

## MANTO: A Born-Digital LOD Resource for Greek Myth

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**Abstract:** *MANTO* is a LOD resource that models both the interactions of people, places and objects within the Greek mythic storyworld and the impacts of those mythic entities on the historical landscape of the Mediterranean. Its data is entirely built up through assertions in ancient sources. In this article we introduce the aims and achievements of this project. We describe its basic ontology and methods of data collection, some ways in which the resulting data can be queried and visualised, and its relationships to other digital projects in ancient world studies. We provide also a case-study of the use of its data in visualising the location and movement of mythic relics described by Pausanias.

### Introducing *MANTO*

In this article, we introduce *MANTO*, a born-digital resource for Greek myth.<sup>1</sup> *MANTO* is a collaboration between Greta Hawes, Scott Smith, and current and former students of Macquarie University, the University of New Hampshire, and Australian National University. Over the past seven years we have built an authoritative Linked Open Data (LOD) resource for Greek myth that now consists of ca. 10.000 fully disambiguated entities. Relationships between these entities are modelled using a bespoke structured vocabulary. All data represent assertions in ancient sources. Currently, *MANTO* has good coverage of the Greco-Roman textual tradition, including all of archaic Greek epic, Pindar, Strabo, Apollodoros, Lucian, and Pausanias, as well as some Greek tragedy and lyric, Latin verse, and mythographic and geographical texts. In 2023 we began to incorporate also evidence for mythic storytelling from ancient artifacts, coins, papyri, and inscriptions. The data can be searched and visualised via *MANTO*'s public interface (<https://manto.unh.edu/>) and is available for reuse under a Creative Commons Attribution 4.0 License (CC BY-NC 4.0).

Early initiatives to provide digital resources for Greek myth tended to replicate the paradigms of print media. The most extensive of these, [Theoi.com](http://Theoi.com), is organised around the collation of out-of-copyright encyclopedia articles and textual passages, making them usefully accessible in new forms. Similar are the encyclopedia entries provided by UPenn and the Perseus Project.<sup>2</sup> More recent work has explored the potentials of the digital medium for mapping the spatial aspects of myth, and developing linked data capabilities. Geographical aspects come to the fore in *Myths on the Map* (<https://myths.uvic.ca/index.html>, from 2010), *Mapping the Catalogue of Ships* (<https://ships.lib.virginia.edu/>, from 2013), and *Mythodikos* (<https://github.com/sfritzell/mythodikos>, from 2019). By contrast, *Mythoskop* (<https://mythoskop.de/>) uses network relationships to visualise

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1 For details of the project see <https://www.manto-myth.org/manto> (all links were accessed 20.01.2026). For discussion of *MANTO* see Johnston (2022); Palladino (2023); Barker et al. (2024); Middle (2024); Kindt (2025). This article is part of the research project *Storytelling networks and community crises in ancient Greece*, funded by the Australian Research Council (FT220100543).

2 The [UPenn collection](#) draws (without attribution) on Seyffert (1891); [Perseus](#) draws on Smith (1873–1874).

genealogies and narratives as well as spatial components. Other projects that incorporate datasets relevant to myth include *ToposText* (<https://topostext.org/>), *Trismegistos* (<https://www.trismegistos.org>), the *Corpus of Paraliterary Papyri* (<https://reliacta.org/cpp/>), and *Digital LIMC* (<https://app.dasch.swiss/project/BRwvcfLLT72IN-fXzQkrdQ/data>), which focus on texts, epigraphy, papyri, and material culture respectively.

*MANTO* began in 2018 before most of these projects had reached maturity. As a born-digital project, it was created from a conceptual blank slate. One of our guiding intellectual principles was the idea that we might be able to conceptualise and convey the informational content of Greek myth differently outside of the restraints normalised by the print paradigm.<sup>3</sup> Somewhat paradoxically, we conceived of *MANTO* as a continuation of the ‘mythographic impulse’ to collect and systematise myths that began in antiquity, and yet we recognise too that digital methods offer quite different opportunities for doing this. Where myth encyclopedias have been primarily organised by lists of gods, monsters and heroes, *MANTO* models myth as a network of intersecting entities which can be re-organised at will. Most importantly, these entities are heterogenous, so places and objects are as significant – and queryable – as mythical ‘people’. In addition, whereas different kinds of evidence for Greek myth have conventionally been siloed off from one another and, in the case of textual evidence in particular, the early poetic and performative genres treated as more authoritative and authentic than the later prose ones, *MANTO* imposes no such *a priori* hierarchies on the sources it draws data from.<sup>4</sup> In this article, we describe *MANTO*’s basic ontology, the process of data collection, and its alignment with other initiatives in the LOD ecosystem, and we demonstrate how its networked structure creates new opportunities for analysis and visualisation.

### **MANTO’s Storyworld**

We treat Greek myth as happening in – and thereby simultaneously creating – a distinctive storyworld. This storyworld is delimited by chronological boundaries: it constitutes the deepest past, starting from the birth of the gods and creation of the universe and continuing through many generations of heroes, including those involved in the attack of the Seven against Thebes and the Trojan War. While there was ancient debate over when the mythical period ‘finished’, for the purposes of this project, we place its endpoint five generations after the return of the Heraclids to the Peloponnese for Greek traditions, and at Romulus’ death – nominally eight generations after the Heraclids – for Roman ones. Identifying this as the endpoint of myth is motivated by practical concerns. It ensures that we capture almost all narrative actions that could be reasonably defined as ‘mythical’. This is the point, for example, that Pausanias’ Messenian and Laconian kinglists, which span the mythical and historical periods, cease to contain narrative content.

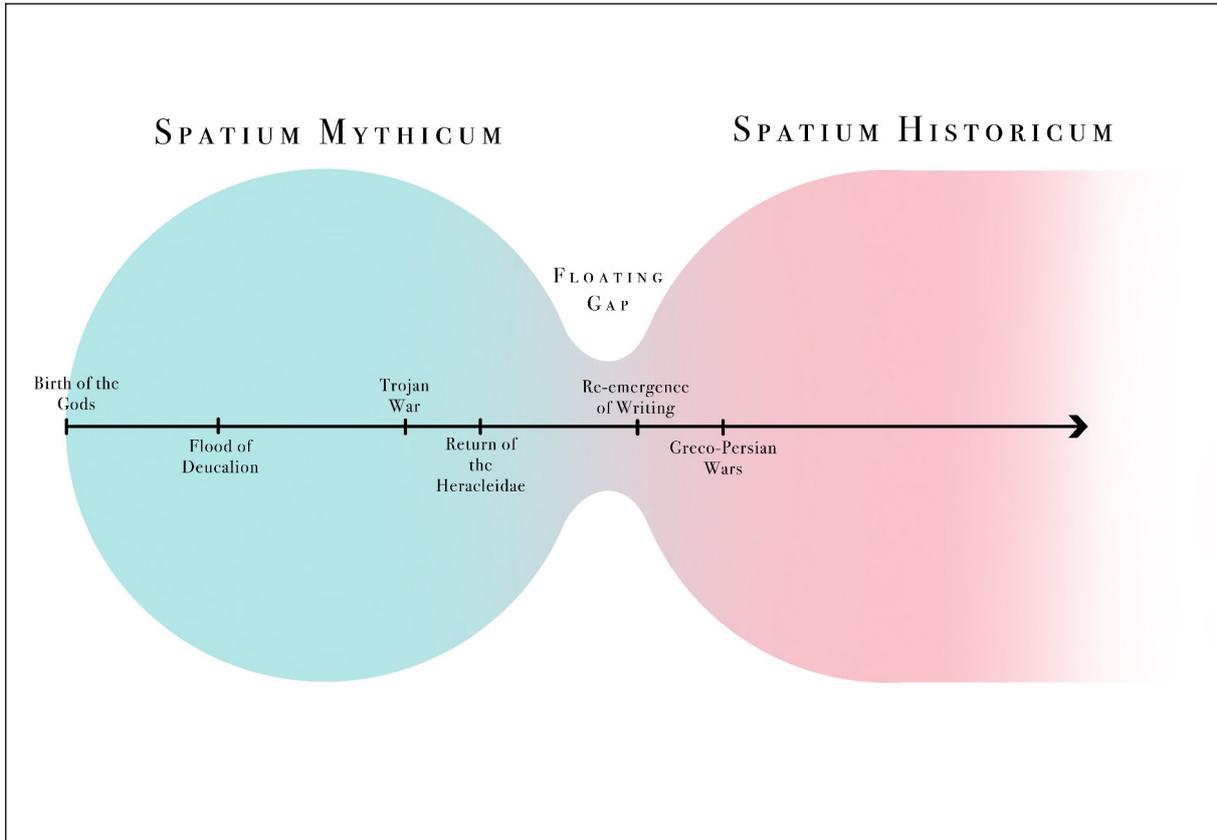
We call this storyworld the *spatium mythicum*, a somewhat out-of-fashion term that signals both a time removed from a historical present and a distinctive conceptual space for mythical action.<sup>5</sup> To conceptualise this storyworld, we borrow J.R.R. Tolkien’s description of such narrative realms as ‘secondary worlds’. These worlds succeed when they are experienced as being internally complete and coherent despite lacking the reality of the primary world.<sup>6</sup> The storyworld of Greek myth, however, has two characteristics that distinguish it from the fictional archetype of Middle Earth. Firstly, it shared much

3 For an analogous discussion, in relation to the creation of textual editions, see Antonopoulos et al. (2023).

4 For discussion of *MANTO*’s conception of Greek myth as a networked storyworld, its role within the mythographic tradition, and its development in relation to other models for organising mythic content, see Hawes / Smith (under review).

