

# The ‘PATHs’ Project: an Effort to Represent the Physical Dimension of Coptic Literary Production (Third–Eleventh centuries)

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*PATHs – Tracking Papyrus and Parchment Paths: An Archaeological Atlas of Coptic Literature. Literary Texts in their Geographical Context. Production, Copying, Usage, Dissemination and Storage* is an ambitious digital project based in Rome, working towards a new historical and archaeological geography of the Coptic literary tradition. This aim implies a number of auxiliary tasks and challenges, including classification of authors, works, titles, colophons, and codicological units, as well as the study and wherever possible exact mapping of the relevant geographical sites related to the production, circulation, and storage of manuscripts.

## ***1. An introduction (Paola Buzi)***

The ‘PATHs’ project—where ‘PATHs’ is an acronym, or better an abbreviation, for ‘Tracking Papyrus and Parchment Paths: An Archaeological Atlas of Coptic Literature. Literary Texts in their Geographical Context. Production, Copying, Usage, Dissemination and Storage’—aims to provide an in-depth diachronic understanding and effective representation of the geography of Coptic literary production, which is the corpus of writings, with almost exclusively religious content, produced in Egypt between the third and the eleventh centuries in Coptic (i.e. the last phase of Ancient Egyptian language).<sup>1</sup>

The double nature of the numerous scientific disciplines involved in ‘PATHs’—philology, codicology, and literature on the one side and archaeology, and geography on the other—is well represented by its logo (fig. 1), which is inspired by the devotional footprints inscribed by pilgrims, monks, and devout people, not necessarily Christian, all over Egypt in Late Antiquity, in order to mark their presence in places that were considered important for the religious life (PATHs < πατ = ‘footprint’, ‘trace’).



Fig. 1. PATHs project logo

1 This article is one of the scientific outcomes of the ERC Advanced project ‘PATHs – Tracking Papyrus and Parchment Paths: An Archaeological Atlas of Coptic Literature. Literary Texts in their Geographical Context: Production, Copying, Usage, Dissemination and Storage’, funded by the European Research Council, Horizon 2020 programme, project no. 687567 (PI: Paola Buzi, Sapienza Università di Roma), <<http://paths.uniroma1.it>>.

Exactly like these devotional footprints, Coptic literature in its physical dimension—that is, Coptic books as material artefacts—left a real and concrete trace in the Egyptian landscape. ‘PATHs’ intends to investigate the relationship between settlements, as revealed by the archaeological investigations, and intellectual production, as revealed by manuscripts, and provide a new comprehensive perspective on the spread and development of Coptic literature and manuscript culture.

While the main product of ‘PATHs’ shall be a digital archaeological atlas of Coptic literature,<sup>2</sup> the project also aims at creating a series of new scientific tools that have the ambition to become pivotal for Coptic studies.<sup>3</sup>

From the first steps of the project, it has been decided that the work of ‘PATHs’ should be based on sharing ideas, achievements and results, in order to create a true collaboration network involving projects with similar or complementary purposes, and to encourage the contribution of other scholars and researchers. For this reason, all the data contained in the ‘PATHs’ database and atlas will be freely and easily accessible, reusable, and exportable.

Moreover, since there is no reason to retrace the research trails already successfully explored by others, whenever possible, ‘PATHs’ takes advantage of the results achieved by other projects and initiatives (*Corpus dei Manoscritti Copti Letterari* (CMCL), Trismegistos, Pleiades, Virtual International Authority File (VIAF), etc.), by integrating their results without redundant overlapping. This allows, through a mutual exchange of data, to plan and build new routes into unexplored territories, such as, for example, the relationship between Coptic literary manuscripts and the physical space (i.e. archaeological context) where they were produced, circulated, stored, and finally discovered. Connection points with other projects—such as e.g. specific IDs attributed to places, works, or manuscripts—are of course always clearly acknowledged.

With no claim to have the last word—which would be pretentious and not plausible—‘PATHs’ hopes to provide useful methods, models, and tools on which further historical, literary, codicological, and archaeological research related to Christian Egypt may be based. It can well be that not all the scientific choices will be ‘approved’ by other scholars, but they are always based on long and meticulous reflection and regard any aspect of the project, and the ‘PATHs’ team does its best to thoroughly explain and motivate them, so that users may decide if they are convincing enough to be adopted.

In the first eighteen months of the project the following results have been achieved:

