



Mapping Visions of Rome and Digital Roman Heritage. Connectivity between Literary and Artistic Heritage in a Digital Age

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Abstract. This paper introduces two projects in the realm of Digital Humanities, *Mapping Visions of Rome* and *Digital Roman Heritage*. The first project was conceived as a digital aid to my traditional research, while the second was developed to support collaborations with other people and projects. This paper explores the opportunities offered by Digital Humanities for humanities researchers like myself who wish to contribute to the field and benefit from its research infrastructures and technologies despite the many challenges newcomers face. In particular, it will reflect on the way in which Digital Humanities can further interdisciplinary collaboration and exchange, which I consider to be one of its greatest assets.

Abstract. Questo contributo presenta due progetti nell'ambito delle Digital Humanities: *Mapping Visions of Rome* e *Digital Roman Heritage*. Il primo progetto è stato concepito come un sussidio digitale alla mia ricerca tradizionale, mentre il secondo è stato sviluppato come un sussidio digitale alla collaborazione con altre persone e altri progetti. Messi insieme, riflettono il modo in cui io, latinista di formazione, sono entrata nel campo delle Digital Humanities, per le quali non ho una formazione specifica. Dunque, lo scopo di questo contributo è principalmente l'esplorazione delle opportunità offerte dalla Digital Humanities a ricercatori nell'ambito delle discipline umanistiche come me, che non considerano questo campo come il loro territorio nativo ma lo stesso desiderano contribuire ad esso e trarre beneficio dalle infrastrutture di ricerca e dalle tecnologie. In particolare, l'articolo rifletterà sul modo in cui le Digital Humanities possono estendere la collaborazione e lo scambio interdisciplinare, che io considero uno dei più grandi valori delle Digital Humanities stesse.

Keywords: Data Modeling, Digital Annotation, Digital Heritage, Digital Hermeneutics, Interoperability, Visualisation

1 Introduction

This paper, originally presented at the AIUCD conference in Venice (September 2016), introduces two of my projects in the realm of Digital Humanities: *Mapping Visions of Rome*

and *Digital Roman Heritage*.¹ Both are largely work-in-progress, which means that in this text I will also discuss some features I have developed since the conference, as well as ideas that I have not yet been able to pursue, but envisage exploring in the future. The first project was conceived as a digital aid to my traditional research, while the second developed as a digital aid to the collaboration with other people and projects. Together they reflect how I, trained as a Latinist, entered the field of Digital Humanities, in which I have no specific training. The goal of this paper is therefore primarily to explore the opportunities offered by Digital Humanities for humanities researchers like myself who do not regard this field as their native soil but still wish to contribute to it and benefit from digital research infrastructures and technologies.² In particular, it will reflect on the way in which Digital Humanities can further interdisciplinary collaboration and exchange, which I consider to be one of its greatest assets.

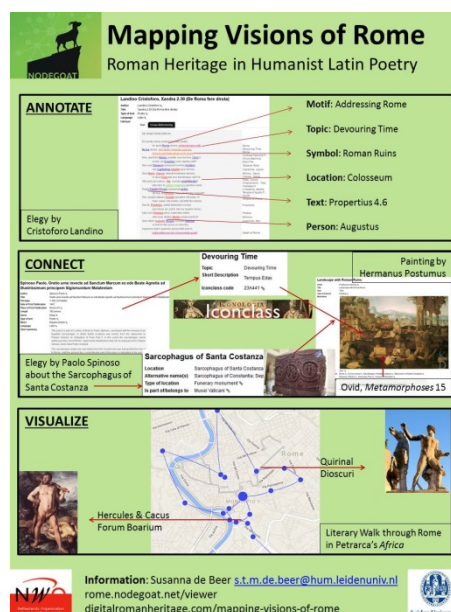


Fig. 1. MVR Poster for Linked Pasts conference, London 2015

¹ These projects were made possible by the support of the following institutions: NWO (Netherlands Organization for Scientific Research), LUCAS (Leiden University Centre for the Arts in Society), LUF (Leiden University Fund), NIAS (Netherlands Institute for Advanced Study in the Humanities and Social Sciences) and KNAW (Royal Netherlands Academy of Arts and Sciences), as well as by the work of the following student- and research assistants: Mark Hanay, Jochem Wouda, Petrie van der Heijden, Arlette Mauritsz and Caroline van den Oever. See <http://www.digitalromanheritage.com/mapping-visions-of-rome> and <http://www.digitalromanheritage.com>.

² For a more comprehensive introduction into the many aspects of *Digital Humanities* this paper touches on, I will regularly refer to *A New Companion to Digital Humanities* [32].



Fig. 2. DRH Poster for Linked Pasts conference, London 2015

2 *Mapping Visions of Rome* – A Research Project

Let me first focus on *Mapping Visions of Rome* (from here on referred to as *MVR*) and explain what my goals were when embarking on this project. The first and main goal was to facilitate and support my research project *Visions of Rome*. The second goal which evolved along the way, was to further collaboration and exchange data with other disciplines. The third goal was to make my research material and results available to a wider audience. In what follows I will discuss these three aspects one by one, and elaborate on the way in which they determined the development of my project(s).

