that we would today call unidirectional...not being addressed to a person or to a group but to a collectivity, and for this reason is made with the location, writing technique, graphic form and impagination, mode and register of expression chosen because they are most suitable to the attainment of its intended goal." Panciera, 2012, 8.

### 24.1.2. Outline

The focus of this paper is a series of rather unimpressive column dedications from the temple of Aphrodite at Aphrodisias. While the information recorded in the texts is unremarkable, the journey of these inscriptions from a paper epigraphic corpus to their recent publication as a digital corpus reveals an epic transformation in the format and approach to these materials. This study will begin with brief overview of previous published editions (e.g. Calder and Cormack 1962) followed by an assessment of the information available on the current Inscriptions of Aphrodisias (2007) website. Through careful assessment of text (including formula, vocabulary and spelling) and its presentation (the arrangement of the text, use of decoration and spaces, as well as lettering) in the images provided, this survey will demonstrate how the availability of published images and inclusion of dating criteria have increased the amount of information available whilst also adding clarity to the process of dating an inscription. By examining how we define and use palaeography to evaluate inscriptions on the Inscriptions of Aphrodisias website (Reynolds et al. 2007), we can observe how the discipline has evolved and what changes may be possible in approaches and the publication of epigraphic material.

## 24.2. Publishing inscriptions: a case study of Column Dedications from the Temple of Aphrodite at Aphrodisias

### 24.2.1. A brief introduction to the inscriptions I Aph 1.4 -1.6

Three inscriptions, each of which record the dedication of a column at the Temple of Aphrodite, will be the subject of this survey. The first two texts were noted as early as the 18th century and copied in a notebook by the British Architect Deering in the early 19th century. A third version of the text, was uncovered during excavations at the temple site by the French Engineer Gaudin in the early 20th century.<sup>14</sup> The inscriptions are recorded on *tabella ansata* (0.745 x 0.465m) as part of fluted marble columns of the peristasis, some of these have been reconstructed in modern restorations on the site.

<sup>14</sup> A comprehensive history of the history and bibliography, as well as a description of the resources can be found on the I Aph website: <http://insaph.kcl.ac.uk/iaph2007/iAph010006.html>.



These texts can be dated through a number of different criteria. Contextual association with construction of the temple, dates between the end of the 1st century BC and the early 1st century AD, though the land was clearly in use well before this time.<sup>15</sup> This is corroborated by coins depicting the temple, which date from 2 BC- 14 AD.<sup>16</sup> Prosopography is also informative: Gaius Julius Zoilos (freed by Caesar or Octavian), who dedicated the theatre at Aphrodisias ca. 28 BC, also dedicated the naos of the temple (IAph 1.2), perhaps posthumously.<sup>17</sup> The benefactor of the columns in this case study, Eumachos Diogenes, also comes from an established family that flourished well into the 2nd century AD.<sup>18</sup> Finally, the formula of the text the inscription and the vocabulary, particularly the term *philokaisar*, suggest a late Republican or Augustan date.<sup>19</sup> Before encountering the inscriptions face to face, the dating, function and meaning of these inscriptions appears to be quite straightforward. So let us examine the experience of viewing these inscriptions various published formats.

#### **24.2.2. Publishing IAPH 1.4 and 1.5 in MAMA VIII (nos. 347 & 348): A series of copies?**

Cormack published the first comprehensive catalogue of inscriptions from Aphrodisias as part of his *Monumenta Asiae Minoris Antiqua* volume VIII in 1962. This was a great undertaking that included texts as well as images. Two of the three texts (IAph 1.4 & 1.5) were

<sup>15</sup> Roueché and Smith 1996, 41-42 and Reynolds 1990, 37. References to Sulla's dedications are in Appian BC 1.97. Caesar and Augustus' acknowledgements of the sacred space are evident in IAph 8.27, 8.31 and 1.1.

<sup>16</sup> Coin type 41 depicts Augustus (OBV) and the temple of Aphrodite (REV) in MacDonald 1992, Plate V R131.

<sup>17</sup> The titles on the architrave inscription, *soter* and *euergetes*, are absent from Zoilos' other inscriptions and may imply a posthumous dedication, perhaps by the *boule* and *demos* (Reynolds 1990, 38).

<sup>18</sup> The success of Eumachos Diogenes' family, which included the first known Aphrodisian to hold a procuratorship in the 2nd century AD, reveals an enduring significance for his family monuments in the city (Reynolds 1999, 327-334).

<sup>19</sup> The formula of the dedication, which lists the benefactor first is evident throughout the Hellenistic period in Aphrodisias (and Asia Minor) until the early Imperial Period, after which a new formula, beginning with recipients (e.g. Aphrodite and Imperial recipients), is predominant (cf. Graham 2013, 387-390). The Augustan and early Tiberian uses of the *philokaisar* are known from a dedication at Ioulis dated ca. 27 BC - AD 14 (SEG XLVIII (1998) no. 1129) and in a monument to Ti. Cl. Drusus in Patara (SEG XLIV (1994) no. 1205). For significance and date of the title see Buraselis 2000, 101-105.

published here as MAMA 437 and MAMA 438 respectively, while the third text was merely mentioned as a further copy.

MAMA 437

Εὐμαχος Ἀθηναγό-  
ρου τοῦ Ἀθηναγόρου  
τοῦ Εὐμάχου Διογένη-  
ς φιλόκαισαρ καὶ Ἀμιάς  
Διονυσίου φύσι δὲ Ἀδρά<σ>του  
τοῦ Μόλωνος Ὀλυνπιάς  
τὸν κίονα θεᾶ Ἀφροδίτη  
καὶ τῷ δήμῳ.

MAMA 438

Εὐμαχος Ἀθηνα-  
γόρου τοῦ Ἀθηναγό-  
ρου τοῦ Εὐμάχου Δι-  
ογένης φιλόκαισαρ  
καὶ Ἀμμιᾶς Διονυσί-  
ου φύσι δὲ Ἀδράστου  
τοῦ Μόλωνος Ὀλυν-  
πιάς τὸν κίονα θεᾶ  
Ἀφροδίτη καὶ τῷ  
δήμῳ.

Translation by author:

Eumachos Diogenes, son of Athenagoras, the son of Athenagoras, the son of Eumachos, devoted to Caesar, and Ammias Olympias, daughter of Dionysius, the natural daughter of Adrastus, the son of Molon, (dedicated) a column to the goddess Aphrodite and the People.

The two published texts reveal similar inscriptions with a few variations.<sup>20</sup> Iaph 1.4 (MAMA 437) has a slightly less impressive ordination, particularly in line 4 with an odd line break, a misspelling of Ammias (as Amias) and Adrastus (line 5) with a sigma omitted. It is difficult to determine how or why these errors occurred without indications of spacing or an examination of the stone. One could argue that spelling

<sup>20</sup> MAMA 437 and 438 are represented in their digital format as published the Packhum website (Aphrodisias 108 and 109). <http://epigraphy.packhum.org/inscriptions/main?url=oi\%3Fikey\%3D256987>.

and arrangement of the text were not important to a broader audience at Aphrodisias, however, this is negated by a second copy of the dedication (IAph 1.5, MAMA 438), which portrays a more skillful execution and arrangement of the text. Spelling errors are rectified and the arrangement of the text creates a distinction in Line 5 between Eumachus and Ammias, and for the demos, which is isolated on the last line. These subtle variations only emerge with a close reading of the text, and it would be easy to overlook them. The published format of the texts also makes them appear similar in lettering and arrangement (e.g. left indentation).

The small (thumbnail) and low quality image provided in MAMA 437 provides a basic understanding of the appearance of the inscription, though it does not allow for a critical assessment of the lettering or arrangement of the text. The image reflects lettering that is recognizable (to the trained eye) as late Republican/ early Augustan at Aphrodisias with deep incisions, small serifs, as well as varying letter heights, but it is not sufficient for a detailed study. MAMA 438 is not published with a photograph, so one must rely upon a comparison of the texts alone.

The third text version of this text is mentioned in the commentary and based on the information provided (two similar texts and a reference to a “copy”) one would expect that it was very similar. The same editorial practice is employed in the parallel column dedications from a different benefactor (IAph 7 & IAph 8), where 2nd version of the text is noted (IAph 1.8) but only one (IAph 1.7, MAMA 450) was published. The apparent verisimilitude of the column dedications is corroborated by the published images, which depict two inscriptions (MAMA 437 and MAMA 450) with similar late 1st c. BC/early 1st c. AD lettering. When publishing a large corpus of inscriptions, referring to copies is understandable. However, treating texts as “copies” as opposed to individual monuments can, and in this case will, prove problematic.<sup>21</sup> While MAMA VIII offered a broader audience access to the inscriptions at Aphrodisias, the approach to the inscriptions and the quality of the images also imposed limitations that made it difficult to analyse the physical elements of the inscription or to question the proposed texts and restorations.