2 Bogdani 2017, 59-69.

3 For more details on the project, see Buzi 2107, 507-516; Buzi et al. 2017.

- Conception and implementation of the relational database, on which the archaeological atlas of Coptic literature is based, and setting up of the GIS to be used for the geographical representation of the atlas.<sup>4</sup>
- Complete classification of Coptic literary works (c.1,200) by a systematic attribution of a *Clavis Coptica* (CC) identification number, integrating the work already done in this field by CMCL.
- Complete classification of 114 'Coptic authors', through the attribution of stable identifiers. Moreover, a detailed form of description for each author has been elaborated. This includes a biographical profile and a classification according to the following categories: original author (no matter if Greek or Coptic); stated author (by titles, colophons, tradition, etc.); author of the master work.<sup>5</sup>
- Complete classification of Coptic titles (c.650) through the attribution of a CC identification number.
- Complete digital edition (with English translation) of the entire corpus of Coptic titles (third to eleventh centuries).
- Complete classification of Coptic colophons or scribal subscriptions by means of a stable identifier (c.180).<sup>6</sup>
- Ongoing complete digital edition (with English translation) of the entire corpus of Coptic colophons.
- Complete classification of 6,135 Coptic manuscripts (or better codicological units), by means of the attribution of stable identifiers, in order to have univocal coordinates of reference to the entire Coptic book production. Such a classification is progressively expandable as soon as new manuscripts are discovered or identified.
- Elaboration of a protocol of detailed (digital) codicological description to be gradually applied to all collected manuscripts<sup>7</sup> (at the moment between 10% and 15% of the corpus has been described in detail).
- Mark-up (in TEI XML) of a selected corpus of literary works that are consistent in terms of their area of production and intellectual milieu, to be used for a tentative identification of places and geographical areas where specific works and literary genres were conceived. This corpus is stored online at <<https://github.com/paths-erc/coptic-texts>>.
- Complete census of the relevant sites (c.320 until now), known as places where single manuscripts (such as codices buried with a body, as a funerary kit) or entire 'collections' (for example a monastery library) have

4 See § 2 below.

5 See § 3 below.

6 See the article by Agostino Soldati below.

7 See the article by Nathan Carlig below.

been found or produced, or important for reconstructing the cultural and religious landscape of late antique and medieval Egypt.

- Elaboration of an accurate form of description of the classified places, including a summary archaeological description, precise coordinates, information on more ancient and more recent phases of occupation and usage, on the eventual function of the site as episcopal see, etc.

Any scientific result achieved until now is based on a long and ongoing reflection within the team and on discussions with other scholars. The musings on the classification of authors and works have been particularly complex. ‘Coptic authors’ are very often not ‘Coptic’ at all and frequently are fictitious or semi-fictitious. While the phenomenon of pseudoepigraphy is not exclusive to Coptic literature, it is much more pronounced here than in other ancient oriental literary traditions and takes often unexpected forms. The situation with works is equally complex, since the re-assembling of several original works—mainly Greek, but also Coptic—to create a new textual product is extremely frequent and strongly characterizes the fluid nature of Coptic literature, where authorship is often a weak point of reference.<sup>8</sup>

Dealing with Coptic works, therefore, it becomes crucial to try to answer questions like: What is an author? How to define a work? How to identify a work (being aware that the titles are not trustworthy ‘coordinates’)? How to describe and classify a textual collection? What is the relation between a work and the physical place(s) related to its production and dissemination? This is exactly what ‘PATHs’ is trying to do, always linking the intellectual production to its physical context.

## **2. Places. A georeferenced database dedicated to ‘Coptic’ Egypt (Julian Bogdani)**

It should be stressed from the beginning that ‘PATHs’ is not the first online database aimed at providing a gazetteer of relevant ancient Egyptian places. Trismegistos is by far the most famous and important online database providing information about texts originating from Egypt.<sup>9</sup> It was developed to collect papyrological resources of Egyptian origin and soon expanded to host epigraphical sources as well; its geographical scope was also expanded to include virtually the entire ancient world.<sup>10</sup> This database is designed to collect Texts, Collections, Archives, People, Networks, Authors, Editors, and, most relevantly here, Places; as of May 2018, 11,596 Egyptian places have been catalogued, related to texts by *provenance* or *attestation*. Trismegistos

8 See also the contribution by Tito Orlandi in this issue.

9 See Verreth 2013.

10 <[https://www.trismegistos.org/about\\_coverage.php](https://www.trismegistos.org/about_coverage.php)>.

assigns to each place a unique identifier, called TM Geo ID, a stable URI,<sup>11</sup> and provides a series of place names in several languages (Ancient Greek, Latin, Egyptian, Coptic, Arabic) and for each language in several variants attested in manuscripts. If available, the adjectival forms (called Ethnics) are also provided, completed with the main reference bibliography. The section dedicated to Places lists all the toponyms related to Egypt mentioned both in documentary and literary sources and for this reason must be considered not as a complete list of actual places, but as a catalogue of toponym attestations, disambiguated, clustered, and, when possible, georeferenced. In fact, well-known places are provided with geographical coordinates, although the geographical position is not a prerequisite for their inclusion in the dataset. Many places whose names are known from documentary or literary manuscript sources still lack a precise or vague localisation, and are therefore not available in the geographical visualization tool implemented in their website.

Place name disambiguation, at a larger scale, is among the goals of another project, Pleiades,<sup>12</sup> a community-based digital gazetteer of ancient place names built upon the *Barrington Atlas of the Greek and Roman World*<sup>13</sup> and soon enhanced to include multiple sources. It has now grown to become the reference gazetteer for the Mediterranean world and beyond. Pleiades provides for each site unique identifiers, stable URIs, geographical coordinates, cross references to other online databases and/or traditional publications, etc.<sup>14</sup> The Pleiades gazetteer provides the 'shared referencing system to enable connectivity through common references',<sup>15</sup> which is the foundation upon which the Pelagios Commons community rests. Pelagios Commons provides a collaborative online tool aimed at connecting and putting together multiple and different web resources dedicated to the ancient world (Mediterranean and

11 E.g. TM Geo ID 1341 stands for Memnoneia–Djeme (Thebes west), <[www.trismegistos.org/place/1341](http://www.trismegistos.org/place/1341)>.