What I needed first and foremost was a method that would facilitate and support my rather traditional research project *Visions of Rome; Strategic Appropriation of the Roman Heritage in Humanist Latin Poetry*. This project focuses on images of the city and symbols of Rome in Humanist Latin poetry from various countries.³ It asks how and why these poems use elements from the Roman past or the ancient Roman legacy to create images that contribute to their contemporary political, religious or cultural positions. Or in other words, how they strategically use the past for present purposes. Just to give a simple example: in a sixteenth century Latin epigram Janus Vitalis (1485-1559), papal servant of Leo X, presented papal Rome as being reborn even greater than before from the ashes.⁴ In his poem he not only refers to several ancient epigrams by Martial, but also adopts the image of the

³ On Rome as symbolic city, see [9].

⁴ For this poem, entitled *Roma instaurata*, see [41], 9.

Phoenix, the ruins of Rome and Rome's potential for renewal from the ancient discourse about the eternal city to create a favorable image of contemporary Rome.

My research material regarding this topic is both wide-ranging and complex: it concerns many different poems from poets with many different backgrounds; many different images of Rome, constructed by means of many different elements of the Roman past. Nevertheless, there is also a considerable overlap between the kinds of elements they use, with elements that return over and over again, in different combinations and with different purposes. In fact, it is my hypothesis that this overlap is not a coincidence, but that it is part and parcel of the strategy of these writers to use the same traditional elements of the Roman legacy to create different or even opposite visions.⁵ What I thus needed was a way to store, organise and annotate my material, which allowed me both to analyse the separate poems on the basis of the elements they use, but also trace and organise similarities between different poems, so as to map the contours of the discourse as a whole.

I found such a method in *nodegoat*, a web-based data management, network analysis and visualisation environment developed by the Dutch company Lab1100.⁶ At its core this is a relational database management system⁷, but it has numerous added possibilities and advantages that makes it very useful for my purposes, the most important of which I consider to be: 1) the database structure and the cross-references between different categories (i.e. the data model) can be completely designed according to individual wishes; 2) cross-references can also be added to full text by means of tagging; 3) the database supports chronological, geographical and social visualisations; 4) a public interface can be generated based on the database.

The data model of *MVR* is designed to feature *text* as main type.⁸ This type offers the primary texts of the poems with some additional metadata on these texts, as well as cross-references in the full-text, referring to other types.⁹ The other types consist of the different categories to which references to the Roman legacy belong, some of them rather straight-

⁵ For the theoretical background of images and counter-images, and the research field of imagology in general, see [1] and [19].

⁶ See <http://www.lab1100.nl/> and <http://www.nodegoat.net>. I came into contact with *nodegoat* via the project *Mapping Nodes and Notes in Networks*, funded by the Royal Netherlands Academy of Arts and Sciences, see [37]. For a brief introduction into how I developed *MVR* in the *nodegoat* environment look here: <https://nodegoat.net/usecases.p/152.m/29/mapping-visions-of-rome>.

⁷ A relational database refers to a database that stores data in a structured format, using rows and columns, and that is *relational*, because the values within each table are related to each other. See [29].

⁸ See [15].

⁹ This way of annotating text by means of cross-references is an alternative to the embedded mark-up languages that are usually applied to texts, such as TEI. The advantage of this method is that it can integrate metadata about texts (and their authors) with metadata retrieved from the texts into the same environment, and also include links to other media than text. At the same time, it is still possible to convert the full-text, including its annotations, into TEI. Stand-off markup (where, as here, the text is separated from the annotation) has the advantage that it can cope with overlapping hierarchies and enables the coexistence of different layers of encoding. See [27] and [31].

forward, such as *persons* (characters), (physical) *locations*, and *events* from history or myth; others more abstract, like *topics*, *symbols*, or *literary templates*.¹⁰

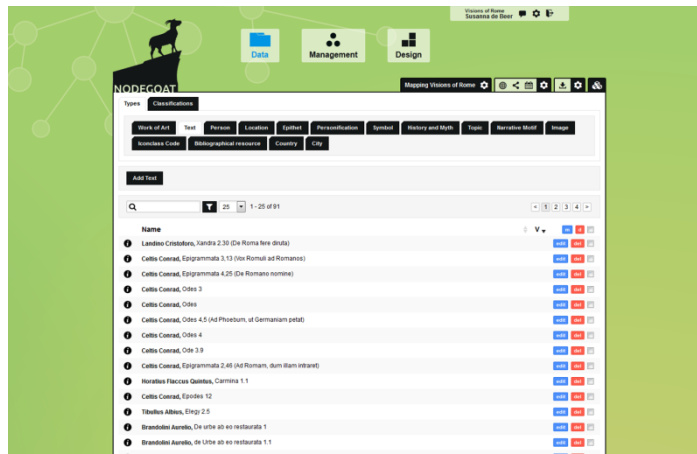


Fig. 3. List of texts in MVR

This model can best be explained on the basis of an example. Here you see a poem by the fifteenth-century Florentine poet Cristoforo Landino, in which I have tagged references to the Roman legacy belonging to separate categories, each category displayed in a different colour.¹¹ Under the category 'Literary Template' I have tagged 'Addressing Rome'; under 'Topic' I have tagged 'Devouring Time'; under 'Symbol' I tagged the Roman ruins; under 'Location' I tagged the Colosseum; under 'Text' I tagged Propertius 4.6; and under 'Person': Augustus.