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<sup>21</sup> For another study of “copy” inscriptions at Aphrodisias Graham 2016.

### 24.2.3. Living in a digital world: the publication of Column Dedications in I Aph 2007 (I Aph 1.4)

The Inscriptions of Aphrodisias project was a groundbreaking endeavour both for publishing epigraphic materials and employing Epi Doc conventions with XML for marking up the text of an inscription. Its success has inspired a number of significantly larger projects with international scope and collaboration. The approach to the materials is detailed with categories covering physical characteristics, history of discovery and bibliography (which is important given the wealth of superlative scholarship).<sup>22</sup> In addition to search functions, the page is more interactive, the texts have been revisited, translations added, as well as commentary with weblinks to parallel texts. The organization of the inscriptions by context allows the reader to view the inscriptions in context and to gain a better understanding of the area's "epigraphic habit" (Fig. 1).

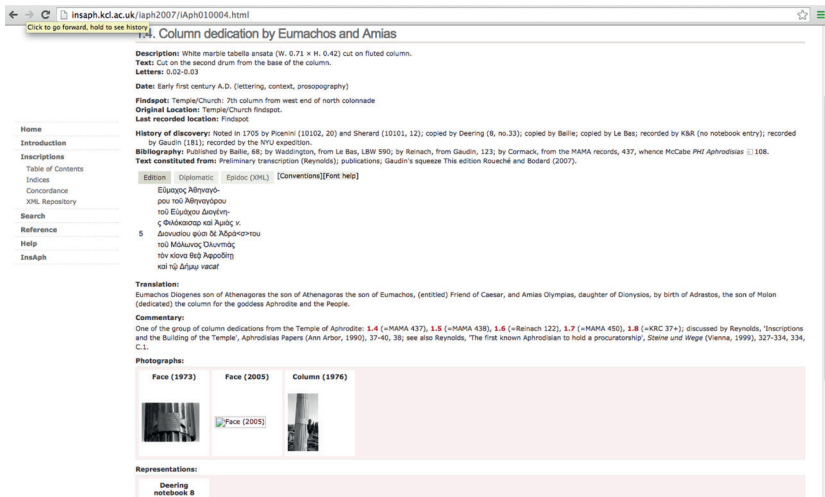


Fig. 24.1. Screenshot of I Aph 4 webpage.

<sup>22</sup> It is worth noting that websites, however they develop, will remain supplementary to published scholarship such as J. Reynolds wonderfully detailed *Aphrodisias and Rome* (1982).

In addition to the format of the webpage, a number of images have been published along with a drawing from Deering's notebook from the early 19th century. These resources provide an opportunity not only to view the inscription but to see how it has been studied over time. The dating of the inscription includes a list of the criteria upon which it was based: lettering, context, prosopography, adding a degree of transparency to the dating process. While the lettering is not subject to further description, the inclusion of weblinks to parallel texts allows the viewer to compare and contrast different inscriptions, developing his/her understanding this element.

The published texts of IAPH 1.4 and MAMA 437 present one significant variation: the inclusion of space indicators within the text. This practice allows the reader to see how the use of space relates with the text of the inscription, particularly in the case of line 4, where challenges in the text (misspelling of Ammias and carrying over of a single letter from the previous line), can be observed in the inclusion of a vacat at the end of the line.<sup>23</sup> The indentation on the last line also reveals a left orientation of the line which is more common in Late Republican/Augustan texts at Aphrodisias (e.g. IAPH 1.1, 1.7, 1.8 and 1.38), as opposed to the "justified" approach (indentations on both sides of the text to accentuate a name or word), which is more common in later Imperial inscriptions at Aphrodisias.

#### MAMA 437

Εὐμαχος Ἀθηναγό-  
ρου τοῦ Ἀθηναγόρου  
τοῦ Εὐμάχου Διογένη-  
ς φιλόκαισαρ καὶ Ἀμιάς  
Διονυσίου φύσι δὲ Ἀδρά<σ>του  
τοῦ Μόλωνος Ὀλυμπιάς  
τὸν κίονα θεᾶς Ἀφροδίτη  
καὶ τῷ δήμῳ.

<sup>23</sup> Vacats, more sparingly employed in late Republican and Augustan inscriptions at Aphrodisias, usually serve a grammatical and/or decorative function (e.g. giving distinction to a name or key elements/individuals in the text (cf. building dedications at the Sebasteion IAPH 9.1, 9.25, 9.112). This vacat serves little grammatical function, and is likely to be a result of the arrangement of the text/ omission in Ammias' name.

## IAph 1.4.

Εὐμαχος Ἀθηναγό-  
 ρου τοῦ Ἀθηναγόρου  
 τοῦ Εὐμάχου Διογένη-  
 ς Φιλόκαισαρ καὶ Ἀμιάς ν.  
 Διονυσίου φύσι δὲ Ἀδρά<σ>του  
 τοῦ Μόλωνος Ὀλυμπίας  
 τὸν κίονα θεᾶ Ἀφροδίτη  
 καὶ τῷ Δήμῳ vacat

High quality images on the website facilitate connections between the published text and the inscription. In the image of IAph 1.4 (Fig. 2), one can observe how descriptive elements manifest themselves in an inscription: how varying letter sizes (2-3 cm) represent a lack of uniformity and crowding as space becomes more cramped, and how, after the beautifully spaced upper lines (lines 1-3) the carver struggled (line 4) to fit the letters in, possibly noticing his spelling error only when there was extra space at the end of the line.

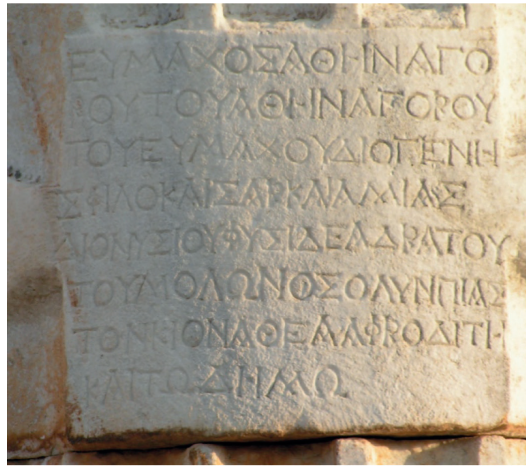


Fig. 24.2. Photograph of IAph 1.4.

Alongside spelling and the arrangement of the inscription, Letter-forms are more readily observed. Overall, the lettering is less uniform than later Imperial dedications, serifs are small and the strokes are both thick and deeply incised. Letter height varies significantly as does the size of omicrons (though this can be seen in a poorly rendered text throughout the Roman period). Angular forms such as alpha, lambda,

and mu all intersect at the top meeting at sharper angles than the more square versions of these letters that predominate in Imperial (post Augustan) inscriptions.<sup>24</sup> Letters also bear stylistic elements of the time: epsilons have a connected middle bar (this is often disconnected in Imperial versions of this letter), the rhos have small legs, making them appear more like their Latin counterpart, and the omicron has an oval shape with serifs only at one end of the lower bars.<sup>25</sup> Comparing these letterforms with parallel dedications at the temple (IAph 1.1, 1.2 - Zoilos' dedications, 1.7 and 1.8) reveals many similarities. Letterforms alone are not diagnostic but when combined with other elements, they can add to our understanding of a date.

#### **24.2.4. Looks can be deceiving. When Inscriptions defy our expectations: IAph 1.5 and IAph 1.6**

Based on the publication of these inscriptions in MAMA VIII, one could easily come to the conclusion that all the column dedications at the Temple of Aphrodite looked quite similar. However, upon visiting the site of Aphrodisias in the summer of 2004, I was (yet again) to be denied a simplistic interpretation of an inscription. Courtesy of the IAph2007 website, a broader audience can now bear witness to complex nature of these inscriptions. The first disparities between the two inscriptions (IAph 1.4 and IAph 1.5) can be observed in a comparison of letter sizes. IAph 1.4 records letters between 2-3 cm (with a variation of 1 cm), while IAph 1.5 varies only between 2.5- 2.75 cm (a variation of .25cm). The reductions in variation of letter size are part of a general standardization in letterforms during the Julio-Claudian period at Aphrodisias.<sup>26</sup> While significant variations in letter size can be observed in poorly executed inscriptions throughout Aphrodisias' history, one may not expect such a significant variation between two "copies".<sup>27</sup> The published text of IAph 1.5 also indicates indentations on both sides of the word *demos* in the bottom line. While double indentations are not unknown in Augustan inscriptions at Aphrodisias, they are more common in later Imperial inscriptions.<sup>28</sup>

<sup>24</sup> Compare with Hadrianic Lettering in the next section of the paper.