12 <<https://pleiades.stoa.org/>>.

13 Talbert and Bagnall 2000.

14 Pleiades exposes its data in multiple formats, both human and machine readable (see, for instance, Simon, Barker, and Isaksen 2012; Isaksen et al. 2014; Simon et al. 2016). Alternative machine readable representations (such as Atom, JSON, KML, RDF+XML, Turtle) for each site and the general data export available at the downloads page (<<https://pleiades.stoa.org/downloads>>) provide an extraordinary tool for the implementation of (spatially enabled) databases and facilitate the reuse of the data, distributed with a Creative Commons Attribution (CC BY) license. Pleiades also automatically harvests and displays contents from other distributed general purpose or specialized databases and web platforms, such as Flickr (<<https://www.flickr.com>>) for photographs (the use of specifically created tags is highly recommended, to create meaningful clusters of images) or Pelagios.

15 Simon et al. 2016, 5.

beyond) by using the RDF Linked Open Data technology.<sup>16</sup> In simple words, the core mission of the project is to create a distributed network of resources, composed of stand-alone archives and databases maintained by projects who implement their own data structure. A central place in this architecture is reserved to Places which act as the common reference that all resources must implement. Places are assigned URIs, and are being referred by the unique identifiers given by the reference database they are described in, and disambiguated by references to major gazetteers such as Pleiades, Geonames, or Wikidata. Pelagios inherits from the Pleiades gazetteer a rather complex network of connection between multiple datasets focused on the ancient Mediterranean, such as Vici.org,<sup>17</sup> the Digital Atlas of Roman Empire (DARE),<sup>18</sup> etc., representing an important connection hub for the academic community.

This was the starting point for *Places*—the entity in ‘PATHs’ information system responsible for listing, cataloging, classifying, and describing sites and centres that are known to be active in the reference chronological period, i.e. the third to eleventh centuries CE. The *Places* file branched the initial dataset from the above mentioned databases, inheriting the existing connection network, limited to the Egyptian territory,<sup>19</sup> with a special focus on the (late) Roman and Medieval period.

From the very first moment of the initial branch, some important differences from the previous gazetteers arose; most importantly, it is the very concept of *place*, beyond the name or label we use for it, that bears important differences and needs to be further clarified. In the ‘PATHs’ database, *Places* are, first of all, archaeological sites, regardless of the kind of documentation we may have on them. The main aim of the project is not only the attestation of

16 Simon, Barker, and Isaksen 2012; Isaksen et al. 2014; Simon et al. 2016.

17 ‘Vici.org is the archaeological atlas of Classical Antiquity. It is a community driven archaeological map, inspired by and modelled after Wikipedia’, <<https://vici.org/about-vici.php>>.

18 DARE (<<http://dare.ht.lu.se/>>) is a webGIS project at the Department of Archaeology and Classical History, Lund University, Sweden, in collaboration with Pleiades. It was initially meant to provide a tiled base map of the Roman Empire and later became a full featured webGIS, inspired by the Barrington Atlas (Talbert and Bagnall 2000) but with a higher level of accuracy thanks to the integration of digital resources such as satellite imagery, national topographic maps, source texts, other source material, and scholarly literature.

19 Asswan and the First Cataract are traditionally considered to mark the southern border of Egypt, since predynastic times (Baines and Málek 2000, 20). It is also the conventional southern boundary of our research, even though it is not a very strict demarcation. Sporadic ‘intrusions’ south of the First Cataract might not be uncommon. The other boundaries are marked by natural features, such as the Sahara Desert, the Mediterranean and the Red Sea.

*place names* and their possible variants, connected or not to an actual position by geographical coordinates, but the concrete existence of a certain context in a given and well determined topographical space<sup>20</sup> during a predefined chronological range. This does not mean that toponyms and their variants are not being recorded, but that there are many cases of 'anonymous' places, of which no ancient name can be reasonably provided, which we are however able to describe on an archaeological basis. The challenge is to compile a complete and detailed repertory of all sites known to have been active from the third to the eleventh century CE, in order to obtain an overall and detailed picture of the Egyptian geography of the time, with a particular focus on centres of production, storage, and circulation of Coptic literary manuscripts. Close collaboration with active archaeological missions and steady monitoring of new publications ensure high quality and up-to-date information on research conducted in Egypt.

Particular attention is given to sites that are known to have provided manuscripts or manuscripts fragments or that are somehow related to the manuscript creation, storage, or circulation.<sup>21</sup> These *Places* usually receive more detailed analysis in order to obtain the best reconstruction that it is possible to recover of the archaeological context of the discovery.