In the context of my research project the goal is not just to identify these elements. Rather, these annotations function as a point of departure to determine the origins of the elements Landino uses, analyse how he employs them to create a certain image of Rome, and consider the purpose he may have had by creating this image. In Landino's poem Rome stands as a symbol for the topic of devouring time, with the ancient locations that are now gone as witnesses to this truth. The reference to Augustus functions in the same way, since if this emperor, who symbolises the architectural magnificence of Rome, were alive again in Renaissance Rome he would not recognise anything he had built. Thus the only possible conclusion is that Rome is dead. However, the fact that we still know the names of these locations, e.g. from the poetry by Propertius, underlines the fact that the literature of ancient Rome is still alive. This feeds Landino's hope and trust that he will be able to function as a

¹⁰ See [22]. I work with the hypothesis that, seen the kind of material my project deals with and the kinds of questions I want to answer, the annotations have to be added manually. However, I fully realize that current and future developments may enable automatic tagging in some of these categories. See e.g. [33].

¹¹ The poem from the elegiac collection *Xandra 2.30 (De Roma fere diruta)* is included in [18], 81-2.

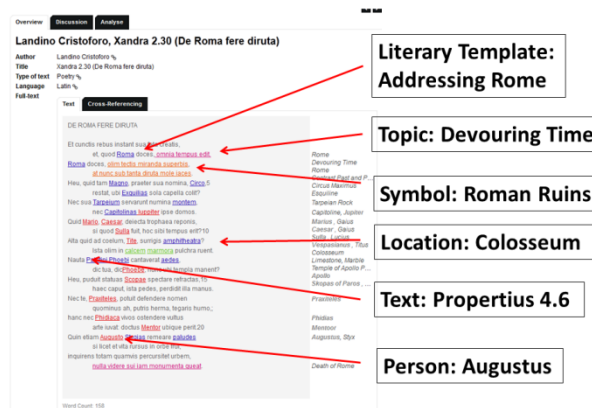


Fig. 4. Poem by Landino tagged in MVR

new kind of Propertius for the new Rome of his time, under the leadership of his patrons, Florence.¹²

However, at this point the question still remains why I would use digital methods to support my research, rather than just notes on paper, or word documents or excel sheets? I see three main advantages to using digital methods here: 1) you can dynamically navigate the dataset and thus approach the corpus from different perspectives; 2) by means of different types of visualisations you can generate a fuller understanding of single texts or of the collection as a whole; 3) the set of cross-references in the database reflects the structure and complexity of the Renaissance discourse on Rome itself.

2.1 Dynamic navigation through dataset

In *MVR* you can directly navigate from a reference to the Colosseum in a single poem to the record of the Colosseum (under 'type: location'), and from there generate a list of all poems that refer to the Colosseum. This opens up the opportunity to start investigating which contexts feature references to the Colosseum, and to compare the different symbolic meanings these may have, be it an iconic landmark or an image of decline; a symbol of immortality or a high point of Roman architecture.

You can also start your investigation from another type altogether, e.g. selecting from the category literary template: 'a character visiting Rome'. Numerous poems, both in classical and humanist literature, feature a character visiting Rome, mentioning specific locations in the city and expressing awe or regret. One of the most famous literary models for such a literary visit is in book 8 of the *Aeneid* where Aeneas walks through the landscape where Rome was to be founded.¹³ Many humanist authors imitated this template in their epics, also using it to reflect on the importance of the location, and imitating some important

¹² See [26], 252-61.

¹³ See Vergilius, *Aeneid* 8, 306-369.

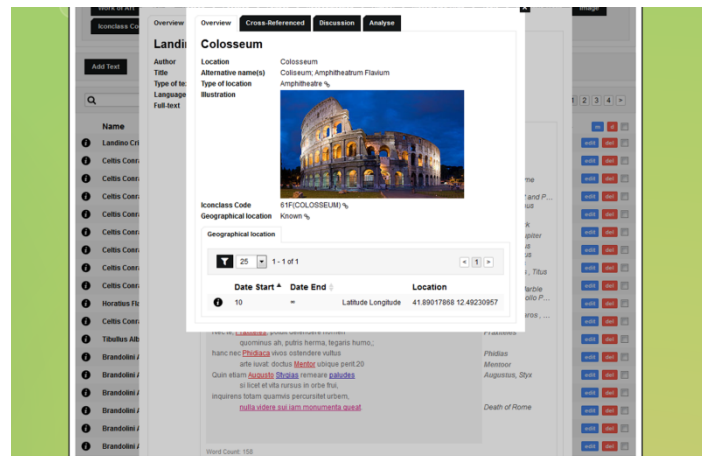


Fig. 5. Location record of the Pantheon in MVR

features of the *Aeneid* for contemporary history. By means of the system of cross-references I can generate a list of authors who use this template, compare the ways they use it and analyse the implications for their image of Rome.¹⁴

2.2 Visualisation of research material¹⁵

This brings me to the second point: the annotation of my material in *MVR* enables the visualisation of such literary walks on the map of Rome.¹⁶ This visualisation can be generated by adding geographical coordinates to every location that is mentioned (and thus cross-referenced) in a poem, and displaying them on a map in the appropriate chronological order.¹⁷ To distinguish between locations that the character is supposed to visit and those he only sees from afar, different colours can be used for the location points, and different kinds of lines can be drawn between the points.¹⁸

Of course these walks are *fictional*, and it is therefore impossible to objectively reconstruct the guided tour Aeneas was offered in the *Aeneid*, or the Carthaginian Hasdrubal in the *Africa* by Francesco Petrarca. However, on the basis of these reconstructions you can still conclude that all these authors – Virgil included – at least tried to let their literary characters follow a more or less realistic path through the Rome they stage, on the basis of the

¹⁴ See [7].