<sup>25</sup> "Legged" rhos are observed primarily in Augustan and Julio-Claudian dedications and also on coins (cf. note 15). This style letterform is increasingly less common after Flavian period at Aphrodisias.

<sup>26</sup> These Julio-Claudian texts record little if any variation in the size of letter forms.

<sup>27</sup> Graham (2015) illustrates a further case study of "copy" inscriptions at Aphrodisias.

<sup>28</sup> Double indentations in an Augustan text are attested (IAph 12.301, dating to 23-25

These discrepancies, which suggest that the two inscriptions may have been less similar in appearance, illustrate the importance of reading the descriptive elements of an inscription carefully.

MAMA 438

Εὐμαχος Ἀθηνα-  
γόρου τοῦ Ἀθηναγό-  
ρου τοῦ Εὐμάχου Δι-  
ογένης φιλόκαισαρ  
καὶ Ἀμμιᾶς Διονυσί-  
ου φύσι δὲ Ἀδράστου  
τοῦ Μόλωνος Ὀλυν-  
πιάς τὸν κίονα θεᾶ  
Ἀφροδίτη καὶ τῷ  
δήμῳ.

IAph 1.5.

Εὐμαχος Ἀθηνα-  
γόρου τοῦ Ἀθηναγό-  
ρου τοῦ Εὐμάχου Δι-  
ογένης Φιλόκαισαρ  
καὶ Ἀμμιᾶς Διονυσί-  
ου φύσι δὲ Ἀδράστου  
τοῦ Μόλωνος Ὀλυν-  
πιάς τὸν κίονα θεᾶ  
Ἀφροδίτη καὶ τῷ  
vac. Δήμῳ vac.

A high quality image (Fig. 3) illustrates further differences between the appearance of this inscription and the comparative materials from the site (IAph 1.1, 1.2, 1.4, 1.7 and 1.8), revealing regular letterforms (e.g. omicrons are less oval and more precisely rendered throughout) with a clear contrast between slender strokes and large deep triangulate serifs. There are no legged rhos, the middle bars of the epsilons are separated from the stem, and the omegas are circular with two large bars that are heavily serified on both ends (e.g. compare the omega on the bottom line of IAph 1.4 with its counterpart of IAph.1.5).

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BC), but the practice is more common in Julio-Claudian dedications (Sebasteion: 9.34, 9.36, 9.37, 9.38, 9.39, The city wall 12.515 (Claudian).



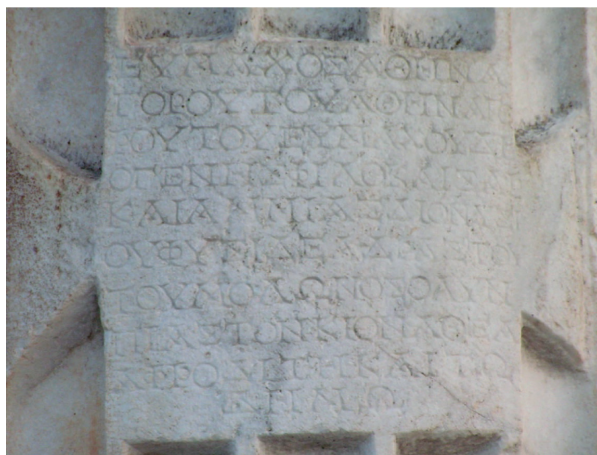


Fig. 24.3. Photograph of Iaph 1.5.

These traits along with others (e.g. letter size and use of spacing noted above) are commonly attributed to late 1st /2nd c. AD inscriptions at Aphrodisias, and are absent from comparative Augustan materials on the site (e.g. Iaph 1.1, 1.2, 1.4, 1.7 and 1.8, including a Julio-Claudian dedication 1.102). Although one must be careful with stylistic factors, especially when archaisms can be used, it is worth noting when a number of features that are attributed to a later period, seem to suddenly emerge nearly a century early.<sup>29</sup> Any one of these features, letter variations, stylistic letterforms, use of serifs, indentations in the text, correction of errors in a previous text, would not stand well alone, but taken together, a more compelling case can be made for the reassessment of this inscription's date.

The website records the date of this inscription just like Iaph 1.4: citing "context, lettering and prosopography." For those trying to gain an understanding of letterforms at Aphrodisias, this is somewhat confusing and it is not the only example in which the lettering and organization of the inscription do not match date provided.<sup>30</sup>

<sup>29</sup> Archaising and imitation of earlier lettering is evident in at least one inscription (IAPH 13.116) Reynolds and Erim 1982, 155-166.

<sup>30</sup> Honours for Zoilos (Iaph 8.203) is dated by "prosopography" to the 1st c. BC but the letters are square Imperial forms and do not match Zoilos' other dedications (8.1, 1.1, 1.2). Honours for P. and M. Vinicius (Iaph 3.101) are dated as "Augustan" and "Tiberian" by "lettering" though prosopography is known (there is some controversy cf. Reynolds 1982, 175). Stylistic elements (arrangement, spacing and decoration), particularly in M. Vinicius' base, reflect qualities of Claudian-Flavian

The date of the text is not incorrect, insofar as it was originally inscribed at this time and the prosopography as well as the formula of the text support this. However, one struggles to see how the lettering and/or the arrangement of the text corroborate this date. An answer may be found in further examination of the inscription's context and prosopography. In addition to a number of earthquakes, new temenos of the temple was added under the emperor Hadrian, a time during which Athenagoras' descendants were alive and prospering in Aphrodisias.<sup>31</sup>

One benefit of the website is that it facilitates searches for parallel texts in this context and this period. A Hadrianic building dedication from the temple, I Aph 1.174 (Fig. 4) reveals similarly rendered letterforms with little variation in size and a number of stylistic similarities: thin strokes with deep triangulate serifs, the omicron with double serif bars, an epsilon with a separated crossbar. Similar observations can be made on a number of Trajanic and Hadrianic texts at Aphrodisias (I Aph 4.308, 5.9, 5.208 in the Hadrianic Baths). A theory of later recarving would reconcile a number of disparities in this inscription.



Fig. 24.4. Photograph of I Aph 1.174.

This is not to say that I Aph 1.5 was definitely a Hadrianic recarving, but to observe that, contrary to what is recorded in the I Aph 2007 dating criteria of this inscription, the lettering and arrangement of text on the stone do not reflect an inscription that is an obvious contemporary with the other column dedications at the temple. The context and prosopography of the inscription do not rule out a later date

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period inscriptions (which is not excluded by prosopographical dates). In both cases, conflicting dating criteria are omitted.

<sup>31</sup> Smith and Ratté 1995, 43. For an analysis of the temenos plan, see Doruk 1990, 66-74. For Athenagoras descendants, cf. note 17 and Reynolds 1999, 327-334.

and the text, which rectifies issues in both organization and orthography of IPh 1.4, reflects an inscription that may have responded to an earlier monument.

The entry for IPh.1.6 represents a different response to a similar problem. It demonstrates that scholars are willing to use letterforms to support a recarving when the case is sufficiently extreme. The text, only mentioned in MAMA VIII as a “copy”, presents a number of irregularities, repeating some errors, correcting others, and making quite a few new ones. Whilst maintaining the first 3 lines of the arrangement in IPh 1.4, this inscription compounds the error on line 4 by reduplicating two letters in the name Diogenes. Line 5 repeats the misspelling of Ammias, corrects the misspelling of Adrastos (line 6), but creates two new errors in line 7, missing out the nu on Molon and Olynpias, then repeating the column phrase in lines 9- 10.

IPh 1.6.