Finally, since the majority (if not the entirety) of literary works written in Coptic have religious content, the religious geography is of particular interest. Consequently, the third type of *Places* that deserve special attention to our purposes are the bishoprics, since they mark a very concrete network of relevant locations from a religious, literary, and political point of view.

20 'Well determined' does not mean that we are always able to provide reliable geographic coordinates or clear boundaries; sites with an unknown or unclear location are also included in our file. The topographical space of an ancient place is not invalidated by our inability to reconstruct it, due to lack of research or a more generic lack of information that has come down to us. Our ability to locate, more or less precisely, the position of a place is measured by other means and clearly stated in the descriptive protocol. Traditionally, the geography of the 'Coptic' Egypt has been tightly conditioned from what can be recovered from written documents (Amélineau 1893; Timm 1984–1992) with a scarce attention to the actual archeological situation. These most important contributions are still the foundations on which any attempt to suggest new reconstructions lies. And yet the archaeological documentation of phases later than Hellenistic and Roman Egypt has grown enormously, and this documentation cannot be ignored. New studies have acknowledged this fact and provide important syntheses to the academic community (O'Connell 2014).

21 Precious information on these processes are typically yielded by paratexts, such as colophons, that sometimes accompany the texts. For a more detailed and documented description of these aspects see the article by Agostino Soldati below.



The gazetteer is based almost exclusively on the available bibliography and on the accessible archive documentation. The research is backed up and supported by field missions—when and where allowed by the general security conditions—aimed at verifying the present state of conservation of sites and monuments, excavated and documented several decades ago, collecting new photographic documentation, and permitting a better understanding of the topography of the archaeological context through an accurate analysis. A complete re-assessment of the Egyptian archaeological geography during the late antique and medieval period on the basis of previous study and autoptic analysis would be impossible due to the limited and often denied access to archaeological areas, the very large geographical size of Egypt, and the richness of its archaeological heritage. What ‘PATHs’ is trying to achieve is to provide a bibliography-based catalogue of the state of the art, with some in-depth analysis based on fieldwork for select areas of particular interest.

With these premises in mind, it is possible to make a brief introduction to the detailed protocol applied in the description and classification of the sites, implemented by ‘PATHs’.<sup>22</sup> All available toponyms and toponym variants are carefully collected and registered for each site, trying to cover the broader timespan. One of them is chosen to be the main name of the site—its principal label—and is given in its English form. There is not a fixed rule for this choice: usually the best-known form is chosen, the one most commonly used in the available bibliography. It can bear traces of the Greek name of the place (e.g. Dionysias), from the westernized Arabic form (e.g. Luxor from the Arabic الأقبصر, *al-Uqşur*) or derived from a more strict transcription (e.g. Manqabad from منقباد). Sometimes translations or transcriptions of toponyms directly derived from the Coptic tradition are being used (e.g. Monastery of Saint Phoibammon) or, finally, where no ancient or modern toponym is available, naming conventions deriving from archaeological surveys and catalogues, like the names of the graves of the Valley of the Kings (KV + progressive number), Valley of the Queens (QV + progressive number), or other Theban Tombs (TT + progressive number)<sup>23</sup> are adopted. The other variants are given with no claim to completeness, but with the sole desire of providing a richer and more dynamic search experience. One particular exception regards toponyms and place names collected from colophons: these are the subject

22 For an introductory description of the general structure of ‘PATHs’ information system, see Bogdani 2017. Technical details and full database schema documentation are regularly published and maintained up to date on ‘PATHs’ documentation repository on GitHub (<<https://github.com/paths-erc/paths-docs>>). All information is made available with open-source MIT license.

23 KV, QV, and TT naming systems were introduced by J.G. Wilkinson (1835) and continued by other archaeologists and scholars working in the area.



of detailed individual studies aimed at providing a qualified and meaningful connection between paratexts (namely colophons), manuscripts that are associated with these documents, and, finally, actual places.

The abundance of names in different languages called for a more abstract identification and naming system, capable of ensuring disambiguation. This is obtained by assigning a unique incremental numeric identifier to each site.<sup>24</sup> The uniform resource name (URN) is composed by the project acronym (`paths`), the entity name (in this case `places`), and a numeric identifier. An incomplete example of the disambiguation and alignment of various toponyms is as follows:

```
URN: paths.places.23
Site name: Abydos
Egyptian transliteration(s): ꜥbdw, ĩbd, ĩbt, ꜥbt, pꜥ tš
n ĩbt?
Greek name: Ἀβυδοῦς
Coptic name variant #1: ⲉⲃⲟⲩ
Coptic name variant #2: ⲁⲃⲟⲩ
Arabic name variant #1: العرابة المدفونة
Arabic name transliteration variant #1: al-‘Arabat al-Mad-
fūnah
Arabic name variant #2: البليتا
Arabic name transliteration variant #2: al-Balyanā
```

In order to credit the sources and to supply fast and easy mapping<sup>25</sup> with provenance database (when available), other identifiers are provided, primarily TM Geo ID (a domain specific database) and Pleiades ID:<sup>26</sup>

```
TM Geo Id: 34
Pleiades Id: 756512
```