5 We do not use the term *spatium mythicum* with any historiographical import or to suggest a qualitative distinction between an irrational past and a rational present (see discussion in Saïd [2007], Buxton [1999]). Rather, we use it as a chronological marker that recognises the basic Greek conception of time that distinguished between a *spatium praesens* and a distant past, separated by a ‘floating gap’ (on which, see Thomas [2001]).

of its geography with the here-and-now of the ‘primary world’. Greek myths recounted the deep past of the Mediterranean and they left traces discernible in the storytellers’ present. Secondly, the storyworld of Greek myth was not created by a single author; rather, it was the work of innumerable storytellers in thousands of communities over more than a millennium. Taken together, these two characteristics underline the extent to which local investment was the engine that drove much ancient myth-telling. The Greek mythic storyworld was, in broad strokes, a stable, recognisable and highly-visible aspect of shared culture, and yet simultaneously subject to myriad conflicting accounts according to the perspectives and preoccupations of those telling stories about it.<sup>7</sup>



**Fig. 1: Graphic model of *MANTO*'s ontology of relationship between the *spatium mythicum* and *spatium historicum*.**

*MANTO*'s data structure is designed to capture both the Greek mythic storyworld itself and the impact of this storyworld on the landscape of the historical Mediterranean. This second element will be the focus of the next section of this article. In this section we describe our processes for articulating mythic events as interactions within the storyworld. Any digital model of Greek myth must respect its noted tolerance for contradictions and disagreement. *MANTO* does this by establishing a stable set of nodes, representing disambiguated entities, then using edges to capture assertions made about these entities in ancient sources, without making any attempt to resolve the ‘messiness’ that comes from the formal incompatibilities that result.

6 See Tolkien (1947); and Johnston (2018), 121–146 on the application to Greek myth. Lowe (2000) uses the model of a narrative universe to describe ancient storytelling more generally. Hawes / Smith (under review) provides further discussion in relation to *MANTO*.

7 For further discussion, see Hawes (2027).

*MANTO*'s entities belong to the following categories:<sup>8</sup>

- **Agents:** individual living entities including gods, heroes, monsters, and animals. E.g.: Athena, Helen, the Minotaur, the Cerynithian Deer.
- **Collectives:** groups of agents with recognisable collective identities. E.g.: the Argonauts, [the Niobids](#), the Centaurs, the Cattle of Helios, the Ionians.
- **Objects:** moveable, object-like entities without agency. E.g.: the Scepter of Agamemnon, the Shoulder of Pelops, the Club of Heracles, the Crown of Ariadne.
- **Places:** Significant geographical locations, including fictional places. E.g.: Athens, the Underworld, Mount Olympus.
- **Landmarks:** immovable buildings or smaller natural features. E.g.: the Tomb of Helen at Therapne, the Olive Tree on the Acropolis.
- **Constellations:** stars, groups of stars, and planets. E.g.: the Pleiades, Mars.
- **Mythical events:** significant events which bring together entities at a particular point in time and/or space. E.g.: the Flood of Deucalion, the Funeral Games of Achilles.

In keeping with the principles of agent-based modelling, no *a priori* hierarchy is imposed on these categories. Autonomy is not reserved for mythic 'people' (i.e. agents and collectives), nor are there restrictions on how entities can interact with each other. This is a necessary principle in working with mythic material since, for example, a goddess might hurl an island as a weapon against an enemy (Apollod. Lib. 1,6,2), a tree might give birth to a hero (Apollod. Lib. 3,14,4) or the plank of a ship might speak a prophecy (Apoll. Rhod. 4,585–588; cf. 1,524–527).

*MANTO*'s ontology treats these entities as basic, identifiable concepts that exist independently of the name(s) assigned to them or iconographic variability.<sup>9</sup> So, just as the major ancient city in Attica might be described in ancient sources variably as 'the city of Theseus', 'the city of Pericles', 'the city of Hadrian', Ἀθηναί, and *Athenae*, so too might the Amazonian woman who marries Theseus and whose abduction sparks a retributive campaign from her fellow-Amazonians be a single recognisable entity despite being variably called 'Antiope', 'Melanippe', 'Hippolyte', or 'Glauce'. Similarly, the implement that Perseus uses to decapitate Medousa remains 'the same' despite sometimes being depicted as an agricultural sickle, and at other times looking more like a sword. *MANTO* mints unique identifiers for all entities; these appear in the stable URLs for the project (e.g. 8190234 for the Amazonian wife of Theseus, 9601847 for Perseus' weapon). Where a specific name is required to capture some relevant aspect of myth (e.g. the Laconian city of Pyrrhichos got its name from Achilles' son Neoptolemos, who was also known as Pyrrhos, Paus. 3,25,1–2), these 'alternative names' are captured as separate entities that are subordinate to their main entities (there is the example of 'Corynetes [alt. Periphetes]' in the illustrative ties below). Where not enough evidence exists to determine whether an entity that appears in one source should be identified with (or disambiguated from) another entity (usually with the same name) elsewhere, we use 'is possibly the same as' to express the uncertainty.<sup>10</sup> Our entities are aligned to other datasets: places and landmarks are aligned with Pleiades and fetch locational data

8 This description is necessarily simplified. For fuller details, see the *Manual of Data Collection Principles and Practices*: <https://www.manto-myth.org/documentation>.

9 For mythical space in *MANTO*, see Hawes / Smith (2025). Establishing the ontologies of mythical 'people' is beyond the scope of this article, though it is worth pointing out that mythical figures are not homogenous in their *function* in the mythical storyworld; 'biographical' agents like Achilles are different from eponyms created ad hoc to explain a place name. For preliminary discussion of mythic people see the series of blog posts [here](#) and [here](#), with Johnston (2018), 147–176. We plan to return to this topic at a later date with fuller discussion.

from there; people are aligned with *LIMC*, *Digital LIMC*, *Wikidata*, and *Trismegistos*.<sup>11</sup> In addition, we identify sources using CTS-URN (for textual passages); *Beazley Archive Pottery Database*, *LIMC* and *iDAI* (for artefacts); and a range of standard epigraphic and numismatic databases. Sources in *MANTO* are classified by type, geographical context and chronological period; this last is aligned to the periods defined in *ChronOntology*.

Connections between entities are captured using ‘ties’, each representing an assertion found in an ancient source. *MANTO*’s ties use a bespoke structured grammar that balances the controlled vocabulary needed for machine readability with the contextual flexibility required to usefully communicate narrative richness. Each tie specifies the ancient source where the assertion is made, and any other sources indirectly cited or described. It uses one of 165 predicates combined with any arrangement of subject(s), direct object(s), indirect object(s), preposition(s), purpose clause(s), and ablative(s) absolute.<sup>12</sup> Some examples of such ties in *MANTO* featuring one of Theseus’ distinctive weapons are (with sources in bold, entities in caps and predicates in italics):

- **Apollodoros, *Library* 3,16,1**: THESEUS *takes* THE CLUB OF THESEUS in/on/at EPIDAUROS from PERIPHETES.
- **Plutarch, *Theseus* 8,1**: CORYNETES (ALT. PERIPHETES) *derives etymology* from THE CLUB OF THESEUS.
- **Diodoros, *Library* 4,59,1–4,59,6**: THESEUS *kills* PERIPHETES with the involvement of THE CLUB OF THESEUS.
- **Euripides, *Suppliant Women* 650–725**: THESEUS *defeats* CREON in/on/at THEBES near RIVER ISMENOS; THE SPRING OF ARES; THE TOMB OF ZETHOS AND AMPHION; THE ELECTRAN GATES using THE CLUB OF THESEUS with the aid of PHORBAS; PARALOS to avenge THE SEVEN AGAINST THEBES to aid ADRASTOS.
- **Wall Paintings from Casa del Centenario IX 8, 3.7, Pompeii**: THESEUS *kills* THE MINOTAUR in/on/at THE LABYRINTH using THE CLUB OF THESEUS with the involvement of THE FINAL ATHENIAN TRIBUTE.
- **Attic Red-Figure Bell Krater (Nicholson NM49.4)**: [NO ENTITY] *purifies* THESEUS in/on/at THE ALTAR OF ZEUS MEILICHIOS with the involvement of PEIRITHOUS; POSEIDON; ATHENA; PHORBAS; THE CLUB OF THESEUS.

These ties are designed to capture basic narrative content. They denote the fact that there is some kind of interaction between the entities named in the tie and their appearance together in the source, while also conveying information about the nature of this interaction. *MANTO* favours acts with clear outcomes, or easily-discernable relationships like genealogical connections. So, our vocabulary distinguishes between certain different kinds of deaths (‘kills’, ‘dies by suicide’, ‘makes sacrifice of’, etc.)

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10 In the opposite cases, where a source conflates two (usually homonymous) entities that are disambiguated in *MANTO*, we use ties with the predicate ‘is conflated with’; these appear on filecards as ‘sometimes conflated with’. Examples include Apollodoros’ conflation of the two Nauplioi (*Lib.* 2,1,5) and Ovid’s of the two Scyllae (*Am.* 3,12).

11 We thank Jonathan Groß, Brady Kiesling, and the larger *Wikidata* community for their work in aligning *MANTO* URIs with *Wikidata*. *MANTO* is an authoritative source in *Wikidata* (Q107400883) and *MANTO* URIs can be added to *Wikidata* using the property ‘MANTO ID’ (P9736).

12 The terms ‘purpose clause’ and ‘ablative absolute’ mark categories that show motivations for actions and offer further ways to add a third entity to a tie. The former includes connections such as ‘to help X’ or ‘to obtain Y’, while the latter includes motivations such as ‘at the command of X’, or ‘at the instigation of Y’, or ‘in accordance with a prophecy from Z’.

since these can typically be easily distinguished across sources, and captures also where a hero does not die but is transformed in some way ('is metamorphosed', 'becomes immortal'), simply vanishes ('disappears'), or is returned to life ('resurrects'). But we do not attempt to record the more granular distinctions that might distinguish accounts in different sources, or particular thematic foci. So, *MANTO* does not capture whether a particular storyteller or artist thought an act of killing was justified or illicit, intentional or unintentional, whether it appears as the main narrative or in a digression, or distinguish, for example, strangling from poisoning or death on the battlefield.

In general, we treat our sources as evidence for the 'building blocks' of myth and record only minimal details of the narratological context from which the data is captured, notably:

- **Data uncertain:** some aspect of the source (e.g., damage, ambiguity, allusiveness) makes some aspect of the data captured in the tie uncertain;
- **Doubt or disbelief expressed:** the source explicitly expresses doubt about the narrative tradition captured by the tie or explicitly argues that it is untrustworthy;
- **Alternatives given:** the source gives two or more conflicting accounts of the data captured in the tie;
- **Data implicit:** the data captured in the tie is deducible from the source, but not stated or depicted explicitly.