Εὐμαχος Ἀθηναγό-  
ρου τοῦ Ἀθηναγόρου  
τοῦ Εὐμάχου Διογε-  
{γέ}νης Φιλόκαισαρ καὶ  
Ἀμιάς Διονυσίου φύσι  
δὲ Ἀδράστου τοῦ Μό-  
λων<ν>ος Ὀλυ<ν>πιάς τὸν κί-  
ονα θεᾶ Ἀφροδίτη {τὸν}  
{κίονα} καὶ τῷ Δήμῳ

Reading this inscription is even more of a challenge (Fig. 5), one can suffer vertigo as the lines run up and down and the letters run into the margins. There is no use of spaces or decorations to clarify or distinguish sections of the text and there are quite a few inadvertent errors to make it difficult, even to the trained eye. Although the prosopography and context support an earlier date, the entry suggests that this “ineligant” text was “recarved?” The entry does not, however, propose a date or explain why, in this instance, recarving is a viable conclusion. While a methodology is evident in the IPh2007 dating format, it is not employed consistently or transparently in this case.

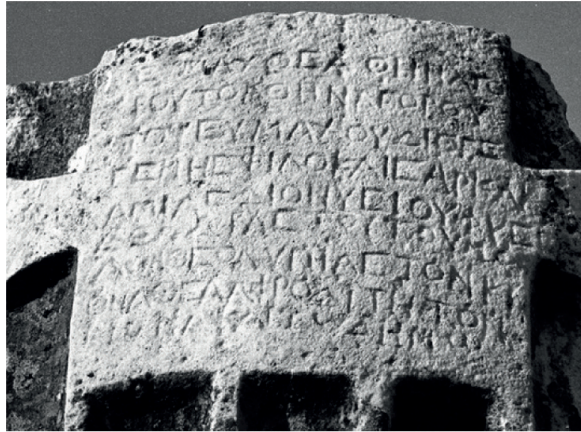


Fig. 24.5. Photograph of I.Aph 1.6.

The inclusion of numerous images proves crucial here, where moss now covers parts of the text that were legible in the 1970's. The lunate omega on the bottom line (barely visibly in the recent photo) along with the lunate sigmas indicate that the inscription is from the late Antique period at Aphrodisias, possibly after an earthquake in 359 BC (for parallels see ALA 29 and 30), before the conversion of the temple into a Christian church (after 450 AD).<sup>32</sup> Acknowledging that the text was reinscribed centuries later affords further insight into both the inscription and act of recarving as a process that often changed an inscription but did not necessarily improve it.

<sup>32</sup> Roueché and Smith 1996, 41-42.

The three inscriptions betray fundamental differences, which reveal a rich and complicated tale of a column's life at Aphrodisias. While minor differences in the text do not change our translation of the words, a close analysis of the resulting inscription informs our understanding of the arrangement of the text, the potential dating of the inscription, as well as the relationship between text and monument. Recarving was not a highly unusual phenomenon in the ancient world but by minimizing the conflicting elements of these inscriptions, one potentially overlooks this aspect of an inscription.<sup>33</sup>

#### **24.2.5. Conclusions on the case study**

This survey of column dedications has demonstrated how a series of inscriptions, which were represented as a series of similar texts in MAMA VIII can be seen in a fundamentally different way in IAPh 2007. The digital publication has a number of advantages: it applies a more rigorous approach to the text in XML thus illustrating the arrangement of the inscription more clearly, the date is given some transparency through a list of applied criteria, and the descriptors, such as the lettering size of the inscriptions, provide more information. The images of the inscription in drawings and its context provide an invaluable resource that allow the reader to better understand the relationship between text, inscription and context, including references and better accessibility to parallel inscriptions. In terms experiencing an inscription in a digital world, this is probably as close as a person can come to assessing the face value of an inscription. It is a tremendous step forward in addressing the longstanding limitations inherent in the publication of epigraphic evidence, though some challenges remain. The final section will consider how we might further use this information, in terms of adding clarity and transparency to the dating process, as well as in our approach to these materials.

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<sup>33</sup> Thomas and Witschel 1992, 135-177.

### 24.3. Palaeography in a digital world: monumental problems & solutions

#### 24.3.1. Digital Epigraphy. New method: new methodology?

For students and academics alike, dating by letter forms is an almost “mystic” practice: something upon which experts often comment but more rarely explain or demonstrate in practice. Recent epigraphic handbooks keep the term palaeography at arms length, using it interchangeably with discussions of letterforms.<sup>34</sup> The caution of these scholars is justified and understandable: conclusions based on a single element of an inscription are precarious and, perhaps more importantly, they represent a mode of scholarship that views inscriptions in a fundamentally different way than they were viewed in antiquity. Writing, both ancient and modern, is a product of a number of factors, all of which functioned together in the image of writing (margins, lettering, indentations punctuation).<sup>35</sup> As few would look at a document today and say “that’s a fine Helvetica 10 point!,” we should be cautious in an assessment of palaeography that excludes the visual elements which were inextricably linked an inscription’s appearance (e.g. alignment, margins, spacing, punctuation). Modern definitions and studies of manuscripts suggest a broader scope of inquiry, which includes handwriting together with decorations and spatial organization as well as subsequent comments in the margins.<sup>36</sup> These practices suggest a discipline with an interest not only in the evolution of lettering but in the appearance and development of a culture of writing.

While traditional text-based modes of publication such as *MAMA VIII* have, at times, constrained the study of hands to an analysis of lettering, digital corpora offer new opportunities to view, analyse and incorporate broader scope of visual elements in the interpretation of an inscription. This is not to say that the traditional methods or charts of letterforms development should be abandoned, merely that

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<sup>34</sup> In the index (Bruun and Edmondson 2015, 880) “palaeography” is cross-referenced with “Letter forms” and though used by O. Salomies (chapter 9), the word is not defined in the preceding chapters (Bruun and Edmondson 2015, 155). Letterforms are described generally with charts of figure numbers rather than images to directly illustrate changing styles (Bruun and Edmondson 2015, 123-4). Cooley’s manual offers a more detailed assessment of lettering with case studies to illustrate the limitations of using lettering (Cooley 2012, 423-33).

<sup>35</sup> Woolf 1996, 25-27, Bodel 2001, 3-5, Cooley 2012, 433-437; Panciera 2012, 1-10.

<sup>36</sup> Buonocore 2015, 21-37.



the methodology could be expanded, as it has been in this case study, to include aspects of textual organization (spacing, use of decoration and punctuation, letter size). The question arises: how do we achieve this through the website materials?

### **24.3.2. Employing change: how we might improve presentation of materials on the website**

One difficulty of the current site, observed in the assessment of I Aph 1.5 is that despite the clear criteria for dating, the terms do not reflect a consistent methodology in dating, or the contradictions in the process. This is dangerous for those who simply accept the dates provided, and confusing for those who try to apply or develop a sense of letterform development. When a recarving is suggested I Aph 1.6, there is little to explain how we know it was recarved (letterforms) or when the recarving took place (use of parallel texts), though both resources are available on the website. The wealth of visual, textual and contextual information in I Aph 2007, offers an opportunity, not only clarify, but to add greater transparency to the process of dating and how lettering is used in an inscription. This could be achieved by adding a few pages to explain and illustrate elements dating criteria (each with a significant *Caveat Lector* on the use of these elements). Firstly, one could add a page outlining the dating criteria, providing a brief description of each (e.g. context, lettering and prosopography) together with a sample case study (or two) of how these factors are applied in an inscription.

Further improvements, could be made with additional pages on lettering and context. While lettering is undoubtedly employed in dating inscriptions at Aphrodisias, one must also consider how this dating is represented in the published materials. Epigraphers, who have described monumental lettering as ‘Augustan’, ‘distinctively Julio-Claudian’ or ‘Domitianic’ have already acknowledged that such distinctions exist at Aphrodisias, but the classifications remain undefined.<sup>37</sup> While such definitions are often problematic, so is a situation in which a broader audience accepts and uses a series of dates, without understanding how certain criteria have been used in formulating a date.

<sup>37</sup> Studies of inscriptions describe lettering as “distinctively Julio-Claudian” (Reynolds and Erim 1982, nos. 2&3, 317-318), “Triumviral or Augustan” (Reynolds and Erim 1982, docs. 35-37, 159-163), and ‘Domitianic’ (Chaniotis 2004, no. 14), suggest that such distinctions are evident at Aphrodisias.

Undertaking a detailed palaeography for a site is a massive endeavor, and one that can prove contentious on a number of levels. However, a page about lettering (together with aforementioned element of textual organization) could be added with brief descriptions of trends (periods of ca. 60-70 years) and references to a few inscriptions as illustrations. This could be supported by a single case study, such as this one, to show how these elements are used as well as how they can be problematic.