- 24 This identifier is automatically assigned by the database engine. The ID field is also the table's primary key.
- 25 This is meant not only for consultation but also for the programmatic treatment and publication of the information. By exposing unambiguous reference links to other data providers, automatic interconnection is made easier.
- 26 As already explained, Pleiades is an impressive linking hub, and connections to other important databases such as DARE, DARMC (<<http://ags.cga.harvard.edu/darmc/>>), Wikipedia (and Wikidata), etc., are easily inferred from it, both manually and programmatically. Linking all these datasets already referenced in Pleiades would be therefore redundant. External IDs are only referenced if there is a relationship of identity (or near identity) between a 'PATHs' place and a Trismegistos or Pleiades place. If a 'PATHs' place is only a part of a Pleiades place, the reference is not provided. E.g. the tombs of Western Thebes are recorded individually by 'PATHs' but clustered under one ID by Pleiades. In this case, each Theban tomb in 'PATHs' is referred to the higher level place, Western Thebes, which is in turn directly linked to Pleiades ID 786067.

Places are then grouped into nine larger conventional areas that do not represent an actual administrative division, neither ancient nor modern. The grouping is used solely for a very rough organization of the descriptive protocol. The clusters created so far are:

- Lower Egypt (Delta)
- Memphis
- Fayyum
- Middle Egypt
- Northern upper Egypt
- Western Thebes
- Eastern Thebes
- Southern upper Egypt
- (Nubia)

As far as the ancient geography is concerned, the name of the nome where each place is located is filed;<sup>27</sup> if the place is known to have been the capital of a nome, this is clearly stated. Moreover, information about bishoprics is listed: whether or not a place has been an episcopal see, and, if yes, the year from which the bishopric is attested. This information is not easily recoverable but it has great importance for the reconstruction of the religious geography of Late Antiquity and Middle Ages.

Archaeological or textual studies sometimes do offer clues suggesting a more precise relationship between two or more sites, defining an actual hierarchy. Such information is not systematic, because it depends to the highest degree on chance in archaeological research, yet when available it is extremely important to be recorded. In this case, a special field retains upward-only topographical relationships.<sup>28</sup>

A few words must be added on the problem of the classifications of sites by function (typology) and their chronology.

Typology definition follows standards defined by other projects, namely Pleiades.<sup>29</sup> It was highly difficult to decide not to implement a tailor-made vocabulary and support previously built ones, but we believe this will enhance future dialogue and interoperability between data providers, and make this dataset easily exploitable by other partners and users. The place types taxonomy adopted by Pleiades has been filtered and limited only to site typologies

27 The nomes list adopted by Trismegistos (see Verreth 2013, 9; 11–13) is being used.

28 One example may be enlightening: that of three, probably temporary, hermitage units—paths.places.315 (C 6), paths.places.318 (C 7), and paths.places.320 (C 7)—referred by recent studies to the monastery of Deir el-Shelwit (paths.places.281), which in this case plays a central role in the area (Delattre and Lecuyot 2016, 715).

29 <<https://pleiades.stoa.org/vocabularies/place-types>>.

identifiable in Late Antique Egypt. The following typologies are currently available:<sup>30</sup>

- acropolis
- agora, forum, plaza
- theater, amphitheater
- aqueduct
- architectural complex
- basilica
- bath
- bridge
- catacomb, cemetery, necropolis
- cave
- castrum
- church
- monastery
- circus
- cistern
- estate, villa
- fort, tower
- hermitage unit(s)
- mine, quarry
- monument
- mosque
- port
- production center (manufacturing, fishing)
- salinae
- sanctuary (religious center)
- settlement
- settlement-modern
- shrine
- station (road or coastal)
- temple
- temporary military installation or camp
- tomb
- tumulus
- tunnel
- undefined
- well

As for the chronological description: when dealing with a multimillennial civilization, the late antique phases cannot be fully comprehended in isolation from earlier history. The preceding periods—Dynastic, Ptolemaic, and Roman—left behind a monumental legacy that significantly shaped the late antique landscape. It is therefore fundamental to provide a brief (without the ambition of being thorough) diachronic description of each place in order to fully contextualize its later, Christian, phases.

30 The vocabulary remains open and can be enriched at anytime, if necessary.

The chronology of the ‘Coptic’ period is given in full detail, with the starting and ending years. This is by no means an exact chronological representation: in most cases datings of archaeological sites are loose, based on few stylistic patterns, and only in rare cases in rigorous stratigraphical sequences. Years are therefore intended in a very symbolic way.<sup>31</sup>

In describing the earlier historical phases, the main aim is to offer a succinct overview of the history of a site, stressing transformations and changes in function and typology, and reuses of monuments over long timespans. These earlier phases are described on their own, and different typologies can be filed for each site in different epochs. The typology shares the vocabulary described above, while the chronology follows a more schematic and conventional classification into macro-periods. Again, the chronological scheme has been borrowed from Pleiades,<sup>32</sup> in turn shaped after shared standards defined by well-known publications, collected by PeriodO, a gazetteer of period definitions for linking and visualizing data.<sup>33</sup> Once again, the adoption of shared vocabularies is justified by the focus of our project—which is not a rigorous organization of Egyptian settlements over many millennia—and we hope that it will ease future collaboration and cross-references with other Egyptological databases and projects.