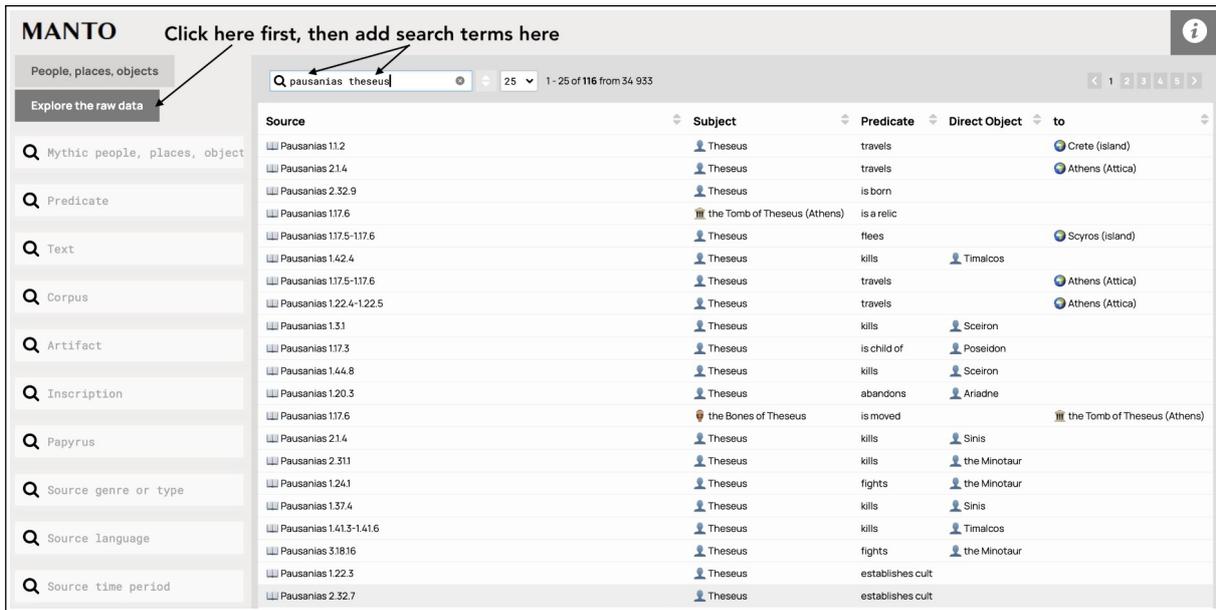
We do, however, capture where the source attributes or associates some aspect of the data to another (indirect) source:<sup>13</sup>

- **Textual source:** in the direct source, the data captured in the tie is attributed to or associated with an identifiable passage of text that is cited or quoted;
- **Local tradition:** in the direct source, the data captured in the tie is attributed to an identifiable local population;
- **Inscription:** in the direct source, the data captured in the tie is attributed to or otherwise associated with an inscription;
- **Depiction:** in the direct source, the data captured in the tie is attributed to or otherwise associated with a visual depiction.

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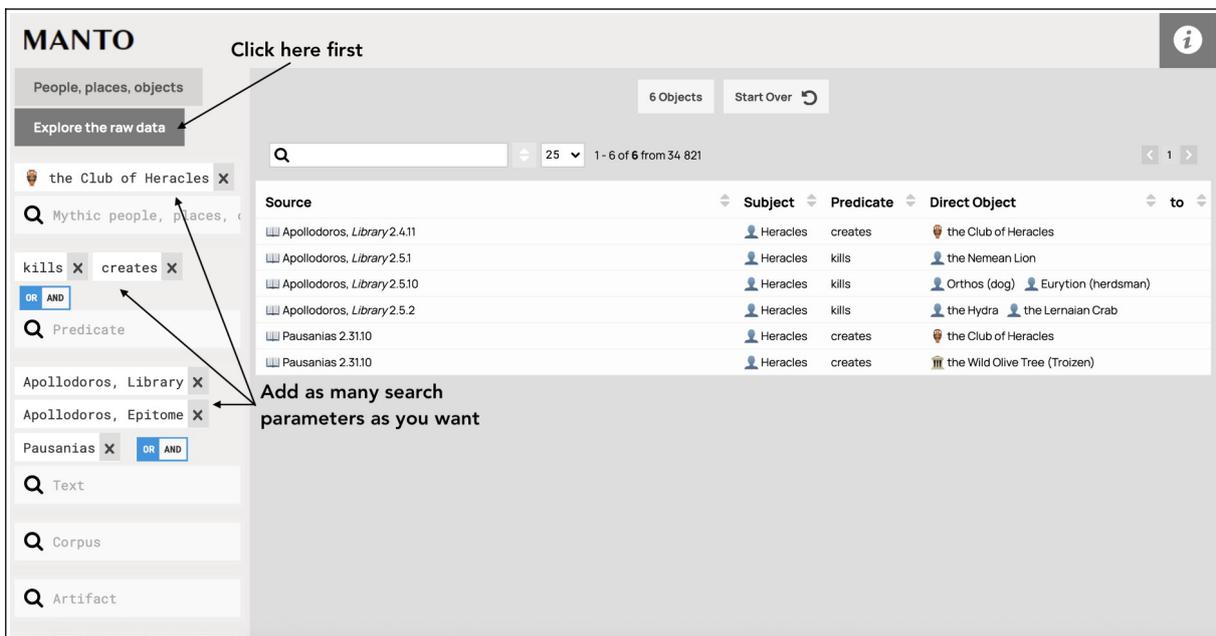
13 For the role of these indirect sources in *MANTO*, see <https://www.manto-myth.org/blog/things-mentioned-by-pausanias-or-an-excuse-to-talk-about-secondary-sources>.

Our team has so far collected around 36,000 ties. This data can be searched in two basic ways in the public interface. Users who access the ‘Explore the raw data’ portal can perform string searches that will return for example, the 116 occasions where we captured Theseus in Pausanias:



**Fig. 2: Screenshot from MANTO's public interface showing string search for 'Theseus' and 'Pausanias'.**

More complex searches can be performed in this portal using Boolean methods to identify specific combinations of entities, predicates, and sources:

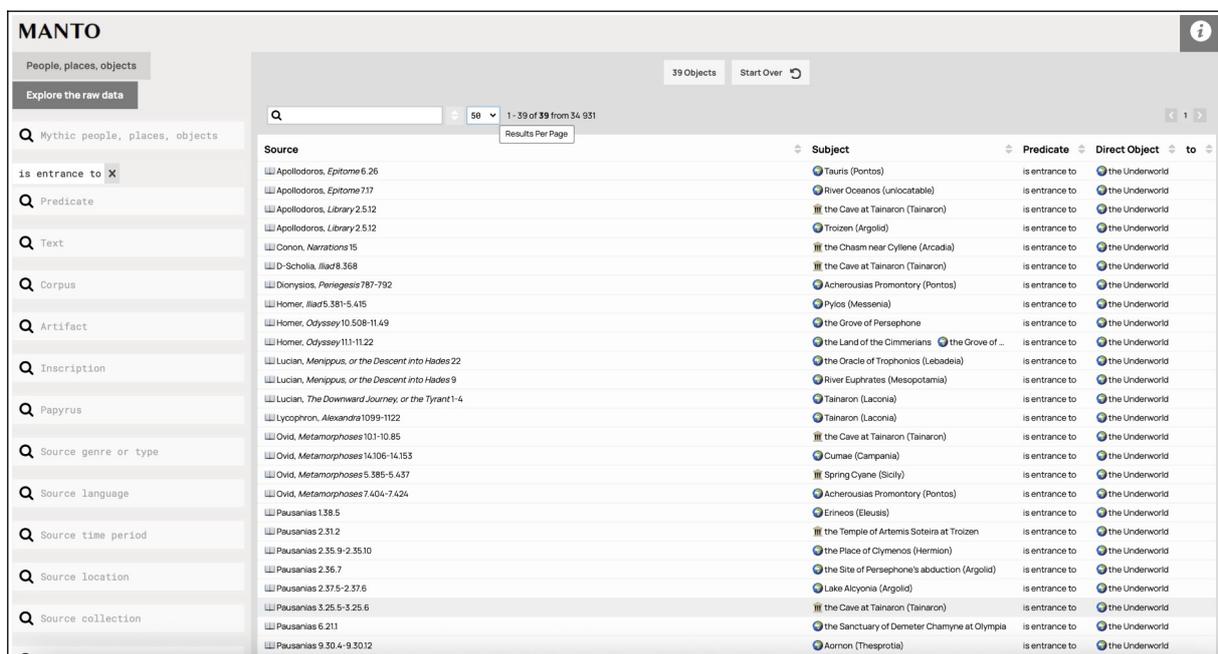


**Fig. 3: Screenshot from MANTO's public interface showing Boolean search.**

Users who access the ‘People, places, objects’ portal are shown the data as ‘filecards’ in a more conventional triple-store format. These are the products of a second-order process of reversals that aggregates the raw data into coherent and comprehensive lists of relationships for each entity. For example, ‘dies at’ will collect all of the evidence for the place of death of a particular entity and not distinguish between the different predicates (described above) that might have been used to capture the episode. Typically, the conditions that trigger these reversals appear within the ties. So, in the example of the Club of Theseus below, ‘used at’ draws on ties that include this entity in the ‘using’ field. In addition,



*MANTO*'s bespoke vocabulary also captures mythic phenomena that mark out the *spatium mythicum* as qualitatively distinctive. To give some examples, strange births are captured using 'is born [from]', 'is born by autochthony', 'gives birth by parthenogenesis' and 'comes into being'. The extraordinary physical features of some agents and collectives are captured using 'has monstrous form' or 'has hybrid form'. Special powers, often gifts of the gods, can also be captured. The predicates 'metamorphoses', 'is metamorphosed', 'becomes immortal', 'makes immortal' and 'takes form of' capture the transformation of one entity into another, including those transformations into constellations found in the rich corpus of catasterisms that developed in the Hellenistic period. We have already seen that several other alternatives to death can be captured, as can resurrection, and the places where the hero or god resides after death (e.g. in the Underworld, or on the Islands of the Blessed). 'Flows into or out of' captures assertions that rivers and other waterways were connected to one another against geographical reality since these often memorialise mythic narratives, like the river god Alpheios' pursuit of Arethousa; and 'is entrance to' captures all those places where access to the Underworld was said to be possible.