Finally, while inscriptions are given a good deal of context in IApH 2007, the epigraphic information remains separated from the archaeological studies. Both of these are factors in the dating process and, as we observed in IApH 1.5 and 1.6 can often facilitate the study of an inscription, both in reconciling discrepancies and searching for parallel inscriptions. With inscriptions grouped by context and an excavation history that is referenced (but not explained) it might be helpful to have a brief building history for each context. In the case of Aphrodisias, these materials and further bibliographies are available on NYU excavation websites and could be easily connected with weblinks.<sup>38</sup>

The benefits and the challenges observed in the IApH 2007 digital publication are applicable to a number of digital resources. As we attempt to bring corpora of unprecedented size to a digital realm, we must consider not only how we represent this information but how we engage a wider readership in epigraphic materials. It would not take a great deal of work to augment the scope of IApH 2007 from an academic resource into one that also achieves a didactic aim of illustrating how we use different elements of an inscription (including letter forms) to suggest a date for an inscription. The point is not necessarily to establish a firm date, but to provide greater transparency to process by which we formulate dates. We have the potential now, to present inscriptions at face value, not only as texts but as contradictory objects whose stories, whether conveyed on stone or a computer app, are subject to the same conventions, complexities and imperfections as the humans who created them.

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<sup>38</sup> NYU website. <http://www.nyu.edu/projects/aphrodisias/home.ti.htm>. Recent excavation reports are reference here as well: <http://www.nyu.edu/gsas/dept/fineart/academics/aphrodisias/aphrodisias.htm>.



## References

- ALFÖLDY, GÉZA. 1995. "Eine Bauinschrift aus dem Colosseum". *Zeitschrift für papyrologie und Epigraphik*: 195–226.
- BODEL, JOHN. 2001. *Epigraphic evidence: ancient history from inscriptions*. New York: Routledge.
- BRUUN, CHRISTER AND JONATHAN EDMONDSON, eds. 2015. *The Oxford Handbook of Roman Epigraphy*. Oxford: Oxford University Press.
- BUONOCORE, MARCO. 2015. "Epigraphic Research from its Inception: the Contribution of Manuscripts." In *The Oxford Handbook of Roman Epigraphy*, edited by Christer Bruun and Jonathan Edmondson 21–37. Oxford: Oxford University Press.
- BURASELIS, KOSTAS. 2000. "Kos between Hellenism and Rome: studies on the political, institutional and social history of Kos from ca. the middle second century BC until late antiquity." *Transactions of the American Philosophical Society* (2000): i–189..
- CALABI LIMENTANI, IDA. 1991. *Epigrafia latina*. Milano: Cisalpino. 4th edition.
- CALDER, WILLIAM MOIR AND J.M.R. CORMACK. 1962. *Monumenta Asiae Minoris Antiqua*, volume 8. Manchester: Manchester University Press.
- CHANIOITIS, ANGELOS. 2004. "New inscriptions from Aphrodisias (1995–2001)." *American journal of archaeology*: 377–416.
- COOLEY, ALISON. 2014. "Paratextual perspectives upon the SC de Pisone patre." In *The Roman Paratext: Frame, Texts, Readers*, edited by Laura Jansen, 143–155. Cambridge: Cambridge University Press. <http://wrap.warwick.ac.uk/64172>.
- COOLEY, ALISON. 2012. *The Cambridge manual of Latin epigraphy*. Cambridge: Cambridge University Press.
- DI STEFANO MANZELLA, IVAN. 1987. *Mestiere di epigrafista: guida alla schedatura del materiale epigrafico lapideo*. Roma Edizioni Quasar.
- . 1995. "Problemi di paleografia epigrafica latina." In *Acta Colloqui Epigraphici Latini*, edited by H. Solin, O. Salomies, and U.-M. Liertz, 163–181. Helsinki : Societas Scientiarum Fennica.
- . 2007. "L'integrazione tra testo e manufatto/monumento in epigrafia." In *Acta XII Congressus Internationalis Epigraphiae Graecae et Latinae*. Barcelona, edited by M. Mayer et al., 393–418. Barcelona : Institut d'estudis catalans.
- DORUK, SEYHAN. 1990. "The Architecture of the Temenos." *Aphrodisias papers: recent work on architecture and sculpture*, edited by Charlotte Roueché and Kenan T. Erım, 66–74. Ann Arbor: Journal of Roman Archaeology.
- ECK, WERNER. 2010. "There Are No *Cursus Honorum* Inscriptions. The Function of the *cursus honorum* in Epigraphic Communication." *Monument und Inschrift* 28: 79–92. [http://terraitalia.altervista.org/servizi/articoli/Werner\\_no\\_inscriptions.pdf](http://terraitalia.altervista.org/servizi/articoli/Werner_no_inscriptions.pdf).

- ELLIOTT, TOM. 2015. "Epigraphy and Digital Resources." In *The Oxford Handbook of Roman Epigraphy*, edited by Christer Bruun and Jonathan Edmondson, 78–85. Oxford: Oxford University Press. <http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780195336467.001.0001/oxfordhb-9780195336467-e-005>.
- GORDON, JOYCE ANNA STIEFBOLD AND ARTHUR ERNEST GORDON. 1957. *Contributions to the paleography of Latin inscriptions*, volume 3. Berkeley: University of California Press.
- GRAHAM, ABIGAIL S. 2013. "The word is not enough: A new approach to assessing monumental inscriptions. A case study from Roman Ephesos." *American Journal of Archaeology* 117(3): 383–412.
- . 2016. "Reappraising the Value of Same Text Relationships." In *The Materiality of Texts: Placements, Presences and Perceptions of Inscribed Texts in Classical Antiquity*, edited by A. Petrovic and E. Thomas. Leiden: Brill, forthcoming.
- GRASBY, RICHARD. 2002. "Latin inscriptions: studies in measurement and making." *Papers of the British School at Rome* 70: 151–176. DOI: <https://doi.org/10.1017/S0068246200002130>.
- HARRIS, WILLIAM V. 1989. *Ancient literacy*. Cambridge, MA: Harvard University Press.
- HOMMEL, HILDEBRECHT. 1970. "Das Datum der Munatier-Grabstätte in Portus Traiani und die hederæ distinguentes". *Zeitschrift für Papyrologie und Epigraphik* 5: 293–303.
- PANCIERA, SILVIO. 1995. "La produzione epigrafica di Roma in età repubblicana. Le officine lapidarie." In *Acta Colloqui Epigraphici Latini*, edited by H. Solin, O. Salomies, and U.-M. Liertz, 319–42. Helsinki : Societas Scientiarum Fennica.
- . 2012. "What Is an Inscription? Problems of Definition and Identity of an Historical Source." *Zeitschrift für Papyrologie und Epigraphik* 183 (2012): 1–10. <http://www.digitalmeetsculture.net/wp-content/uploads/2013/10/Pancieria-Inscription-ZPE-2012.pdf>.
- PETRUCCI, ARMANDO. 1993. *Public lettering: script, power, and culture*. Chicago: Tuttle Publishing.
- REYNOLDS, JOYCE 1990. "Inscriptions and the Building of the Temple of Aphrodite". *Aphrodisias Papers: recent work on architecture and sculpture*, edited by Charlotte Roueché and Kennan T. Erim, 37–40. Ann Arbor: Journal of Roman Archaeology.
- REYNOLDS, JOYCE. 1999. "The First known Aphrodisian to hold a curatorship." In *Steine und Wege: Festschrift für Dieter Knibbe zum 65. Geburtstag*, edited by P. Scherrer and H. Thur, 327–334. Vienna: Österreichisches Archäologisches Institut.
- REYNOLDS, JOYCE, CHARLOTTE ROUECHÉ, AND GABRIEL BODARD. 2007. *Inscriptions of Aphrodisias (2007)*. <http://insaph.kcl.ac.uk/iaph2007/index.html>.