¹⁵ See [10].

¹⁶ For these dynamic visualisations see <http://rome.nodegoat.net/viewer>. Select the *Virgilian walks*. See also [28].

¹⁷ The chronology in this case is however fictional, as it is only employed to display the locations in the right order, not to suggest that the character visited these location at a certain point in time.

¹⁸ Only recently a new feature is added to nodegoat, which allows you to manually draw lines in the map following the course of modern (or ancient) streets.

cross-references it becomes possible to visualise the image of Rome associated with a person as a node.

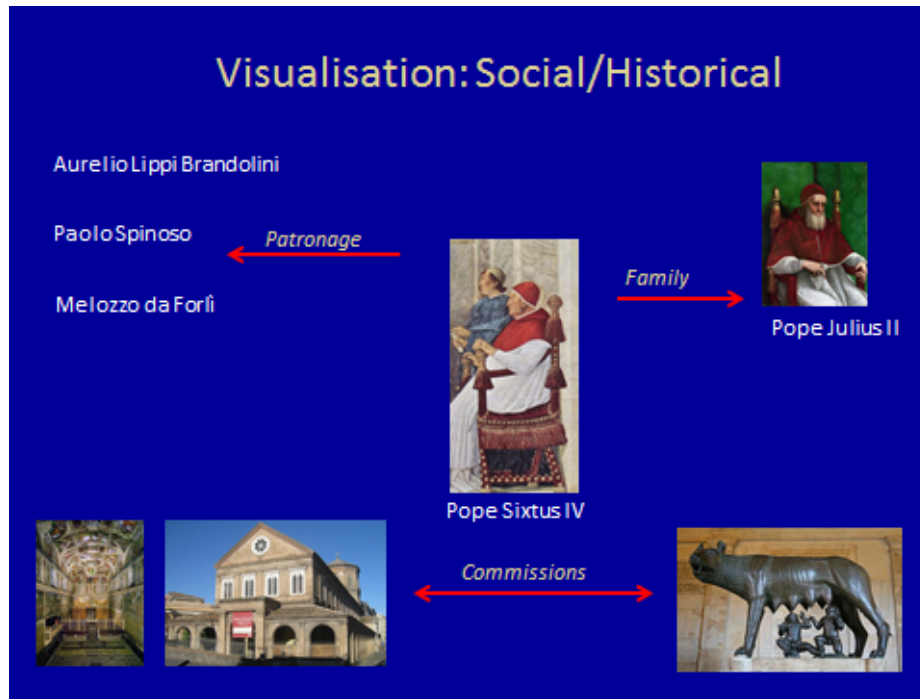


Fig. 7. Simplified scheme for Network Visualisation

2.3 Digital Hermeneutics: Mapping the Renaissance Discourse of Rome

When it comes to the data model, that is the set of cross-references (= tags or metadata) divided into several types (= categories), my work did not start from nothing, but was based on what I knew from my own research to be the most important elements of the existing discourse on Rome in Antiquity and the Renaissance.²⁰ However, this model is not fixed or static, but rather functions as a hypothesis that can be adjusted and finetuned on the basis of the actual tagging. In this manner I have already added, deleted or merged several tags, and renamed and restructured the types themselves.²¹

As a result the primary material, the set of types and the lists of cross-references tend towards a more accurate conceptualisation of the Renaissance discourse about Rome on the go. The more material is included, the more sense it makes to, for example, trace and visualise trends in the dataset as a whole, such as the relative popularity of a certain theme,

²⁰ On the basis of, e.g., [13]; [17]; [9].

²¹ See [14]; [35].

location or historical event; calculate the relative distance between authors with regard to their image of Rome; draw clouds of elements from different types that are often found together; identify regional or chronological trends, preferences according to genre, classical texts that are relatively often alluded to, etc. This process as a whole, in which digital means participate in the hermeneutic process of interpretation, can be called *digital hermeneutics*.²² It moves beyond the Digital Humanities as a means to store or organise, and uses it to advance understanding of sources in humanities.

3 *Mapping Visions of Rome – Interdisciplinary Collaboration and Data Exchange*

What I have sketched above basically reflects my initial vision for the database based on my own particular research question. However, very soon I realised that many, if not all of the elements from the Roman legacy employed by the humanist poets, are relevant beyond the realm of humanist Latin poetry as well. To give an example: the sixteenth-century French poet Joachim Du Bellay regularly refers to the *tempus edax* (devouring time) in both his Latin poetry and also in his French poetry about Rome. Around the same time the theme was also reflected upon in a painting by Hermanus Postumus, who even included a quotation by Ovid in the painting itself on the *tempus edax*, to underline the link with this specific theme.