**Fig. 6: Screenshot from *MANTO*'s public interface showing search for uses of the predicate 'is entrance to'.**

*MANTO*'s focus is best described as a qualitative treatment of mythic information rather than the capturing of narrative *per se*. Most notably, because we largely ignore the narrative context in which our data appears, we lose the sequential ordering of events that shaped the story in the ancient account. *MANTO* thus excels in revealing certain mythic phenomena through its concern with the 'building blocks' of Greek myth, but cannot express the whole edifice of a story as it appears in a particular account. This approach is being pursued elsewhere. Mythoskop's data collection methods do retain the sequential ordering of action in a specific author using context windows; for instance, the story of Perseus in Apollodorus 2,4,1–2 is presented and visualised as a series of 22 steps, from his fathers Acrisios' consultation of the oracle to his own killing of Medusa. Similarly, the emerging model of hylistics extracts narrative material (*Erzählstoff*) from the medium in which it is transmitted. Hylistics have been used in the service of comparative mythology and, increasingly, narratology.<sup>14</sup>

14 See Zgoll (2019); Zgoll et al. (2023).

## The Storyworld's Impact on the Historical Mediterranean

This distant storyworld, for all its inherent strangeness, cannot in actuality be disentangled from the historical Mediterranean. As we noted above, the *spatium mythicum* was, spatially, largely co-terminous with the *spatium historicum*, and ancient storytellers constantly drew connections between the ‘there and then’ and the ‘here and now’. So, *MANTO* reveals the ways in which the mythical world peeked through into the historical landscape.

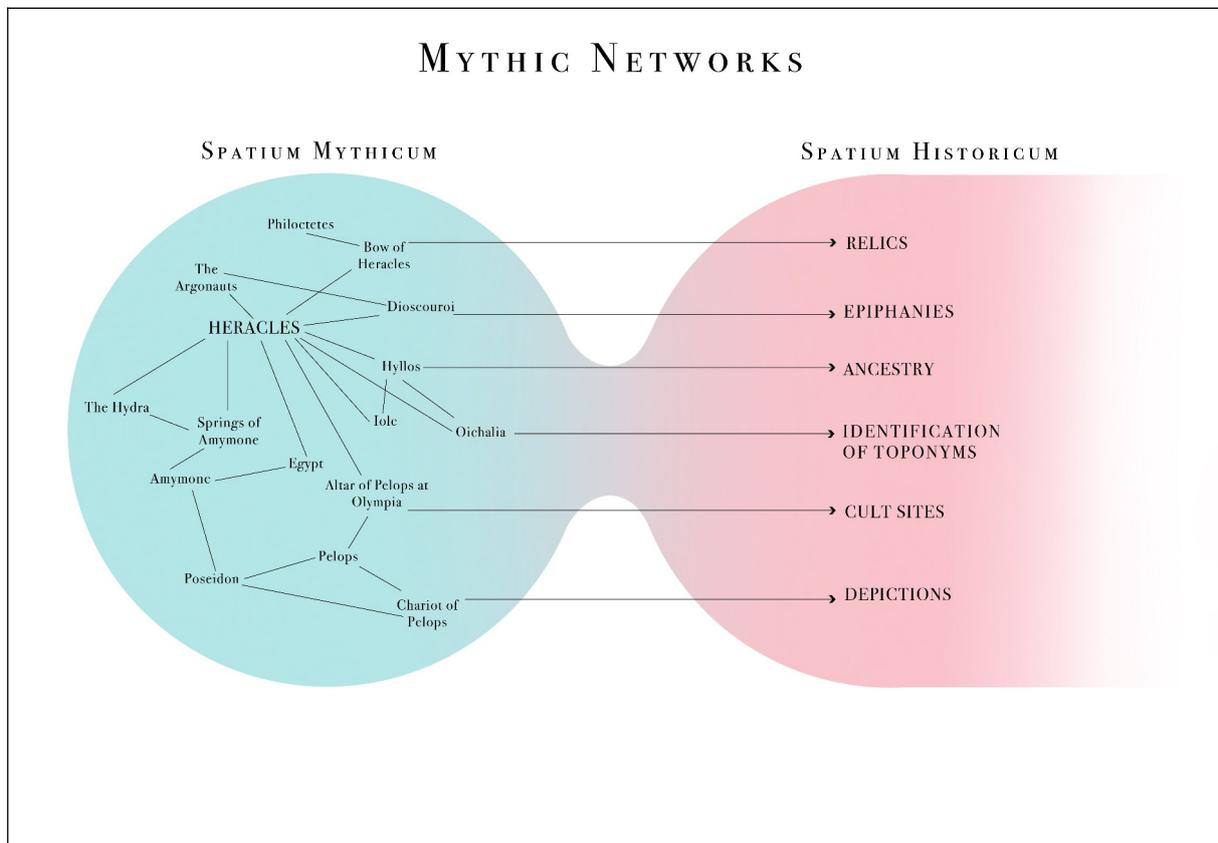


Fig. 7: Graphic model of *MANTO*'s ontology for the impacts of the *spatium mythicum* on the *spatium historicum*.

Interactions within the storyworld are almost entirely concerned with the narrative facets of mythic storytelling, and so they are, almost without exception, relevant to *MANTO*. By contrast, the impacts of myth on the historical landscape are qualitatively more diverse in nature, and required us to make pragmatic assessments of their relevance. *MANTO*'s data structure captures the following phenomena (see fig. 7):

- **Relics:** the survival of physical objects made in the *spatium mythicum*.
- **Cult sites:** worship of gods or heroes in the historical period begun in the *spatium mythicum*.
- **Metanomasia, syncretism, and identification:** claims about the identification of mythic toponyms or locations with historical ones, and of syncretism between Greek-Roman gods and heroes and similar figures from other traditions.
- **Depictions:** representation of mythic entities on artifacts made in the historical period.
- **Ancestry:** claims of ancestry from gods or heroes made in the historical period.
- **Epiphanies:** claims of the appearance of gods or heroes in the historical period.

*MANTO* does not comprehensively collect data relevant to ancient religion (epithets, images, sacred space, etc.) unless they are directly related to actions or entities in the *spatium mythicum*. Nor does it catalogue ancient iconographical practices where these do not substantially improve our coverage of ancient narrative storytelling.<sup>15</sup> This limitation has several implications for this aspect of the dataset, not least in respect to personifications, and to the Olympian gods and major heroes whose statues, temples and cult sites were found all over the Greek world. For less commonly-encountered heroes, by contrast, we capture their cultic and artistic incarnations in the historical landscape more systematically since, given that we have less data about these entities in general, each addition is more likely to improve our dataset's expression of the local qualities of mythic storytelling. To capture how myth impacted the historical landscape, we needed to expand somewhat the entities classified as 'places' and 'landmarks' (see above) so that these can include also locations relevant to historical storytelling even if there is no indication that they existed in the *spatium mythicum*. Our dataset does not include non-mythical people, however, so claims of ancestry and epiphany are tied to the *place* where they occurred.

### Development and Sustainability

*MANTO* is now in a mature phase with a large and robust dataset, and remains a work in progress. Like many digital initiatives, it has been developed and maintained with minimal ongoing funding. Since 2019 we have received seed funding from the University of New Hampshire (the Center for the Humanities, the Janetos Fund, and the Geospatial Services Center), Australian National University (the Research School of Humanities and Arts, and the College of Arts and Social Sciences), and the Center for Hellenic Studies. The University of New Hampshire's Research Computing Center manages storage of *MANTO*'s data, supported by the College of Liberal Arts. When COVID lockdowns made travel impossible, Greta Hawes was able to re-allocate some funds from an existing fellowship from the Australian Research Council (ARC) to support early work on data collection; her current ARC fellowship also funds some expansion of *MANTO* as an analytical platform for her research program for the period 2023–2030.<sup>16</sup>

Because our primary expertise lies in ancient myth, we employ 'lightweight' digital methods that do not require specialised technical knowledge.<sup>17</sup> LAB1100's Nodegoat caters to this limitation with a data collection environment and public interface that we can customise ourselves to meet the needs of our richly-structured data.<sup>18</sup> This data is then exportable as .csv files, or queryable via an API (<https://api.manto.unh.edu>). We hope that, by avoiding bespoke data infrastructures, by storing data in compatible formats, and by sharing data with other LOD initiatives, we will mitigate some of the sustainability risks that accrue to digital projects. We provide an account of how this data was created in the *Manual for Data Collection*, the most recent version of which appears on the project's website (see

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15 Other projects cover this material. For cult, there is [Mapping Ancient Polytheisms](#) (Toulouse) and [Collection of Greek Religious Norms](#) (Collège de France in Paris and the University of Liège). For iconography, [Digital LIMC](#) and [LIMC France](#) are invaluable.

16 *The spatial dynamics of myth in Pausanias' Periegesis* (DE170101251); and *Storytelling networks and community crises in ancient Greece* (FT220100543).

17 As Middle (2024) notes, a lack of technical training or experience is now much less of an obstacle to participation in LOD-based research projects. This observation contrasts notably with the situation described in Cayless (2019), a case-study of foundational Linked Ancient World Data projects, which notes their heavy reliance on individuals with technical expertise and their investment in bespoke infrastructures.

18 We thank Pim van Bree and Geert Kessels at LAB1100, who have supported and advised us as *MANTO* developed.

above, note 8), so that future users of the dataset will understand what it represents and the principles that underpinned its creation.<sup>19</sup>

Data collection for *MANTO* is largely a process of manual curation. Despite the slowness, we find this is the only way that we are able to produce high-quality data with the richness and accuracy we require. In addition, this process allows us to develop the project as an opportunity for intergenerational research training and mentorship. We have benefited from enormous student interest in the US and Australia, and have had over 90 undergraduate and postgraduate students participate in various aspects of data collection and analysis over the past seven years. A small group of these also participated in the development of *MANTO*'s ontology and data structure.<sup>20</sup> *MANTO* has proved to be a vital 'go to' project for undergraduate students at UNH seeking research funding.<sup>21</sup> In addition, it forms the backbone of weekly Mythlab meetings run by Scott Smith at the University of New Hampshire, and internships run by Greta Hawes as part of Macquarie University's PACE program.