- REYNOLDS, JOYCE AND KENAN T. ERIM. 1982. *Aphrodisias and Rome*. London: Society for the promotion of Roman studies.
- ROUECHÉ, CHARLOTTE, JOYCE REYNOLDS, AND KENAN T. ERIM. 2004. *Aphrodisias in late antiquity*. <http://insaph.kcl.ac.uk/ala2004/>.
- ROUECHÉ, CHARLOTTE AND ROLAND R. R. SMITH, edd. 1996. *Aphrodisias papers 3: the setting and quarries, mythological and other sculptural decoration, architectural development, Portico of Tiberius, and Tetracylon*. Ann Arbor: Journal of Roman Archaeology, 1996.
- SMITH, ROLAND R. R. AND CHRISTOPHER RATTÉ. 1995. "Archaeological research at Aphrodisias in Caria, 1989-1992." *American journal of archaeology* 99: 33-58.
- SUSINI, GIAN CARLO. 1973. *The Roman Stonecutter: An Introduction to Latin Epigraphy*. Oxford: Blackwell.
- THOMAS, EDMOND AND CHRISTIAN WITSCHER. 1992. "Constructing reconstruction: claim and reality of Roman rebuilding inscriptions from the Latin west." *Papers of the British School at Rome* 60: 135-177. DOI: <https://doi.org/10.1017/S0068246200009818>.
- TRACY, STEPHEN V. 1990. *Attic Letter-cutters of 229 to 86 BC*. 6. Berkeley: University of California Press.
- . 1995. *Athenian democracy in transition: Attic letter-cutters of 340 to 290 BC*. Berkeley: University of California Press, 1995.
- . 2003. *Athens and Macedon: Attic Letter-cutters of 300 to 229 BC*. Berkeley: University of California Press, 2003.
- WOOLF, GREG. 1996. "Monumental writing and the expansion of Roman society in the early empire." *Journal of Roman studies* 86: 22-39. [http://journals.cambridge.org/abstract/s\do5\(S\)0075435800057415](http://journals.cambridge.org/abstract/s\do5(S)0075435800057415).



# 25. Deixis and Frames of Reference in Dedicatory Epigrams. The use of a database with an interdisciplinary approach

*Flavia Licciardello\**

## **Abstract**

This paper presents an example of a database designed to combine epigraphic, linguistic and philological data. This database is part of my project on a study of deictic expressions in dedicatory inscribed and literary epigrams. It includes the results of the analysis of around 600 dedicatory epigrams and it will be used to extract information on trends and recurrent patterns in the genre.

**Keywords:** Greek epigram, dedication, database, deixis, Hellenistic age

## **25.1. Introduction**

For a long time, the study of the Greek epigrams has maintained a clear distinction between ‘epigraphic’ and ‘literary’ epigrams. This distinction, however, fails to understand the complexity and the development of this poetic genre. Only in very recent years have scholars started to highlight properly the important relationship between Hellenistic ‘literary’ epigrams and epigraphic models.<sup>1</sup>

My PhD project follows this new exegetic line and contributes to our understanding of the inscriptional component of the Hellenistic epigram.<sup>2</sup>

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<sup>1</sup> The shift in the attitude towards the history of the epigrammatic genre is well resumed by in Garulli 2012, 5-34. For other works, which consider the importance of the dialogue between ‘epigraphic’ and ‘literary’ epigrams, see e.g. Meyer 2005, Tueller 2008. On archaic and classical epigrams, see Baumbach et al., 2010. Further bibliography in Baumbach et al., 2010, 2.

<sup>2</sup> The project is developed within the frame of the C-1 group (‘Deixis and frame of reference’) of the Excellence Cluster TOPOI.

In particular, I focus on the use of deictic expressions in dedicatory epigrams, i.e. on the use of all those linguistic elements whose meaning and interpretation depend on the spatial and temporal context where they are uttered.<sup>3</sup> The corpus analysed includes inscribed epigrams from the archaic epoch until the end of the 4th century BC, and the Hellenistic epigrams transmitted in the Greek Anthology or on papyrus. The reference editions used are Hansen 1983, 1-2 for inscribed epigrams and Gow and Page 1965 and Austin et al. 2002 for 'literary epigrams'.<sup>4</sup>

In order to deal with this heterogeneous material, I developed a database to register and organise the data obtained from the analysis of the texts. The specific aim of this database is the registration of all relevant linguistic features related to spatial, personal and temporal deixis. In addition to this, I put on record for each epigram other more generic elements, which are related to the dedicatory context, to the linguistic facies and, especially in the case of inscribed epigrams, to the historical and archaeological context. In this way, on the one hand, I can obtain a global picture of the whole corpus, which includes data found both in inscribed and literary epigrams. At the same time, I can keep and easily retrieve all the peculiar features related to each specific text in order to be able to deal with the material properly, without losing sight of their specificity. The possibility of managing at the same time these two levels – the whole corpus and the single text – is extremely valuable. In this regard, the database provides an essential support, since it helps work with complex material on those different levels that must be considered together, but are usually difficult to keep in focus at the same time.

## 25.2. Greek dedicatory epigrams and the role of deixis

In the Ancient Greek world it was customary to accompany a dedication to the gods with a – usually – short inscription. This was normally chiselled on the dedicated object (or on its support) and it recorded the main information related to the offering. The elements

<sup>3</sup> For an overview of the concept of deixis see Diessel (2012, with further bibliography). On deixis in Ancient Greek see e.g. Felson 2004, Edmunds 2008 and Bonifazi, 2014.

<sup>4</sup> For convenience, I will later on refer to this second group as 'literary epigrams'. The definition simply identifies those epigrams that are transmitted in the Greek Anthology or on papyrus and does not imply any value judgment.

recurring in such inscriptions were the name of the dedicator, the verb of dedication and the name of the god receiving the dedication.<sup>5</sup> The most common and widespread formula for dedications contained exactly these three elements: ὁ δεῖνα ἀνέθηκε τῷ θεῷ. A frequent variation was ὁ δεῖνά με ἀνέθηκε τῷ θεῷ,<sup>6</sup> where the speaker is the object itself, as is clear from the employment of the personal pronoun με. It is interesting to note that since their first examples the speaking object was a recurring feature in dedicatory epigrams and it is still frequent in the 4th century BC.<sup>7</sup> Clearly, the basic scheme here presented could be varied by omitting some elements (as the name of the dedicator) or adding others (as the generic name of the object, like the recurrent ἄγαλμα).

A crucial moment in the evolution of the epigrammatic genre is the beginning of the Hellenistic era, when the genre becomes more and more popular and epigrams started to be circulated autonomously, no longer limited to one inscription alone.<sup>8</sup> This development led to the composition of literary epigrams not intended for inscription, but which in some way maintained the illusion of a material inscription on a stone. The Hellenistic epigrammatists who worked with inscriptional type of epigrams (and among these dedicatory epigrams) retained the structure, style and traditions of the epigraphic models, yet the translation of these into a book context inevitably means that the communicative strategies employed until then had to be reinvented. The primary reason for such changes is self-evident: the monument intended for inscription and the space surrounding it do not exist anymore – they have to be imagined in the reader's mind.<sup>9</sup>

<sup>5</sup> On archaic dedications, see Day 2010, spec. 1-14 for an introduction to the genre.

<sup>6</sup> The formula here presented (with its two variants) was identified by Maria Letizia Lazzarini, in her study on the formulas of archaic dedications (Lazzarini 1976, 58-60). Her analysis is based on both verse and prose inscriptions from the archaic age. However, such basic scheme, with these elements, was normal in epigrams as well and it remained substantially unchanged in classical and post-classical time.

<sup>7</sup> On the topos of the speaking object, see Burzachechi 1962, Svenbro 1988, 36-52, Tueller 2008, 16-27, Furley 2010, 151-166, Wachter 2010, 250-260, Christian 2015, 29-107.

<sup>8</sup> This trend may be linked to the custom prevalent in the 5th and 4th century BC to copy epigrams on monuments and then quote them in various texts. See Gutzwiller 1998, 47ff.

<sup>9</sup> This involvement of the reader can be put in relation with what Bing 1995 defines *Ergänzungsspiel*, i.e. with the process of supplementation of the text deliberately incited by Hellenistic epigrammatists.

This process of reinvention is particularly evident in dedicatory epigrams, which were traditionally chiselled on the dedicated object itself. In this case, the loss of the original context forces the author to re-elaborate traditional models, by adding some elements (e.g. the specific name of the dedicated object) that cannot be retrieved from the surrounding setting.

From a linguistic point of view, this re-elaboration has an impact in the texts on deictic expressions, which were typically used in inscriptions to lead the gaze of the reader towards the dedicated object. In this epigraphic context the deictic expressions point to something in front of reader's eyes (*deixis ad oculos*), whereas in a literary context the readers will have to imagine in their mind the invisible referents of deictic expressions (*deixis am Phantasma*).<sup>10</sup> If on the one hand this change requires a particular attention to the verbal reconstruction of the setting, on the other hand, the loss of the material context allows the poet to play with different and new points of view and frames of reference.