Scholars of Neo-Latin, French literature or art history often identify the Ovidian origin of this theme, but do not regularly compare contemporary examples from other disciplines. However, it would give a much more complete image of the multidisciplinary process of reception if these examples were studied together more often. The same goes for instances in which the same location in Rome or the same story features in different kinds of sources. I therefore asked myself: how can *MVR* deal with and do justice to the connectivity between art and literature in the Renaissance discourse of Rome? Or, framed in its wider context: how can Digital Humanities contribute to the collaboration between disciplines?²³ As collaboration is a two-way-street, I envisaged both the contribution I could make to the discussion by making my research (material) available to others, as well as the ways in which I could benefit from the research (material) of others, preferably if it were already available in a digital format.

Let us start with the last issue, for which I see two main options: *MVR* enables the inclusion of other types of primary sources, e.g. in other languages or other media, which I can annotate with the same set of cross-references also applied to Latin poetry. In the example discussed above all three instances referring to the *tempus edax* can be tagged with the same cross-reference under the category 'topic': devouring time, and thus be brought together. However, this implies that these other sources are already known to be related, so that in some sense we learn nothing new by applying this method. It would be methodologically more sound, and lead to more unexpected results, to compare and connect primary sources (of different sorts), to which the same set of cross-references have already been applied from the outset. But to make this possible, we have to use *standards*.

²² See [11]; [15].

²³ See [12]; [36]; [21].

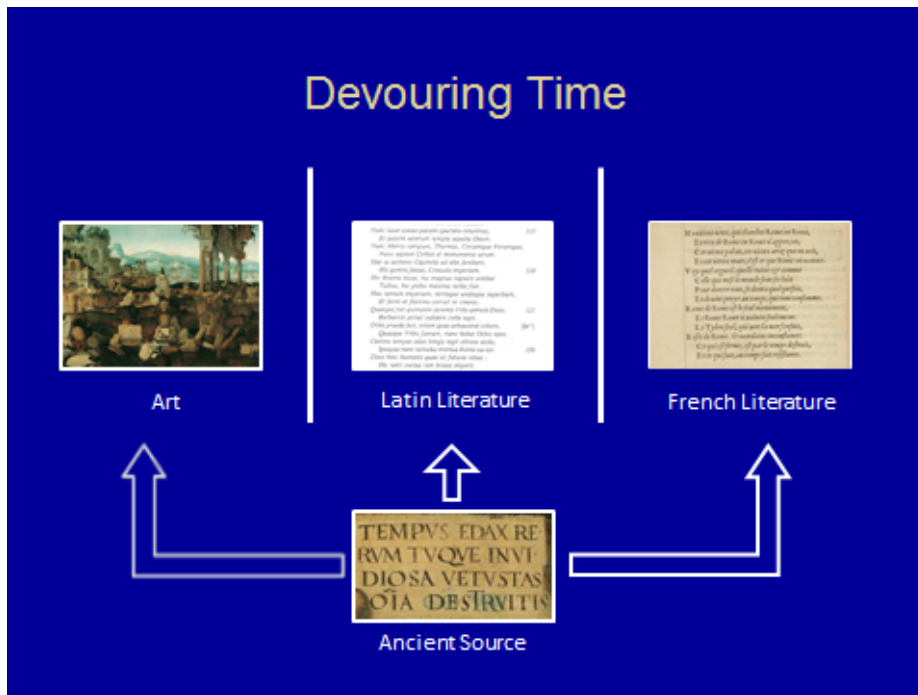


Fig. 8. Dividing Lines between Disciplines

This leads us to the following questions: a) for what categories in *MVR* would it be worthwhile to use standards? Or: which types would, in theory, allow for data exchange with other disciplines? and b) which standards are already available for this kind of data exchange (*interoperability*)?²⁴ The first question is rather easy, as it concerns almost all categories: monuments and locations; persons; events from history and myth; topics; symbols; literary templates, etc. The second question is far less easy to answer, as in many categories there appears to be more than one standard, and/or no standard at all, and/or not all standards support the practice of Linked Open Data.²⁵

3.1 Geographical Annotation

Let me consider three areas in which I have explored the issue of standardisation and experimented with applying (digital) standards to my own dataset, including some examples of what this method has to offer *in concreto*. The first area is geographical annotation, that is the annotation of locations (and monuments) mentioned in the primary sources, with a focus on locations and monuments in Rome.²⁶ There are numerous digital projects that have

²⁴ For the difference between data exchange and interoperability see [31].

²⁵ See [25].

²⁶ Another project that is concerned with the geographical annotation of Latin texts is GeoLat, see [5].