### ***MANTO* as a Tool for Research**

One great benefit of a community-based approach to data collection is easily overlooked. Creating data for *MANTO* is a collective exercise in close reading and analysis, with researchers and students together debating the meaning of texts and images, working with other resources to make or confirm identifications, and then having to make final, pragmatic decisions about what is captured and how. From this process there naturally emerge new research questions and insights. For example, our work with a series of Imperial-era texts signalled vast differences in authors' approaches to geography and topography and led to the publication of a chapter on the intersection of space and mythical narratives surrounding Theseus.<sup>22</sup> Scott Smith's work on Antoninus Liberalis led to a note on the topography of the story of Cragaleus.<sup>23</sup> And Greta Hawes' work on Ps-Plutarch's *On Rivers* led to two discursive treatments of its unconventional approach to myth.<sup>24</sup>

*MANTO*'s true unique potential as a research tool, however, resides in its capacity to connect up elements of the Greek mythic tradition that have not previously been studied in proximity, and to surface more comprehensive catalogues of mythic phenomena. *MANTO* allows us to analyse Greek myth at unprecedented scale, to work with it as a place-based storytelling tradition, to understand its local resonances, and to start to break down the silos that have traditionally separated out the mythic evidence contained in verse and prose texts from one another, and from the full wealth of epigraphical and archaeological finds. This potential is apparent in Greta Hawes and Rosemary Selth's study of matrilineal succession in Greek myth, which used *MANTO*'s data to identify the most complete list yet of 54 instances of mythic rulers succeeding through a matrilineal claim. They show that the half-dozen examples of matrilineality typically discussed in previous scholarship have created an availability bias and are not representative of the fuller tradition.<sup>25</sup> An ongoing project is using *MANTO*'s data from

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19 See Hawes (2027).

20 We thank in particular Glen Goodwin, Rosemary Selth, and Aristogeneia Toumpas.

21 Scott Smith thanks his research assistants: Jack Vachon (Mapping the Homeric Catalogue of Ships [2014]; The Pausanias Project [2015]), Aristogeneia Toumpas (Mythic Genealogy in Pausanias' *Periegesis* [2018]), Melina Ryan (The Geography of Tragedy [2021]), Jack Wirth (Servius's Commentaries to Vergil [2022, 2023]; Apollonius Rhodius and Ovid's Mythical Geographies [2025]), Georgina Ramadanovic (Cataloguing and Mapping Ovid's Myths [2023]), and Ivy Young (Mapping Greek Tragedies [2025]).

22 Smith et al. (2025).

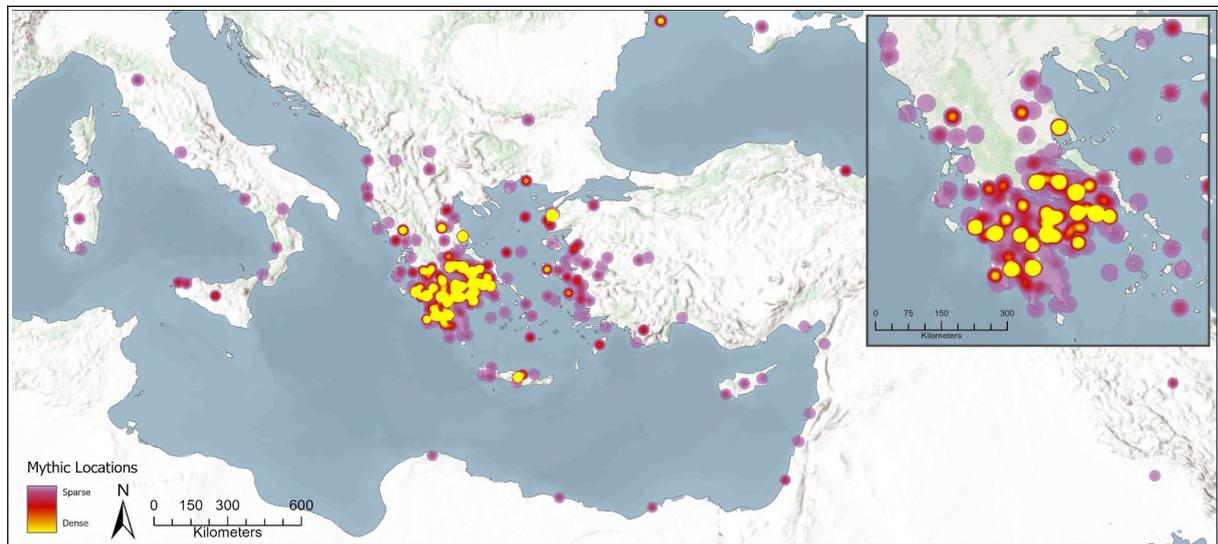
23 Smith (2026).

24 Hawes (2027); Hawes / Pertsinidis (forthcoming).

25 Hawes / Selth (2024).

Pausanias to interrogate his conception of mythological chronologies via genealogies. Preliminary analyses have shown that, of the 1192 people that he mentions in heroic histories, he provides genealogical information that connects together some 72% into the same massive family network; and this number rises to 83% when we include conventional genealogical connections that he does not mention.<sup>26</sup> The resulting chronological data has also been used as the basis for a GIS visualisation that shows the changing geographical remit of mythic history in Pausanias' account.<sup>27</sup>

As an indication of how *MANTO*'s data can be (re)used to reveal at scale patterns of textual information not likely to be apparent to a reader of that text, we present here a series of maps that visualise various perspectives on the movement of objects created in the *spatium mythicum* and described by Pausanias as still surviving in the *spatium historicum*.<sup>28</sup> Fig. 9 shows the location of these 138 moveable relics in the *spatium historicum*. The relics cluster largely around the south and central Greek mainland, which is to be expected since these regions are the focus of Pausanias' itineraries. A smaller number are attested in Asia Minor, the Aegean islands, Sicily and southern Italy; these reflect digressions from Pausanias' topographical structure. The geographical spread apparent in fig. 9 accords broadly with that shown in fig. 8, which maps all locations that Pausanias connects to myth in any way throughout the *Periegesis*.

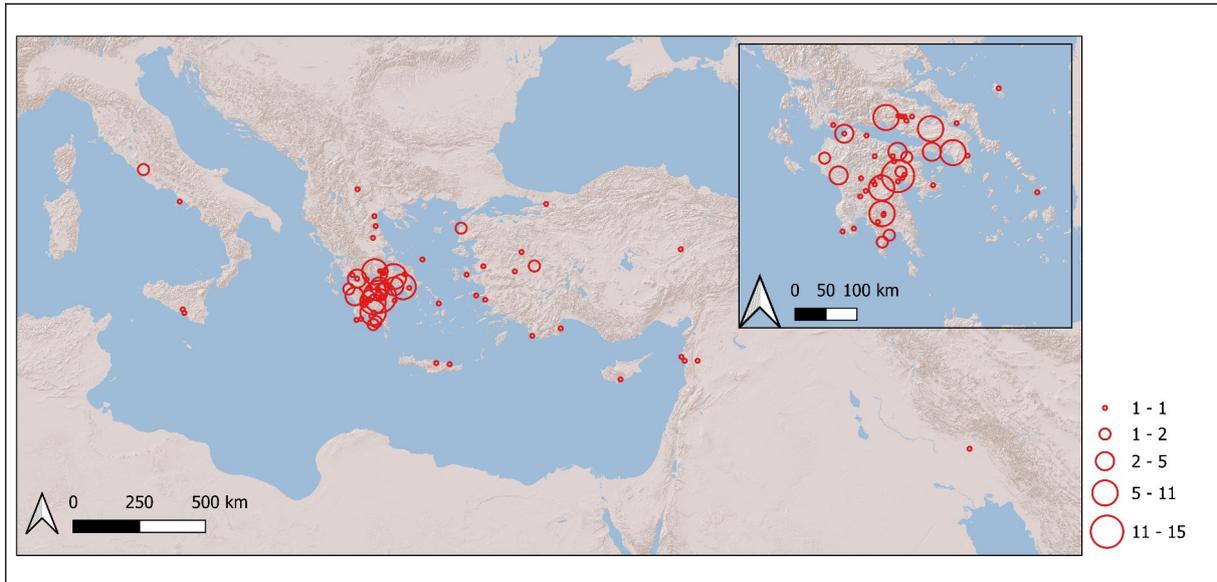


**Fig. 8:** Heatmap showing locations connected to myth according to data from Pausanias in *MANTO*. Colour intensity represents both density of mythic locations in an area, and number of connections to other mythic entities per location. Not shown: Gades, Colchis, Mt Caucasos. Map modified from ArcGIS Pro.

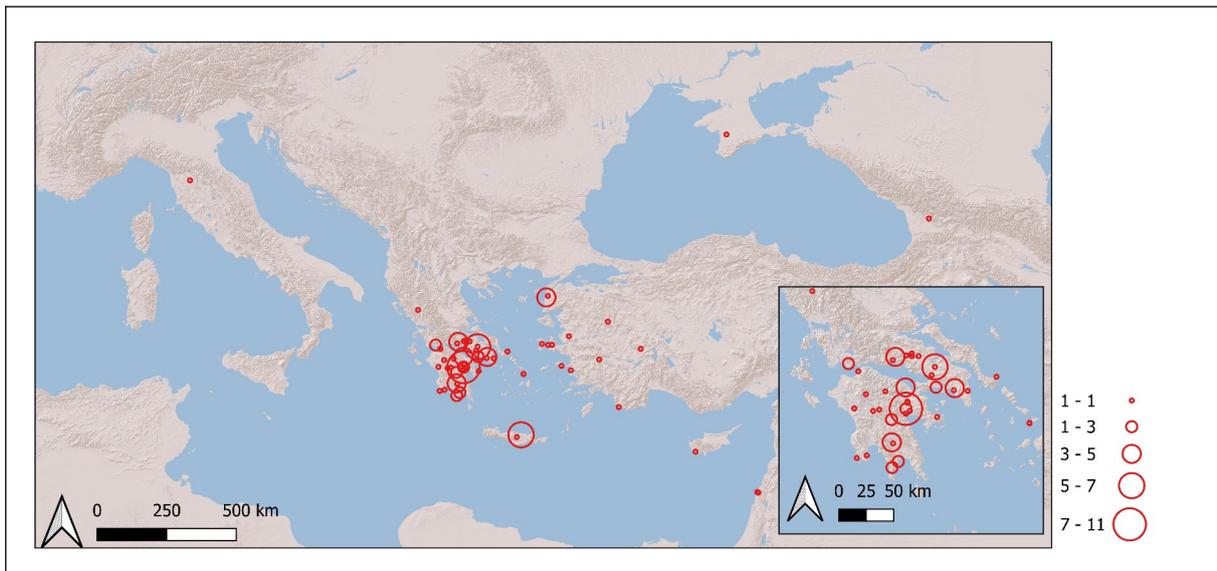
26 For preliminary results, representing the work of Greta Hawes and Xinyi Xu, see: <https://www.manto-myth.org/blog/mythic-chronology-in-pausanias-preliminary-data-analysis>.