The analysis of deictic expressions can help determine the deictic centre in dedicatory epigrams. The deictic centre, which normally coincides with the origin of the utterance, works as a point of reference for all deictic markers and expression.<sup>11</sup> In the case of dedicatory epigrams on stone, the deictic centre in spatial terms is generally understood to be in the place of the inscription itself, which in most cases is the dedicated object. In other words, for all deictic expressions that point to something close (such as the proximal ὅδε 'this here')<sup>12</sup> the occasional reader will look for the referents in the space close to the inscription. In the evolution of the epigrammatic genre, the loss of the material context produces an important change, since the strong relation that connects the text with its object starts to fade. In other words, when the epigram is found in a book, the point of reference — or deictic centre — is not immediately clear to the reader, since it is not immediately clear the relation of the text with the spatial setting to which it refers. This means that the deictic centre is somehow released from its traditional

<sup>10</sup> The difference between *deixis ad oculos* and *deixis am Phantasma* was highlighted and described for the first time by Bühler in 1934, see Bühler 1982, 121-126, 133-135.

<sup>11</sup> See Bühler 1982, 102f. and Levinson 1983, 63f..

<sup>12</sup> 'Proximal' deictic elements are all those elements that refers to something that is close to the deictic centre: among these demonstrative pronouns or adverbs such as 'this' or 'here' and temporal adverbs such as 'now'. See Diessel 2012, 2408f.



location on the object and the poet is free to consider and bring to the text new, different points of view.

This progressive detachment of the text from its original physical location played a crucial role in the process that led, out of trivial verse inscriptions, to the emergence of the epigram as a full literary genre. Deictic expressions were traditionally employed in epigraphic contexts to strictly and clearly bind the text to its material support. Later on, only the possibility of the separation from a unique location allows the epigram to be circulated autonomously and reach a wider audience. In this passage, poets explore new uses of deictic markers in order to widen the possible references of their text.

My research will try to detect different trends in the use of deictic expressions in order to highlight the similarities and parallelisms between inscribed and literary epigrams and to elucidate the different deictic strategies employed in different contexts.

### 25.3. The database

In the first step of my research, the analysis of the texts is followed by the registration into a database of all the relevant data related to spatial, personal and temporal deixis. This database is conceived first of all as a tool to organise the data and make them available for the next steps of the research.

The corpus of epigrams analysed includes dedicatory verse-inscriptions collected in Hansen's *Carmina Epigraphica Graeca* [CEG 1-2], as for epigrams on stone. In this case, I selected those epigrams included by Hansen in the section "Tituli dedicatorii". For literary epigrams, I followed Gow's and Page's edition (Gow and Page 1965), to which I added the epigrams attributed to Posidippus and edited by Austin and Bastianini (Austin et al. 2002). In this case, the selection was made according to the contents of the epigrams and I selected all those epigrams that have a clear dedicatory frame.

The structure of the database was designed to include all important data related to the text examined, in order to have for each epigram a complete profile, which includes linguistic, literary, historical and archaeological aspects.<sup>13</sup> The data were organised in various tables, which are all interconnected (See Fig. 1).

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<sup>13</sup> The software used is FileMaker Pro 13.0v4.

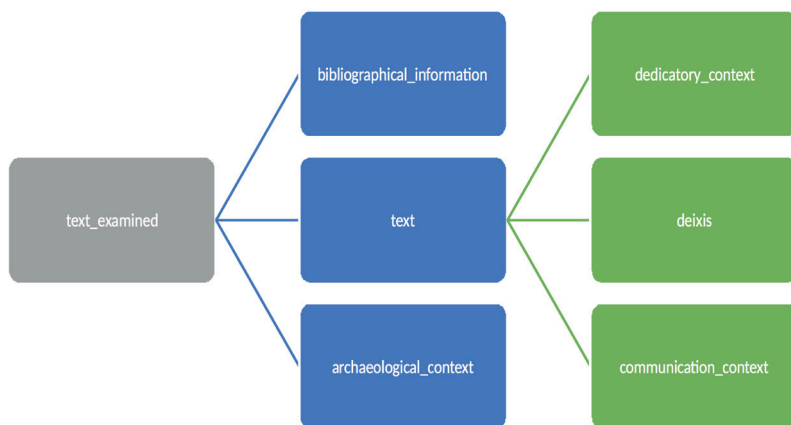


Fig. 25.1. Default.

Alongside bibliographical and historical-archaeological information, the database records the data obtained by a first analysis of deictic forms and linguistic features of the epigram, such as verbal tenses, occurrences of demonstrative and personal pronouns (deixis); speaking subject and addressee (communicative\_context); verb of dedication, standard name of the dedicated object (dedicatory\_context). Such a structure offers a balance between the need to record a detailed picture for each epigram analysed and the possibility of conducting research on single features within the whole corpus. Since each table contains a restricted amount of data (divided into coherent sections), it is easy to get a simple, clear picture of the recurrence of one specific feature (and its interconnection with other related aspects) within the corpus and to leave out information that is not immediately consistent with the research done. However, the fact that all the tables are interconnected enables the user to formulate queries that combine fields contained in different tables. In this way, for example, it is possible to look for the recurrence of a specific tense for the verb of dedication (in the table 'deixis') and to see if this is associated with the use of a specific verb of dedication (in the table 'dedicatory\_context') or with a particular epoch (in the table 'archeological\_context').

### 25.4. An example: the present tense in dedicatory epigrams

The verbal tenses can work as temporal deictic markers and can play an important role in the definition of the temporal frame.<sup>14</sup> In particular, the present tense usually decodes the present time, which is the time of the deictic centre ('now'). Since the deictic centre operates as a point of reference for the spatial and temporal orientation, individuating the deictic centre helps determine the frame of reference of the epigram. This could lie, for example, in the act of dedication celebrated, in the moment of the composition by the poet or in the moment of reading.<sup>15</sup>

In the definition of the deictic centre in dedicatory epigrams, the analysis of the verb of dedication is particularly relevant, since this makes clear the relation of the text to the dedicatory act, which is the main piece of information of the epigram. The most common dedicatory formula presents the verb in the indicative aorist (with augment). Leaving aside the formulaic aorist and those cases where the verb is not expressed or lost, we find in the corpus analysed a significant number of cases where the verb that expresses the dedication is in the indicative present.<sup>16</sup>

As for the 41 occurrences of verbs of dedication in the indicative present, a clear distinction can be observed between epigrams on stone and epigrams with a literary tradition. In the first group, the present form is much more sporadic. Out of 422 epigrams analysed, we find only 5 clear examples, from different epochs and geographical areas: [CEG 192i] (Athens, ca. 520? BC ἀνακειμα[ι]), [CEG 302] (Attica, found

<sup>14</sup> Though the grammatical category of tense does not always coincide with the semantic category of time, it is still possible to retrace in the use of a peculiar verbal form a reference to time. However, such analysis must always consider other linguistic elements, which contribute to determine the temporal frame of the text. On temporal deixis and verbal tense see Lyons 1977, 677-690; Levinson 1983, 73-79; Klein 1994, 14-26 and 120-130. For the analysis of temporal deixis in Ancient Greek texts see e.g. D'Alessio 2004 and Edmunds 2008, 8f. (with further bibliography).

<sup>15</sup> On the relation between the temporal frame of the utterance and the deictic centre, see Levinson 1983, 79f. and D'Alessio 2004.