Further information, such as graphical documentation (photographs, plans, sketches, etc.), topographical surveys, satellite imagery, topographical maps, digital elevation models, all of different scales, and geographical coverage are being collected in a conjunct GIS platform, able to perform rather complex spatial queries and accurately interconnect data of different provenance. The GIS is also the test bench of the geographical representation of the data that will be made available to the academic community through the Internet by the Archaeological Atlas.

### ***3. Coptic literature: authors, works, and textual corpora. Some methodological notes and case studies (Francesco Berno)***

It is obvious that the categories ‘authors’ and ‘works’ are closely related within the ‘PATHs’ database. In turn, they are connected to the ‘manuscripts’ category, since our text-oriented analysis has inevitably the concrete manuscript evidence at its core.

31 E.g., ‘starting year 501’ and ‘ending year 550’ stands for ‘first half of the sixth century’. This is a conventional manner to represent both undefined periods and very exact dates and make them easily searchable and comparable. A query for ‘starting date equal or bigger than 501 and ending year equal or smaller than 550’ will match ‘first half of the sixth century’, ‘first (or second) quarter of the sixth century’, but also exact ‘year 532’.

32 <<https://pleiades.stoa.org/vocabularies/time-periods>>.

33 <<http://perio.do/>>.

Indeed, 'PATHs' classification of an author is primarily based on his relationship with the works which are ascribed in different ways to his name, contributing to form a figure that may be real or fictitious, or, as in most cases, a mixture of reliable pieces of biographical information and later additions, often with evident apologetic or defamatory purposes.<sup>34</sup> Conversely, the identification of a work<sup>35</sup> cannot be separated from its connection with the tradition(s)—and I shall use this notion with great care, since it threatens to overexpose elements of ostensible continuity—that preserved the text, and with the environment(s) in which it was produced, copied, and transmitted.

'PATHs' has developed the following system to define any virtual kind of relationship between a work and a so-called 'author'. An 'author' can be linked to a single work as:

- *stated author*: the name to which a work is attributed in Coptic;
- *work's creator*: actual and original author of the work in its original language, either Greek or Coptic;
- *author of the master work*: author of a work that has lost its original authorship, but continues to circulate in the Coptic literary tradition under a pseudoepigraphical attribution and in such a redrafted redaction that it has to be considered as a work independent of the original one. The most striking example is the Coptic rewriting of Plato's *Republic* (IX 588b–589b) preserved in NHC VI, 5.

These identifications can be built on textual (the content itself), paratextual (titles, colophons, other scribal subscriptions) and/or 'external' evidence (other works, historiographical traditions, etc.), and this information is clearly recorded and made available in our database in a specific field.

34 Especially in the case of notable ecclesiastical figures at the origins of the Coptic church (Athanasius, Cyril, etc.), whose (pseudo-)biographical dossiers increased over the course of the development of Coptic literature. This led to the formation of the so-called 'cycles', that is, groups of works composed between the seventh and the eighth centuries and devoted to the lives of fourth- and fifth-century Fathers (or falsely attributed to their names). On this characterizing phenomenon of Coptic writing activity, see Orlandi 1986. It is also interesting to note a quite opposite trend, namely the continued use of the figures of notable heresiarchs, in order to denote their heresy over many centuries. See, for instance, the use of the name of Nestorius in the homily *On the Nativity* (CC 0129), attributed to Demetrius of Antioch.

35 By 'work' I mean here what Orlandi 2013 defines 'textual unit', that is, what is 'identified in modern scholarship by means of author and title [...], but also specifying the literary genre' (91); thus, a work can be preserved by different 'codicological units'. I use 'text'—which is an intrinsically wider and more vague term—to refer to the concrete dictate of a work, that is the combination of words, grammatical structures, and sentence patterns composing a work.

‘PATHs’ record for each author includes an internal numerical identifier (ID), the VIAF identifier, as well as different names and designations attributable to the author<sup>36</sup> and any religious or ecclesiastical title. This is followed by a short biography of the author composed with a special interest in the role he and his production have played in the development of Coptic literature and, in most cases, with a discussion of his more relevant extant works. This section ends with a thorough register of his extant literary production, that is, a list of all the literary works that are ascribed to the author, both in Coptic and in near linguistic environments.

For the Greek ‘authors’,<sup>37</sup> we exclusively record the works that were actually transmitted in Coptic, and this last section is customarily organized in two parts, the first covering the authentic works, the second the pseudoepigraphical ones. For the Coptic ‘authors’,<sup>38</sup> we record both the works originally composed in Coptic (*genuina* and *dubia/spuria*<sup>39</sup>) and their translations in other languages. Thus, in this case, the repertory is threefold, since for obvious reasons the authenticity is indicated solely for the Coptic works.