27 For preliminary results, representing the work of Cian Colgan, Greta Hawes, Chiara Palladino, and Scott Smith, with the support of Furman University's Shi Institute for Sustainable Communities, see <https://storymaps.arcgis.com/stories/5ba0f6f2540c40c2ae48cac63799ec4d>.

28 Raw and cleaned data for analyses in this section are available at <https://doi.org/10.5281/zenodo.17204486>.



**Fig. 9: Map showing the location of movable objects created in the mythic period and still surviving in the historical period according to data from Pausanias in *MANTO*. Relative size of circles represents number of relics preserved in a location. Made in QGIS. Base map: © Esri 2009.**



**Fig. 10: Map showing the locations associated during the mythic period with movable objects that were attested as relics in the historical period according to data from Pausanias in *MANTO*. Relative size of circles represents number of objects associated with a location. Made in QGIS. Base map: © Esri 2009.**

When we compare fig. 9 with fig. 10, which shows the locations that Pausanias associates with this same group of moveable objects but in the *spatium mythicum*, we see a general geographical shift from east to west between these two periods. Fig. 10 shows that, although Pausanias reports the preservation of relics in Italy and Sicily in the historical period, he ascribes only one to a location west of the Aegean in the time of myth.<sup>29</sup> By contrast, Crete and the Troad – both outside of Pausanias’ itineraries – are much more prominently associated with moveable objects in the *spatium mythicum* (fig. 10) than they are in Pausanias’ cataloguing of preserved relics (fig. 9). This geographical shift illustrates how the objects accrued value through entanglements: what makes the relics that Pausanias describes worthy of preservation and admiration (and therefore of his notice) was not merely their (apparent) antiquity. They were famous on account of the biographies given to them and their association with

<sup>29</sup> For discussion of this Italian location, associated with the Palladion, see below.

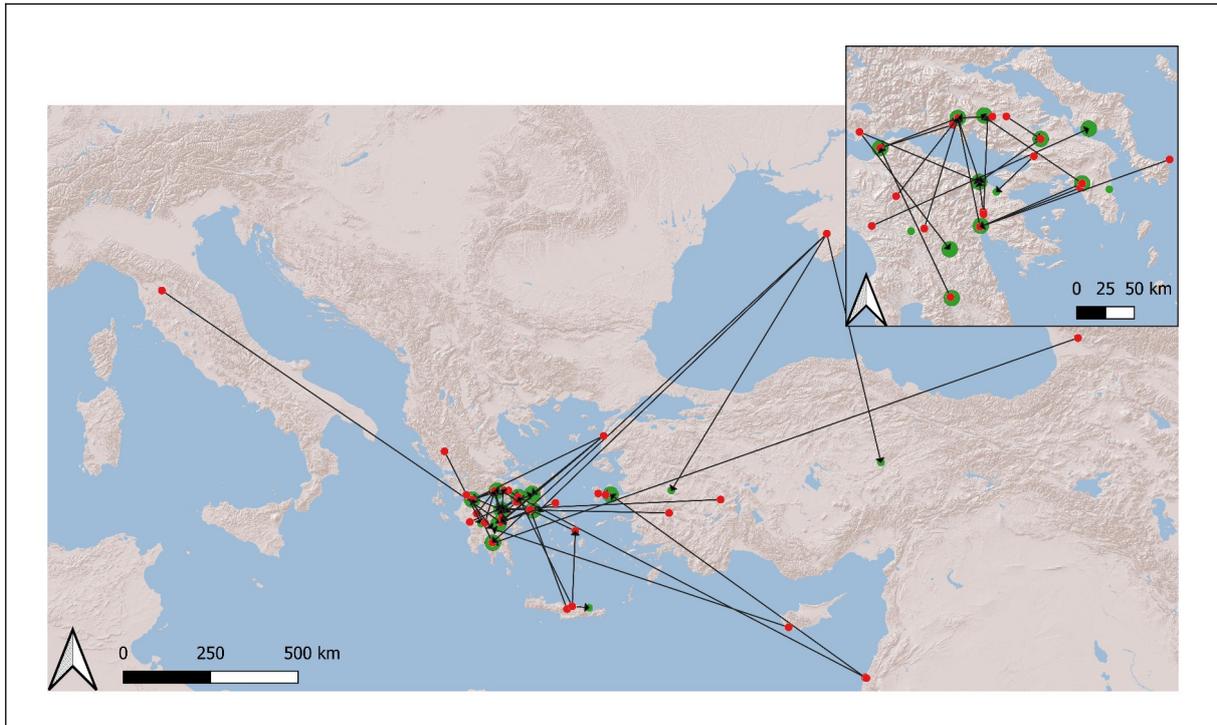
renowned events.<sup>30</sup> Fig. 10 shows that Crete and the Troad featured prominently in these biographies. The relics associated with Crete in the *spatium mythicum* but preserved elsewhere consist of five statues made by Daidalos (MANTO 10786035, 10266962, 10274690, 10274716, 10152139) and some statues of Eileithyia (MANTO 10151120) taken by Phaidra to Athens.<sup>31</sup> The prominence of Daidalos here parallels Pausanias' interest in the early development of Greek art; he includes a digression on the objects attributed to him that were still to be seen in the Imperial period (9,40,3–4). The five relics associated with Troy in the *spatium mythicum* but preserved elsewhere are more heterogeneous, but Pausanias connects all to the Trojan War. The Palladion (MANTO 8190183), the chest of Dardanos (MANTO 10274288), Euphorbos' shield (MANTO 10159974), and the *xoanon* of Herceian Zeus (MANTO 10188438) were taken by the triumphant Greeks; the shoulder blade of Pelops (MANTO 10055354) was the talisman needed to ensure the city's capture. The biographies of these relics shows that associating objects with the war at Troy or with Daidalos' creative industry on Crete produced a patina of mythic prestige that cities on the Greek mainland strove in particular to claim.

The relative absence of relics said to be personal items belonging to heroes who fought at Troy is notable given the strong traditions elsewhere of weapons and clothing dedicated at sanctuaries. Filtering the dataset of moveable relics for objects closely associated with such warriors shows that three important objects are not represented in fig. 10: Memnon's sword (MANTO 10146656) which Pausanias says was displayed in the Asclepieion at Nicomedia (3,3,8), Achilles' ash spear (MANTO 8194754), which Pausanias says was displayed in the sanctuary of Athena at Phaselis (3,3,8), and the sceptre of Agamemnon (MANTO 8190286), which Pausanias says must have been taken to Phocis by his daughter Electra since it was later found and displayed by the people of Chaironeia (9,40,11–12). These relics are not mapped in fig. 10 because Pausanias does not describe them as having been in the Troad during the *spatium mythicum*. But such connections are clear in the larger tradition. Achilles inherited his spear from Peleus and used it as a weapon at Troy (Hom. *Il.* 16,140–144; 19,387–391). Homer describes Agamemnon holding his sceptre in assembly there as a symbol of his pre-eminence (*Il.* 2,100–108). The very fact that Pausanias does not explicitly recount this information is an index of how well-known the biographies of the latter two mythic objects were. And Memnon's fame to a Greek audience derived almost entirely from his duel with Achilles, so his preserved weapon must have invoked a Trojan War connection. Examples like this show how important it is to situate *MANTO*'s data in its literary and cultural context, and to understand the circumstances of its capture. The richness of *MANTO*'s data is an index of the richness of this tradition; because mythic knowledge was woven through ancient life and so much was taken as given by ancient authors, we cannot base our analyses purely on the explicit assertions in texts that can be captured as data.

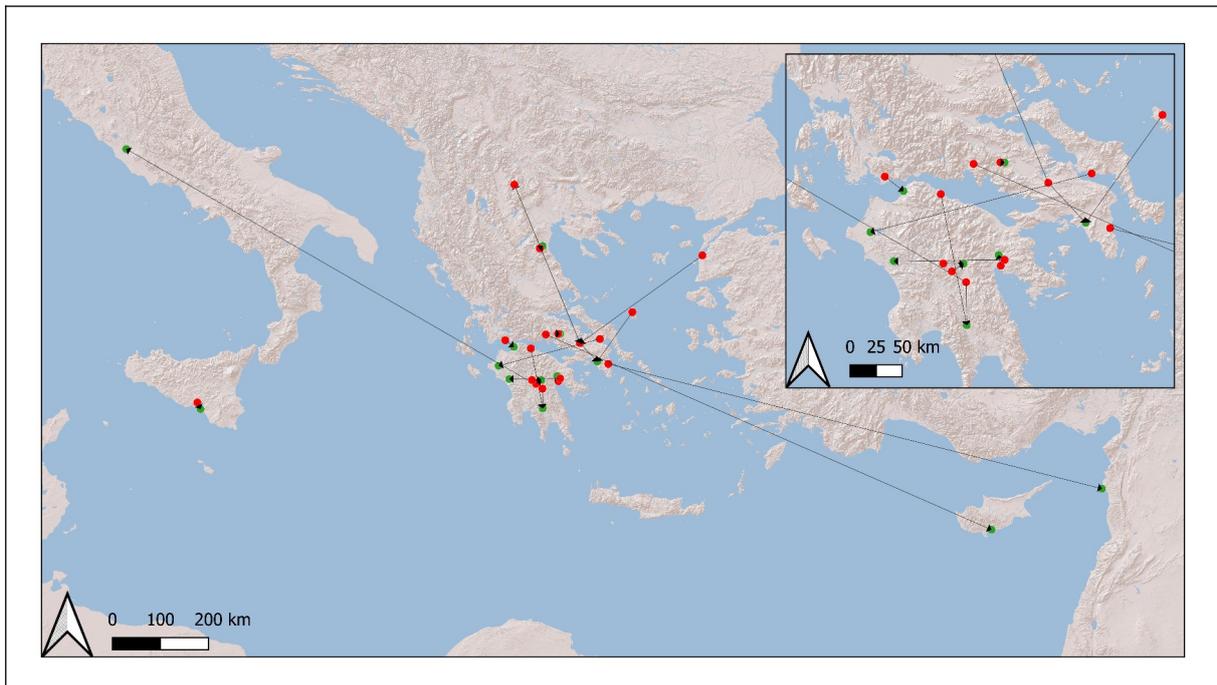
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30 For the biographies of objects, and their movement through time, see Appadurai (1986); Gosden / Marshall (1999); Hahn / Weiss (2013). For recent extensions and critiques of the linearity of these models, see esp. Bauer (2019).