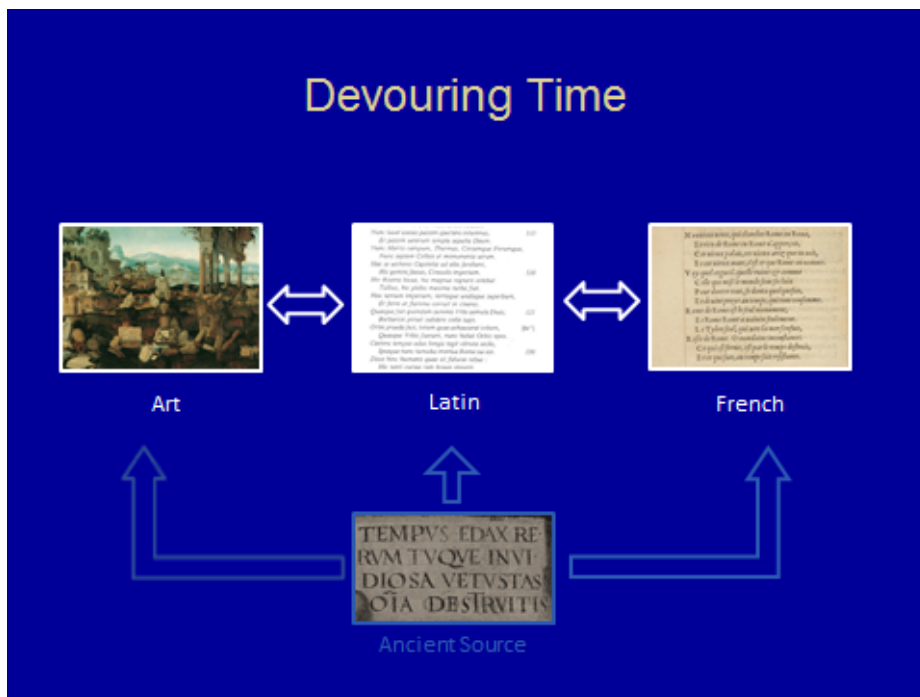


Fig. 9. Interdisciplinary Collaboration

an interest in locations or monuments in Rome, some of which appear especially suited for connecting with *MVR*.

Consider for example the CENSUS of Antique works of art known in the Renaissance, a huge database of ancient locations, monument and art works, including all kinds of documents, texts and works of art, that shed light on their survival up to the Renaissance.²⁷ Much of the information in this database would be useful for *MVR* and vice versa. For example, if a humanist poet refers to the Temple of Diana on the Aventine, it would be interesting to see what was known about or still visible of this temple at the time of writing. Or if a poet describes the Colosseum, it would be helpful to see contemporary sketches of this monument, both as an illustration of what it looked like and as point of comparison of what it could symbolise.

Vice versa, if CENSUS assembles written documents and sketches of the sixteenth-century collection of statues in the Capitoline collection, it would be interesting for the CENSUS-team to know what Joachim Du Bellay wrote about those statues in his Latin poetry. Or if it is CENSUS' goal to reconstruct the whereabouts of the sarcophagus of Santa Costanza, which is now in the Vatican museums, but was originally located in the Catacombs of Santa Costanza, it is highly relevant that Paolo Spinoso wrote a poem about the transportation of this sarcophagus to the Palazzo San Marco at the instigation of Pope

²⁷ See <http://www.census.de>.

Paul II in the 1460's.²⁸ For this reason I have started to add codes from the CENSUS database to my locations and monuments where I considered it relevant and helpful for the future.

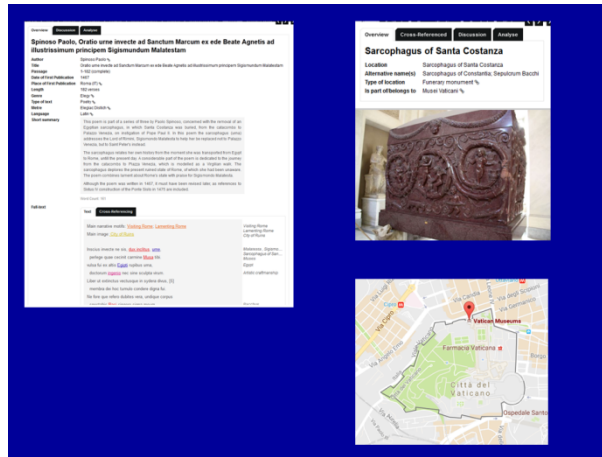


Fig. 10. Text and Image of the Sarcophagus of Santa Costanza in MVR

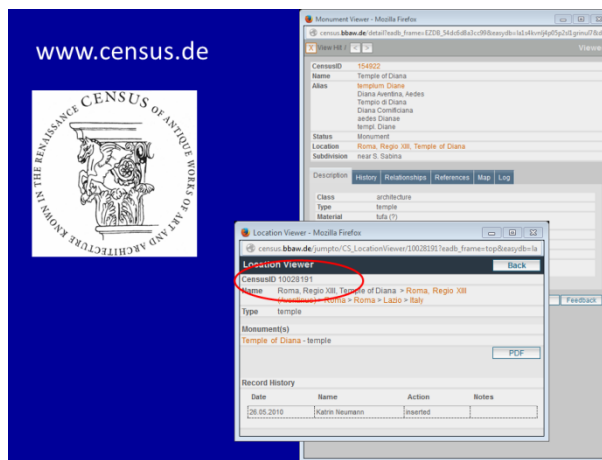


Fig. 11. The Temple of Diana on the Aventine in CENSUS

There are several projects in addition to CENSUS in which locations and monuments in Rome are an important factor and that could contribute to or benefit from the material

²⁸ See [2], 163.