It is not uncommon for a work to disclose and combine more than one category of ‘author’, or several authors in the same category. The homily *Quod deus non est auctor malorum* (CC 0081<sup>40</sup>) is an effective example of both these phenomena. In fact, this is an authentic homily by Basil of Caesarea, the Greek manuscript tradition being quite unanimous in such identification (CPG 2853).<sup>41</sup> Basil’s authorship must have been known also in Coptic, since a Sahidic translation—whose *inscriptio* is now missing—is included in MONB.GS<sup>42</sup> (CLM

36 English name, Italian name (assigned by the CMCL), Greek name and, obviously, Coptic name(s) (as it/they actually appear(s) in the manuscript tradition).

37 By ‘Greek’ I mean authors whose works were likely composed originally in Greek.

38 By ‘Coptic’ I mean authors whose works were likely composed originally in Coptic. The problematic cases of authors who seem to have written both in Greek and Coptic will be shown under this latter category.

39 However, we are fully aware of the provisional and forced nature of this conceptual framework, all the more so in a complex literary tradition such as the Coptic. On this topic, see Mayer 2017, especially 979–985.

40 The *Clavis Coptica* (CC) is the standard system developed by the *Corpus dei Manoscritti Copti Letterari* (CMCL) to identify a Coptic work. Their number is constantly growing because of new textual discoveries and identifications.

41 For a recent survey on the Coptic textual transmission of Basil’s *corpus*, see Suci 2017, especially 65–67, with selected bibliography.

42 This is the standard system developed by the CMCL to identify complete or reconstructed Coptic manuscripts. The *sigla* consists in a first section of four letters—which depends on the original provenience of the codex—followed by a two-letter progressive code.

414<sup>43</sup>), a codex entirely consisting in (authentic) homilies by the Cappadocian Father. However, at least two more Coptic testimonies of this work are transmitted. The first one, an almost complete<sup>44</sup> Bohairic version preserved in Vatican City, Biblioteca Apostolica Vaticana, Vat. copt. 57 (MACA.AC; CLM 72), is ascribed, according to the *inscriptio*, to John Chrysostom, who is said to have authored all the homilies collected in the manuscript. Lastly, the chapter of the *History of the Patriarchs of Alexandria* devoted to Athanasius attests that the bishop wrote a treatise 'in which he proves that evil comes from the devil [...] and that there is no evil at all with God';<sup>45</sup> a treatise which, beyond reasonable doubt, can be identified with our homily.<sup>46</sup>

Thus, in the Coptic literary tradition, three 'names'<sup>47</sup> are said to have authored this work. As a result, our entry will display two 'stated authors' (Chrysostom and Athanasius) and a 'work's creator' (Basil), with the aim of providing a clear and comprehensive overview of the work's Coptic reception and legacy.<sup>48</sup>

Moreover, there are cases in which an author falls under two or three categories at the same time, that is to say, is indicated in Coptic as the author both of works that can be certainly or reasonably ascribed to him and of works whose authorship is uncertain or wrongly attributed.

43 The *Coptic Literary Manuscript* (CLM) identifier is a univocal numerical identifier attributed by 'PATHs' to all complete, reconstructed, and fragmentary preserved Coptic manuscripts.

44 Despite the title, which specifies, in accordance with all the other *inscriptiones* of the codex, 'εβολ ηεν ηεηηοικον' ('[taken] by its *ethikon*' [that is, by the moral section that closes Chrysostom's homilies]). This makes us wonder about the actual Coptic perception of the Greek text. For a textual, paratextual, and codicological analysis of Vat. copt. 57, see Berno et al.2018.

45 V, 67, 397. See Orlandi 1968, 67–68.

46 It may be of interest to note that this elliptical reference appears immediately after a quick hint at the relationship between Athanasius and the bishop of Caesarea: '[a]nd he used to write to Basil, and Basil used to answer his letters, and used to address him as My Father'.

47 I keep using such a peculiar designation in order to stress in the strongest possible terms the problematic biographical consistency of these attributions and, more broadly, of the notion of 'authorship' itself in a Coptic environment. It is highly likely that, in most cases, the 'author' attributed to a work was just a mask, a name, without any (or with very limited) personal and biographical substance.

48 Although the complexity of the redactional history of CC 0081 is particularly remarkable, this is not an isolated case. See, for instance, the Melito's homily *De anima et corpore* (CC 0223). This text, lost in Greek, is attributed in Coptic to Athanasius, and goes in Syriac under the name of Alexander of Alexandria. On this problematic attribution, cf. Orlandi 2003.



In this context, I would like once more to take John Chrysostom as a privileged case study. The case of the bishop of Constantinople presents an even more challenging situation. Besides the subdivision just mentioned, we find that two works ascribed in Greek to Chrysostom are attributed in Coptic to other authors.<sup>49</sup> Nevertheless, we felt the necessity to store in our database this fundamental information, which otherwise would have been lost, by adding a new subset, namely that of ‘Literary works attributed in Coptic to other authors, while in Greek to Chrysostom’. Thus, ‘PAThs’ record will provide a concise but exhaustive list of the extant literary production connected to his name, without limitation to the works which are explicitly ascribed to Chrysostom and regardless of the authenticity of this attribution.