31 Although Pausanias does not make this connection, it is not impossible that these statues were also thought to be works of Daidalos, as he says the statue taken by Phaidra's sister Ariadne explicitly was (Paus. 9,40,3–4; cf. Kall. h. 4,307–309; Plut. *Thes.* 21,1). For Pausanias' assessments of Daidalos' work, see Arafat (1996), 67–74.



**Fig. 11:** Map showing differences in location of specific moveable relics between the *spatium mythicum* and the *spatium historicum* according to data from Pausanias in *MANTO*. Relative size of green circles represents number of relics preserved in a location. Made in QGIS. Base map: © Esri 2009.



**Fig. 12:** Map showing movement of specific moveable relics during the *spatium historicum* according to data from Pausanias in *MANTO*. Made in QGIS. Base map: © Esri 2009.

Two further maps (figs. 11, 12) offer more granular representations of the movement of individual moveable relics where we do possess the required data from Pausanias. Fig. 11 represents differences between the location(s) of moveable relics in the *spatium mythicum* and their first attested location(s) in the *spatium historicum*. It shows clearly the centripetal movement of objects towards the Greek mainland, so that relics of stories set far from the Greek mainland came to be preserved at its heart. This impression is unsurprising given that the geographical remit of the *Periegesis* tends, as we have

already seen, to privileged relics preserved in the central and southern mainland. Fig. 12 represents Pausanias' evidence for the further transfer of these relics during the *spatium historicum*. Notable here is the general movement towards major *poleis* and sanctuaries on the mainland: Athens, Sparta, Thebes, Mantinea, Elis, Olympia, and the Argive Heraion. Some half (9/17) of the relics represented in fig. 12 are the bones of specific heroes. Our data thus correlates generally with something that has long been observed: bone transfers tended to occur in contexts of power disparity, with stronger communities taking them from weakened or subordinate communities.<sup>32</sup> Of the other eight moveable relics that Pausanias says were moved in the *spatium historicum*, in two cases the story given describes an object found by accident at some unspecified time in the past and then taken to a nearby city under some kind of mutual compromise.<sup>33</sup> But the other six are certainly associated with rapacity, or the punitive treatment of weakened cities. Indeed, four of these transfers are mentioned in 8,46,1–4, in which Pausanias' observation about Augustus' looting of cult items following his defeat of Tegea leads him to note that, in behaving like this, the Romans continuing a long history of looting by victors that can be traced back to the Trojan War.<sup>34</sup> So, after describing Augustus' punitive removal of the Calydonian Boar's tusks (MANTO 10266952) from Tegea, he catalogues Antiphemos' removal of a statue made by Daidalos (MANTO 10266962) from Omphace, Xerxes' removal of the Tauropolis (MANTO 9604520) from Athens, and the Argives' removal of a cult statue of Hera (MANTO 10159982) from Tiryns.<sup>35</sup> What is notable is that, although Delphi is the location from which one relic was taken (Harmonia's necklace [MANTO 8190328], 'looted' [ἐσπλήθη] by the tyrants of Phocis and subsequently claimed by Cyprus, 9,41,2–5), fig. 12 does not convey the sanctuary's role as an important locus within the *Periegesis* for the plundering of cultural heritage. Pausanias' description of Delphi lingers on its depletion, but the objects 'missing' from the site are rarely mythic relics, but objects whose prestige was determined through other means.<sup>36</sup>

The presence of mythic relics in Italy and Sicily during the *spatium historicum* illustrates clearly both of the dynamics we have discussed in general terms: the east-to-west movement of objects with mythic value, and the 'magnetic' pull of powerful cities. The realities of political control and the removal of artworks and cult property from the Aegean in the three centuries prior to Pausanias' account requires us to understand this phenomenon as of-a-piece with forceful Roman expropriation of desirable elements of Greek cultural heritage; as we have just seen, Pausanias is certainly sensitive to this reality. Yet figs. 11 and 12 show just one specific relic moving into the western Mediterranean (the Calydonian boar's tusks displayed at Rome by Augustus). The shift is only really apparent when we aggregate data and compare the locations of all relics in the *spatium historicum* to the locations associated with them in the *spatium mythicum* (figs 7, 9). We have already observed that Pausanias locates almost none of the moveable relics in Italy and Sicily during the *spatium mythicum*. Other than the tusks of the Calydonian boar, only the tusks of the Erymanthian boar (MANTO 10214288) might sim-

32 Fig. 12 shows the transfer of the bones of Tisamenos and Orestes to Sparta, Theseus and Oedipus to Athens, and Orpheus, Hippodameia, Hector and Arcas to Mt Piera, Olympia, Thebes, and Mantinea respectively. Pausanias says that the bones of Linos were taken from Thebes by Philip in 338 BCE then later returned (9,29,8), so the map shows them moving in both directions. Not shown is the transfer of Actaion's bones to Orchomenos since Pausanias does not say where they were originally (9,38,5). For power dynamics in such transfers, see McCauley (1998); Coppola (2008), esp. 166–167.

33 Pelops' shoulderblade was found by a Euboian fisherman; on the advice of the Delphi oracle he gave it to Elis and was installed as guardian, a role passed down through his family (5,13,4–6); Agamemnon's sceptre was found along with some gold on the Boiotian-Phocian border; the sceptre was taken to Chaironeia, and the rest of the treasure to Panopeus (9,40,12).

34 For discussion of this passage within the context of Romans' treatment of Greek sanctuaries, see Miles (2008), 92–94; 256–257; Köster (2026), 200–202.

35 Pausanias elsewhere describes Augustus' removal of the statue of Artemis Laphria (MANTO 10273441) from Calydon as explicitly punitive (7,18,8).

36 For Pausanias' presentation of Delphi as despoiled, see Hawes (2021), 136–143.

ilarly be conceived of as having been taken forcibly; Pausanias does not give credence to their authenticity in any case (8,24,5). By contrast, the provenience of a preserved Triton (MANTO 10773533) is not given (9,21,1), and the Sicilian tradition of a statue (MANTO 10266962) by Daidalos preserved on the island might be connected to the hero's time with Cocalos at Camicos; Diodoros certainly attributes a lot of relics on the island to him (e.g. 4,78,1–5).

Pausanias' tendency to not locate relics in western Mediterranean during the *spatium mythicum* is reminiscent of Apollodoros' well-observed tendency to not set stories in Italy and Sicily in his *Library*, a mythography perhaps contemporary with the *Periegesis*. In Apollodoros' case, the lack of Roman myths has been read variously as an attempt to counter Roman control; to nostalgically celebrate an older conception of Hellas constrained largely to the Aegean; and even as a reflection of *Roman* preferences for Greek stories.<sup>37</sup> The general lack of Roman myth in Pausanias has not received similar attention, but adds new grist to ongoing debates over the nature of the *periegete's* attitudes towards Rome. His implicit prejudice becomes clear through the visualisation of data about moveable relics; it also shows up when we consider the traditions that he omits or downplays. By the late second century the strongest claims to possession of the Palladion – Troy's talisman – were being made by Italian cities, including Rome. Whereas the earlier geographer Strabo catalogues four places in southern and central Italy that claimed to have the Palladion, and disputes a claim from the Troad (6,1,14; 13,1,41); Pausanias, by contrast, narrates at length an Athenian story about how Theseus' son Demophon got it from Diomedes (hence the name of their 'Palladion' lawcourt, 1,28,8–9), and notes the Argives' claim to display it (2,23,5). He dismisses the latter by observing that Aeneas had actually taken it to Italy (δηλόν ἐστιν ἐς Ἰταλίαν κομισθὲν ὑπὸ Αἰνείου). This intervention is typical of Pausanias' pointed critiques of Argive mythmaking, and it is notable that he goes no further in discussing its current whereabouts in Italy.<sup>38</sup> Such reticence means he gives only minimal support for the Italian claim(s), and fails to counter elsewhere his recording of Greek traditions showing its theft by Diomedes, which are formally incompatible with the idea that Aeneas took it from Troy.<sup>39</sup> A similar condition holds in Pausanias' discussion of the true location of the cult statue of Artemis Tauropolos brought by Iphigeneia and Orestes from Tauris. Pausanias constructs a two-way dispute between Spartan and Athenian claimants, and favours the former, since the latter say that they lost the statue to the Persians, who carried it off to Laodicea; he also mentions in passing claimants in Lydia and Cappadocia (1,33,1; 3,16,7–11).<sup>40</sup> What he does not mention are any Italian claims. It is difficult to securely prove that the strongest of these, that of the sanctuary of Diana Nemorensis at Aricia, predates Pausanias; our clearest ancient descriptions of Orestes having taken the *xoanon* there are Hyginus Fab. 261 and Servius Aen. 2,116; 6,136, which add that the statue went from *there* to Sparta;<sup>41</sup> but Strabo at least provides earlier evidence for the sanctuary modelling itself on the Taurian one (5,3,12). Pausanias associates Orestes after his return from Tauris only with locations in the Peloponnese and Attica. He, like Herodotus, recounts the

37 See, most recently, Michels (2023), esp. 22–23, with bibliography.

38 For Pausanias' general scepticism of Argive claims to mythic relics and idiosyncratic variants, see Hawes (2021), 161–162.

39 The Greek and Roman variants could be reconciled with some effort (see Linderski [2016]); the most popular solution had Diomedes take it to Italy and give it to Aeneas there, which does not *prima facie* agree with Paus. 2,23,5. Conflicting traditions about the 'same' object are difficult to convey in our visualisation; the arrow from Italy to Argos in fig. 11 does not represent a tradition in which the relic was said to have moved eastwards. Rather, it represents a generalised spatial relationship to the same object in different periods of time: Pausanias associates Italy (as well as Athens, Phaleron, and Troy) with the Palladion in the *spatium mythicum* and also locates it at Argos in the *spatium historicum*. Because Pausanias does not explicitly say that the object was still preserved in Italy, it is not captured as a relic there in MANTO's data.