Fig. 12. The Temple of Diana on the Aventine in MVR

in *MVR*.²⁹ However, at the moment none of these projects allow for a direct connection to the information about these locations in their database, i.e. they do not answer to the ideals of Linked Open Data. If they did, each of their records would generate a URI (Unique Recognition Identifier), which could be linked and immediately direct you to that record in its most recent form. In that case it would also be possible to select some of the metadata connected to that location and import it in *MVR*. For example: in such a scenario the geographical coordinates and building dates that CENSUS adds to Roman monuments could be automatically imported in *MVR* via this connection.

Since all these potential connections are based on the location as a *node*, in an ideal world individual projects would not generate their own URI's, but instead use *standard* URI's for locations and monuments in Rome. This calls for an intra-city gazetteer of Rome, which would generate URI's for each location to which each individual project could link. The interoperability based on such standards has several advantages: data can be exchanged on the basis of information that a computer can recognise, instead of through, e.g. similar location names, which is especially hazardous in the case of Rome; not every project has to add the same metadata, because the basic information about the locations can be shared; this creates a web of connections which reflects the multidisciplinary nature of the topography, history and discourse of Rome.

Having recognised the necessity and potential of such a gazetteer, it is great news that a pilot to design one has been recently included in the Pelagios project.³⁰ In the meantime I have already started experimenting with importing URI's from two gazetteers that do include some locations in Rome, namely DARE (the Digital Atlas of the Roman empire) and Pleiades.³¹ Having set up a dynamic connection between *MVR* and DARE, I can now search

²⁹ E.g. *Hadrianus, Digital Augustan Rome, Lupa, Linking Evidence, Speculum Romanae Magnificentiae*.

For a full list of such projects, see <http://www.digitalromanheritage.com>.

³⁰ See <http://commons.pelagios.org>, a pilot led by Valeria Vitale.

³¹ See <http://dare.ht.lu.se> and <https://pleiades.stoa.org>.

the locations in DARE and select the appropriate URI directly from *MVR*. Consulting this location record in *MVR* directly opens the link to this location in DARE in return.

Roma aeterna An interesting aspect of using locations as *nodes* for connecting data is the possibility it offers to use the map of Rome as a navigation tool through information that is geographically annotated. Without yet using the geographical standards I mentioned above, the following two subprojects of *MVR* do exploit this ideal.

The first of these employs the map of Rome to browse and consult articles from the Dutch journal *Roma aeterna* which are related to specific locations in Rome.³² The interface is based on the *MVR* database structure in nodegoat, to which an extra type *article* has been added. Each article record is annotated with all the locations it mentions in Rome, and enriched with the URL link to the article itself in open access. The map is generated in *MVR* as a so-called *scenario*, filtering all locations in Rome that are mentioned in all available articles from *Roma aeterna*, and visualised on the map. Clicking on a location generates a list of articles related to this location, from which a single article record can be opened, including the direct link to the open access article. At the moment this interactive map only links to articles from this journal, but using Linked Open Data it is easy to imagine an environment in which also other resources related to these locations can be consulted, whether or not they are actually included in *MVR*.

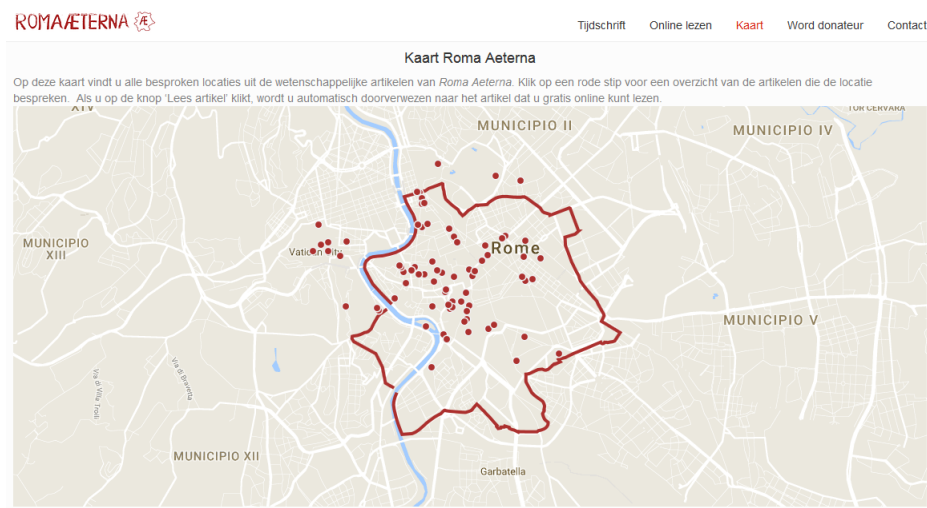


Fig. 13. The Interface of Roma aeterna

³² See <https://www.romaaeterna.nl/page/kaart> (it might be necessary to refresh the page immediately when you have opened it).