<sup>16</sup> More specifically, out of a corpus of 598 epigrams analysed, for the verb of dedication the aorist appears 379 times, the present 50 times. In 172 epigrams the verb is lost or absent. Moreover, some epigrams contain more than one verb of dedication and these could be expressed in different aspects and moods.

in Ptoion, ca. 540? BC v. 1 εἰμ')<sup>17</sup> [CEG 251] (Athens, ca. 500-480? BC v.1 εἰμι), [CEG 390] (Apollonia Illyrica, found in Olympia, ca. 450-440? BC v.1 ἀνακεῖμεθα), [CEG 822] (Geronthrai, 4th cent.? BC v.1 ἀνάκειται).<sup>18</sup> In all these cases, the grammatical subject of the verb is the dedicated object. The use of the present form refers therefore to the present of the object, which, since the dedication, is for the time being in the place of the dedication. As is also clear from the fact that in most of these cases the object is the speaker, the use of the present verb indicates that the deictic centre is the dedicated object. It is also interesting to notice that most of the aforementioned epigrams contain a second verb of dedication, in the formulaic aorist form.<sup>19</sup>

For Hellenistic epigrams of literary tradition, the picture is different. First, the occurrence of dedicatory verbs in indicative present is less sporadic. Out of 176 epigrams analysed, the present form appears in 33 epigrams. In some of these cases, the situation is similar to that found in dedications on stone: the subject of the present verb is the dedicated object, which lies in the temporal deictic centre.<sup>20</sup> An important innovation is the fact that in some epigrams the subject of the verb of dedication in present form is the dedicator. The present verb refers therefore to the present time of the act of dedication accomplished by the dedicator. This means that the deictic centre is anchored now to the moment of the dedication, when the dedicator is obviously present. More evidently, in [Leon. AP VI 288 (HE 2213-2222)] and [Phan. AP VI 299 (HE 2994-3001)], the dedicator is the speaker and consequently the very deictic centre. Another interesting case is found in [Call. AP XIII 7 (HE 1129-1134)] and [Diosc. AP VI 220 (HE 1539-1554)]. In these two epigrams the dedicator, who speaks in the first person, pronounces the dedicatory formula, and this is reported by the epigram as a direct discourse. Such examples indicate that in the development of the Hellenistic epigram the frames of reference multiply.

<sup>17</sup> For the verb εἰμί in dedicatory formulas, see Lazzarini 1976, 59f.

<sup>18</sup> In addition to these, in [CEG 347] and [CEG 775i], the verbs ἀνακεῖμεθα and κοσμοῦμεν respectively are supplied. In [CEG 830ii] the verb ἀνάκειται refers to another dedication, not to the one celebrated by the epigram.

<sup>19</sup> The exceptions are [CEG 822] and the fragmentary [CEG 192i].

<sup>20</sup> However, as opposed to the examples found in dedications on stone, the object is rarely the speaker. It is also interesting to note that the formulaic ἀνάκειμαι is frequently substituted by the simple form κείμει. Similarly, in literary epigrams the simple τίθημι is preferred to ἀνατίθημι, which is traditional in epigraphic examples.

The authors explore new point of views, not anymore tied only to the dedicated object.

These figures, which obviously require more in-depth analysis, are an interesting sign of the transformation and development of the epigrammatic genre in the Hellenistic epoch. Though the poets still move along the path of the epigraphic tradition, they include new elements in their celebration of the dedicatory act. Elements already employed from the beginning of the epigrammatic genre are retrieved and renewed, by combining them with new perspectives.

## 25.5. Conclusion

The database presented here is designed to be a helpful tool in the study of heterogeneous material. This tool will allow us to apply an interdisciplinary approach, which combines epigraphic, linguistic and philological strategies. It not only helps to manage a large quantity of data, it also organises the results of the analysis on the texts in a practical way. The coherent organisation of the data into a database has two clear advantages. On the one hand, the database provides an overview of the whole corpus. This could be used, for example, to detect easily specific trends and recurring elements in the corpus, or to consult and combine the data from different points of view. On the other hand, it is possible to retrieve rapidly the data connected to each specific text. This comprehensive look, on the whole as well as in the particular, would be difficult to obtain otherwise and it makes the database a fundamental tool for dealing with complex materials and applying different levels of analysis. It is important to stress that this database aims to enable many possible, different types of research. The structure is not based on a single, pre-fixed hypothesis of investigation, but is built so as to let the user interrogate the data in different ways, without defining a priori the direction of research. Moreover, the database is a dynamic tool and suitable for further and continual additions. This feature is particularly valuable in the field of the epigrammatic poetry, where continual discoveries of new material (on stone, but also on papyrus) require us to enlarge and re-work the corpora constantly. In this regard, the database presented here is not only a response to the recent need, in the specific field of epigrammatic studies, to create corpora that combine epigraphic and 'literary' materials, it is also open to future additions and new research.

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## References

- AUSTIN, COLIN, AND GUIDO BASTIANINI. 2002. *Posidippi Pellaei quae supersunt omnia*. Milano: Edizioni Universitarie di Lettere Economia Diritto.
- BAUMBACH, MANUEL, ANDREJ PETROVIC, AND IVANA PETROVIC. 2010. *Archaic and Classical Greek Epigram*. Cambridge: Cambridge University Press.
- BING, PETER. 1995. "Ergänzungsspiel in the Epigrams of Callimachus." *Antike und Abendland* 41: 115–131.
- BONIFAZI, ANNA. 2014. "Deixis (including 1st and 2nd Person)." In vol. 1 of *Encyclopedia of Ancient Greek Language and Linguistics*, edited by Georgios K. Giannakis, 422–429. Leiden-Boston: Brill.
- BÜHLER, KARL. 1982. *Sprachtheorie: die Darstellungsfunktion der Sprache*. 2nd ed. Stuttgart-New York: UTB.
- BURZACHECH, MARIO. 1962. "Oggetti parlanti nelle epigrafi greche." *Epigraphica* 24: 5–34.
- CHRISTIAN, TIMO. 2015. *Gebildete Steine: zur Rezeption literarischer Techniken in den Versinschriften seit dem Hellenismus*. Göttingen: Vandenhoeck & Ruprecht.
- D'ALESSIO, GIOVAN BATTISTA. 2004. "Past Future and Present Past: Temporal Deixis in Greek Archaic Lyric." *Arethusa* 37(3): 267–294.
- DAY, JOSEPH W. 2010. *Archaic Greek Epigram and Dedication: Representation and Reperformance*. Cambridge: Cambridge University Press.
- DIESEL, HOLGER. 2012. "Deixis and Demonstratives." In vol. 3 of *Semantics. An International Handbook of Natural Language Meaning*, edited by Claudia Maienborn, Klaus von Heusinger, and Paul Portner, 2407–2431. Berlin-Boston: De Gruyter Mouton.
- EDMUNDS, LOWELL. 2008. "Deixis in Ancient Greek and Latin Literature: Historical Introduction and State of the Question." *Philologia Antiqua* 1(1): 1000–1032. <http://www.torrossa.it/resources/an/2247888>.
- FELSON, NANCY. 2004. "The Poetics of Deixis in Alcman, Pindar, and Other Lyric." *Arethusa* 37(3): 253–465.
- FURLEY, WILLIAM D. 2010. "Life in a Line: A Reading of Dedicatory Epigrams from the Archaic and Classical Period." In *Archaic and classical Greek epigram*, edited by Manuel Baumbach, Andrej Petrovic, and Ivana Petrovic, 151–166. Cambridge: Cambridge University Press.
- GARULLI, VALENTINA. 2012. *Byblos lainee: epigrafia, letteratura, epitafio*. Bologna: Pàtron.

- GOW, ANDREW S. F., AND DENYS L. PAGE. 1965. *The Greek Anthology, [1] Hellenistic Epigrams*, 2 voll. Cambridge: Cambridge University Press.
- GUTZWILLER, KATHRYN J. 1998. *Poetic Garlands. Hellenistic Epigrams in Context*. Berkeley: University of California Press.
- HANSEN, PETER A. 1983. *Carmina epigraphica Graeca (saeculorum VIII - V a. Chr. n.)*. Berolini-Novii Eboraci: de Gruyter.
- KLEIN, WOLFGANG. 1994. *Time in Language*. London-New York: Routledge.
- LAZZARINI, MARIA LETIZIA. 1976. "Le formule delle dediche votive nella Grecia arcaica". *Memorie dell'Accademia nazionale dei Lincei. Classe di scienze morali, storiche e filologiche*. 19: 47–356.
- LEVINSON, STEPHEN C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.
- LYONS, JOHN. 1977. *Semantics*. Cambridge: Cambridge University Press.
- MEYER, DORIS. 2005. *Inszeniertes Lesevergnügen: das inschriftliche Epigramm und seine Rezeption bei Kallimachos*. Stuttgart: Steiner.
- SVENBRO, JESPER. 1988. *Phrasikleia: anthropologie de la lecture en Grèce ancienne*. Paris: La Découverte.
- TUELLER, MICHAEL A. 2008. *Look Who's Talking. Innovations in Voice and Identity in Hellenistic Epigram*. Leuven: Peeters.
- WACHTER, RUDOLF. 2010. "The Origin of Epigrams on 'Speaking Objects'." In *Archaic and classical Greek epigram*, edited by Manuel Baumbach, Andrej Petrovic, and Ivana Petrovic, 250–260. Cambridge: Cambridge University Press.