Sure enough, such a classification relies on and is made possible by a coherent identification-system of any and every single textual unit—with the obvious restriction to the literary works—by providing it with a stable identifier (the CC entry) and by relating it with the literary traditions and languages in which the same work is preserved. Therefore, an essential step is the presentation to each CC entry of other relevant *claves*<sup>50</sup> that, when available, might offer a map of the work’s dissemination and legacy in other linguistic, geographical and cultural backgrounds.

The modern conventional ‘titles’ attributed in our database on the basis of the designations provided by CMCL or other resources, as well as the ancient *inscriptiones/subscriptiones* ascribed in the manuscripts to their related works, are not sufficient to identify a text in a consistent and methodologically satisfying way<sup>51</sup>, and this indicates the need for an in-depth analysis of the contents of each manuscript evidence of the Coptic textual tradition. Our ‘works’, marked with an univocal CC entry, are always linked to and identified by the manuscript(s) in which they are preserved.

As for the relationship with other literary traditions and as for the numerous cases in which we have evidences of different Coptic redactions of the same work, this results in another cluster of questions. In fact, their exact overlapping is just a million-to-one shot. This difficulty applies to a wide range of textual and literary circumstances by addressing the relationship be-

49 Homilies in Mt 15, 21 (CC 0147; attributed in Coptic to Eusebius of Caesarea) and *De poenitentia* (CC 0166; attributed in Coptic to Severian of Gabala). On the Coptic reception of Chrysostom’s *corpus*, see Voicu 2011 and 2013.

50 Namely, *Clavis Patrum Graecorum* (CPG), *Bibliotheca Hagiographica Graeca* (BHG), *Bibliotheca Hagiographica Orientalis* (BHO), *Bibliotheca Hagiographica Latina* (BHL), *Clavis Apocryphorum Veteris Testamenti* (CAVT), *Clavis Apocryphorum Novi Testamenti* (CANT), *Clavis Aethiopica* (CAe).

51 On the variety and heterogeneity shown by the use, the position, the structure, and the role of Coptic titles, I refer to Buzi 2004, 2005, and 2011.

tween a Coptic original work (or, more frequently, a Coptic translation of a Greek model), on the one hand, and, on the other, previous or later reworked versions of the same text transmitted in other languages, or again two or more Coptic redactions or translations of the same work<sup>52</sup>.

We therefore need to establish a common 'degree of flexibility/fluidity' – which has to maintain a dialectical relationship with a more traditional 'idea of textual stability' associated with the notion of literature<sup>53</sup>—within which to set the decision concerning whether two texts can be taken as the same work or not. In other words: what is the threshold of redrafting and amending beyond which two or more versions of the same model can no longer be considered the same, resulting in two independent works? The main concern of 'PATHs' is to offer as much reliable and complete information as possible and, at the same time, to give our database user the possibility of making her/his own choice (which could be different from ours). Consequently, our option has been to provide the references to all the *claves* that either point to previous versions contributing to the formation of the Coptic work or indicate following translations which are in various ways related to and dependent upon the Coptic text. This means that we have opted for an hourglass-model. Predictably, the most noticeable implications of this option involve those genres that are more exposed to rewriting and emending processes, such as hagiographical and martyr tales<sup>54</sup>.

A last issue has to be briefly discussed, namely the presence of a CC for both single work and textual *corpora*. Currently, for instance, one can find a *clavis* for the *De cella* by Agathonicus, and a different one for the *Agathonicaeum corpus*, that is, for a collection of works by Agathonicus, including the *De cella* itself. Another, maybe more obvious instance is provided by the *Letters of Paul*. Just as an example, CC 0699 identifies the *Letter to the Galatians*, while under CC 0724 we find the *Pauline Epistles* as a whole.

This feature – which is largely dependent upon the CMCL classification, and undoubtedly deserves greater attention and further investigation – is not due to an inconsistency of our taxonomy, since it complies with the necessity

52 I am hinting, as mere instances, at the relationships between CC 0423 and CC 0633 (*Vita Moysis Archimandritae*), and between CC 0187, CC 0233 and CC 0549 (*Vita Pistentii*). Cp. also the contribution of Tito Orlandi in this issue.

53 As for the Coptic *milieu*, I would like at least to mention Lundhaug 2017.

54 I would point out the following *clavis* entries as specific case studies: CC 0227, CC 0229, CC 0231, CC 0232, CC 0233, CC 0234, CC 0236. In these cases, we provide the reference to all the Greek textual traditions that led to the Coptic text as we know it, as well as the reference to all the translations that derived from the Coptic text, regardless of the often significant textual elaborations.

of safeguarding the unity of a Coptic work/translation as it was actually perceived in Coptic religious life.

Some evidence<sup>55</sup> leads us to maintain that a textual *corpus* might be conceived as ‘something more’ or ‘something different’ than the single works included in it and, as such, had an independent circulation. In short, significant *corpora* stand as works in their own right.

This is information that must be stored and adequately appreciated in an analysis of Coptic literature.

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55 See Orlandi 2018.

- ination and Storage': A New International Project on Coptic Literature and the Role of the Coptic Papyrus Codices of the Museo Egizio for Its Development', *Rivista del Museo Egizio* 1 (2017) <doi:10.29353/rime.2017.656>.
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