40 For the Spartan-Athenian dispute, see Hawes (2021), 92. Pausanias' Cappadocian claimants are likely from the city of Comana (see Strabo 12,2,3; Cass. Dio 36,11).

41 Both also describe the removal of Orestes' bones to Rome (likely in the Augustan period: see below), which might suggest a date for the removal of the statue as well.

Spartans' retrieval of his bones from Arcadia (3,3,5–7; 3,11,10; 8,54,4). What he does not do is place Orestes in *Italy*, a tradition that, even assuming it did not predate him, took on greater visibility under Augustus. It is likely that Augustus had the bones of Orestes retrieved from *Aricia* to Rome; a Claudian-era relief likely shows the urn in which they were kept and Servius lists them amongst the talismans of the Roman state (Aen. 7,188).<sup>42</sup> Pausanias offers a hint of this tradition, again in relation to the Argives, when he notes that a statue of Orestes in their Heraion has an inscription declaring it a representation of Augustus (2,17,3). This hint is all we get in the *Periegesis*, however. The hero that Pausanias associates with *Aricia* is the reincarnated Hippolytos, not Orestes, and he offers no suggestion that any of Orestes' relics – his bones, or the Tauropolis – ever made their way further west than Sparta.

This examination of a subset of *MANTO*'s data is intended to illustrate the project's potential as a research tool. Our focus on moveable relics shows what can be done when mythic knowledge is made queryable by the objects and places that appear in these stories, and not just by the gods and heroes that provide their characters. Further, our data collection methodology produces richly-structured networks that facilitates much more granular filtering. The example given shows the significance of distinguishing between events attributed to the *spatium mythicum* and events attributed to the *spatium historicum*, for example. *MANTO*'s most exciting promise lies in its capacity to reveal patterns at scale. By surfacing examples of specific phenomena across the ancient evidence, *MANTO* can give us better overviews of ancient storytelling both as a whole, and in localised or particularised contexts. It can, in this way, suggest new research directions and new targets for analysis. The large-scale patterns we found by visualising Pausanias' treatment of moveable relics are not likely to be apparent to the casual reader of the *Periegesis* and most are not encapsulated in any explicit observations that Pausanias makes *in propria persona*. The kind of analyses that can be performed on *MANTO*'s data do not replace traditional modes of close reading and close looking; rather they supplement them. Being able to model and map mythic data at scale can reveal things which will send us back to the source material with new questions in mind.

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42 For the Augustan context, see Hölscher (1990); Köster (2024), 149–152.

## References

- Antonopoulos et al. (2023): A. P. Antonopoulos / S. Chronopoulos / N. Ntaliakouras / P. Taktikou / A. Psomiadou / I. Markelis, Developing a Database for the Greek Fragmentary Tragedians, *Digital Classics Online* 9 (2023), 15–29, <https://doi.org/10.11588/dco.2023.9.95214>.
- Appadurai (1988): A. Appadurai (ed.), *The Social Life of Things. Commodities in Cultural Perspective*, Cambridge 1988.
- Arafat (1996): K. W. Arafat, *Pausanias' Greece. Ancient Artists and Roman Rulers*, Cambridge 1996.
- Barker et al. (2024): E. Barker / C. Palladino / S. Gordin, Digital Approaches to Investigating Space and Place in Classical Studies, *Classical Review* 74 (2024), 1–19.
- Bauer (2019): A. A. Bauer, Itinerant Objects, *Annual Review of Anthropology* 48 (2019), 335–352.
- Buxton (1999): R. Buxton, Introduction, in: R. Buxton (ed.), *From Myth to Reason? Studies in the Development of Greek Thought*, Oxford 1999, 1–21.
- Cayless (2019): H. A. Cayless, Sustaining Linked Ancient World Data, in: M. Berti (ed.), *Digital Classical Philology*, Berlin 2019, 35–50.
- Coppola (2008): A. Coppola, *L'eroe ritrovato: il mito del corpo nella Grecia classica*, Marsilio 2008.
- Gosden / Marshall (1999): C. Gosden / Y. Marshall, The Cultural Biography of Objects, *World Archaeology* 31 (1999), 169–178.
- Hahn / Weiss (2013): H. P. Hahn / H. Weiss (eds.), *Mobility, Meaning and Transformations of Things. Shifting Contexts of Material Culture through Time and Space*, Oxford 2013.
- Hawes (2021): G. Hawes, *Pausanias in the World of Greek Myth*, Oxford 2021.
- Hawes (2026): G. Hawes, Documenting Principles and Processes for Data Collection in MANTO, in: M. Cradic / L. Lieberman (ed.), *Data Literacy for Archaeologists Practice Guide*, 2026.
- Hawes (2027): G. Hawes, Original Interventions and Meaningful Names in the Greek Mythic Storyworld, in: M. Breunese / C. Fossi / K. Vacano (eds.), *Constructing Fantastical Worlds*, Leiden 2027.
- Hawes / Pertsinidis (forthcoming): G. Hawes / S. Pertsinidis, Troubled Waters: The Rivers of Ps.-Plutarch, in: D. Hanigan / E. Stradzins (eds.), *Terraqueous Topographies in Postclassical Greek Literature* (forthcoming).
- Hawes / Selth (2024): G. Hawes / R. Selth, Matrilineal Succession in Greek Myth, *Classical Quarterly* 74/1 (2024).
- Hawes / Smith (2025): G. Hawes / R. S. Smith, The Data of Mythic Spaces, in: C. LaMonica / A. Foka (eds.), *Evolving Perspectives on Digital Classics*, London 2025, 51–73.
- Hawes / Smith (under review): G. Hawes / R. S. Smith, MANTO: A Digital Model of the Greek Mythic Storyworld, in: F. Pannach / C. Sporleder (eds.), *Digital Mythological Studies*.
- Hölscher (1990): T. Hölscher, Augustus and Orestes, *Études et Travaux* 15 (1990), 163–168.
- Johnston (2018): S. I. Johnston, *The Story of Myth*, Cambridge 2018.
- Johnston (2022): S. I. Johnston, Mythology, Greek, in: *Oxford Classical Dictionary*, Oxford 2022.
- Kindt (2025): J. Kindt, Classical Studies and the Public Humanities, *Public Humanities* 1 (2025), <https://doi.org/10.1017/pub.2025.2>.

- Köster (2024): I. K. Köster, Thieving Pilgrims between Rome and the Middle Ages, in: A. Collar / Troels Myrup Kristensen (eds.), *Pilgrims in Place, Pilgrims in Motion. Sacred Travel in the Ancient Mediterranean*, Aarhus 2024, 143–157.
- Köster (2026): I. K. Köster, *Stealing from the Gods: Temple Robbery in the Roman Imagination*, Ann Arbor 2026.
- Lowe (2000): N. J. Lowe, *The Classical Plot and the Invention of Western Narrative*, Cambridge / New York 2000.
- McCauley (1998): B. McCauley, The Transfer of Hippodameia's Bones: A Historical Context, *Classical Journal* 93 (1998), 225–239.
- Michels (2023): J. A. Michels, *Agenorid Myth in the Bibliotheca of Pseudo-Apollodorus: a Philological Commentary of Bibl. III.1–56 and a Study into the Composition and Organization of the Handbook*, Berlin / Boston 2023.
- Middle (2024): S. Middle, Linked Ancient World Data: Implementation, Advantages, and Barriers, *Digital Classics Online* 10 (2024), 16–49, <https://doi.org/10.11588/dco.2024.10.104105>.
- Miles (2008): M. M. Miles, *Art as Plunder: the Ancient Origins of Debate about Cultural Property*, New York 2008.
- Palladino (2023): C. Palladino, Not the Same Landscape. Rediscussing Digital Approaches to Premodern Spatial Knowledge Systems, in: C. Palladino / G. Bodard (ed.), *Can't Touch This: Digital Approaches to Materiality in Cultural Heritage*, London 2023.
- Saïd (2007): S. Saïd, Myth and Historiography, in: J. Marincola (ed.), *A Companion to Greek Historiography*, Chichester 2007, 61–72.
- Seyffert (1891): O. Seyffert, *A Dictionary of Classical Antiquities*, New York 1891.
- Smith et al. (2025): R. S. Smith / G. Hawes / A. Toumpas, Theseus' Imperial Topographies, in: J. Downie / A. Peterson (eds.), *Greek Literary Topographies in the Roman Imperial World*, London 2025, 67–83.
- Smith (2026): R. S. Smith, Topography and Geography in Antoninus Liberalis, *Met.* 4, *Classical Quarterly* (2026), 1–5, <https://doi.org/10.1017/S0009838825101018>.
- Smith (1873–1874): W. Smith, *A Dictionary of Greek and Roman Antiquities*, London 1873–1874.
- Thomas (2001): R. Thomas, Herodotus's Egypt and the Foundations of Universal History, in: N. Luraghi (ed.), *The Historian's Craft in the Age of Herodotus*, Oxford 2001, 198–210.
- Tolkien (1947): J. R. R. Tolkien, On Fairy-Stories, in C. S. Lewis (ed.), *Essays Presented to Charles Williams*, Oxford 1947, 38–89.
- Zgoll et al. (2023): A. Zgoll / B. Cuperly / A. Cöster-Gilbert, In Search Of Dumuzi: An Introduction to Hylistic Narratology, in: S. Helle / G. Konstantopoulos (eds.), *The Shape of Stories: Narrative Structures in Cuneiform Literature*, Leiden 2023, 285–350.
- Zgoll (2019): C. Zgoll, *Tractatus Mythologicus: Theorie und Methodik zur Erforschung von Mythen als Grundlegung einer allgemeinen, transmedialen und komparatistischen Stoffwissenschaft*, Berlin / Boston 2019.

## Figure References

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Fig. 2: Screenshot from *MANTO*'s public interface.

Fig. 3: Screenshot from *MANTO*'s public interface.

Fig. 4: Screenshot from *MANTO*'s public interface.

Fig. 5: Network graph for 'the Club of Theseus'.

Fig. 6: Screenshot from *MANTO*'s public interface.

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