De Vereeuwigde Stad (Dutch for: The Eternalised City) A related, more sophisticated subproject of *MVR* is called ‘De Vereeuwigde Stad’.³³ In the same vein as the *Roma aeterna* tool, it features the map of Rome as main navigation and browsing tool, but now primarily consulting *classical texts* about these locations. Other types of information which can be retrieved in this manner are the *locations* themselves, the *persons* associated with the locations and the texts (as authors or commissioners) and *art works* representing these locations. By making the public interface connected to the *MVR* database more user-friendly, the result is a mobile website that has all the features of an App. It can be used both at home as well as during a trip to Rome itself, offering scholarly information to the interested public.³⁴

3.2 Thematic Annotation

Other types (= categories of cross-references) in the *MVR* project that would benefit from or could contribute to the interoperability with other projects, can be summarised under the heading of ‘thematic annotation’. Although the category ‘theme’ as such is not part of my *MVR* data model, we can understand it to include various elements from the Roman past or the traditional images of Rome that are referred to in the poems, and also in other types of literature or other media, such as paintings. They include both concrete themes, such as historical or mythological characters or events from history or myth, and also more abstract themes, symbols or topics. For example, poems, painting or statues can all refer to Romulus, just as they can reflect on the topic of devouring time, as we have seen.

As said above, my types and individual cross-references (= my ontology) are developed on the basis and for the purpose of my specific research question. For a comparison of other kinds of primary sources with this same research question in mind, it is therefore advisable to apply this same ontology to other (kinds of) sources in the context of *MVR* and further adjust it on this basis. However, this methodology implies that you already know which sources to include. In contrast, mapping my own ontology for thematic annotation on other classification systems where other primary sources have already been tagged, opens up the possibility of retrieving and connecting with new sources.

I have carried out an experiment in this direction with Iconclass, the iconographical classification system commonly used for works of art.³⁵ In this classification system you can systematically find (or create) codes to describe the content of works of art. For a connection with *MVR* it is especially relevant that you can retrieve specific codes for characters or events from Roman history or myth, but also for more abstract topics, like ‘devouring time’, or ‘the destruction of monuments by barbarians’. By adding Iconclass codes to the appropriate tags in my project, I can thus compare my dataset with other datasets that have been annotated by means of Iconclass, and see what kinds of connections come up.³⁶

So far I have only added Iconclass codes manually, but for the future I envisage creating a similar dynamic connection with the Iconclass browser as I have set up with DARE, so

³³ It is connected to a book with the same name, [38].

³⁴ The website <http://www.devereeuwigdestad.nl> will be online from April 2018 onwards. Via GPS your own position in the city can be shown on the map.

³⁵ See <http://www.iconclass.org>.

³⁶ E.g. in <http://www.arkyves.org>, a reference tool for the history of culture. Another interesting project in this respect is <http://www.iconos.it>, which collects images related to the *Metamorphoses* of Ovid.



Fig. 14. Using Iconclass to connect text and image in MVR

as to be able to directly browse Iconclass for the appropriate code from within the *MVR* environment. A further development could be to enrich Iconclass with new codes based on elements that frequently figure in *MVR* and vice versa. In my view the mapping of these two ontologies not only aims to exchange primary sources on this basis, but also to create a ‘language’ that scholars from different disciplines can use and apply to their material. This in turn will generate a more comprehensive view on the Renaissance discourse on Rome, and assess the specific contributions of either Latin or the vernacular, literature or art.

3.3 Intertextual analysis

These methods of standardised annotation all aim to connect and thereby compare different sources on the basis of the references they share, be it locations in Rome, literary templates, mythological characters, etc. However, many literary sources are also directly related by means of intertextual references, either sharing references to the same classical texts, or referring to each other by means of allusions. Finding these connections has traditionally been part of the expertise of individual scholars, but recent times have also seen several initiatives to retrieve intertextual links computationally. Depending on the method used, these programmes are restricted to finding literal similarities (similar to plagiarism software), or, by using an algorithm, assessing the significance of similarities between two texts.³⁷ The great advantage of such methods is that they do not look for similarities with a given phrase which has already been selected by a scholar as potentially relevant, but identify and assess similarities between two (complete) sets of texts.

I do not yet have concrete ideas about the incorporation of such intertextual analysis tools or methods in *MVR* - much of this depends on how these tools themselves develop -

³⁷ See [6]; [39]. In my forthcoming article on the *Economics of Poetry*, I discuss some of these tools (*Tesseræ*, *Memorata Poetis*, *Croala*, *MVR*). I have not yet been able to fully explore the *eTRAP* project (<https://www.etrapp.eu>). See also [20] and [23].

but the potential opportunities are numerous. First of all, an integral part of my hypothesis is that Latin literature is a considerable and significant part of the ancient Roman legacy which these humanist poems select, interpret and appropriate. Having a tool that can trace similarities between poems from my corpus and the whole body of ancient literature would therefore be a welcome addition to the assessment of such relations by other scholars' and my own observations. Needless to say that such observations – whether retrieved automatically or individually – are only the starting point of an investigation, not the goal. In addition, such a method would also enable one to analyse the frequency and relative importance of certain classical texts for the discourse of Rome in the Renaissance. Although we do have a general idea of what this canon of texts looks like, methodologically we run the risk of overemphasising its importance, as we are more likely to observe references to this canon than to other texts.³⁸

What would contribute even more to our current understanding of the literary discourse of Rome in the Renaissance, would be to trace intertextual references between texts of that period. First, because it is an area in which individual scholars are far less knowledgeable because of the sheer quantity of sources and the lack of a strongly defined canon. Second, because it could potentially adjust our ideas about the dominance of ancient literature in this period. Unfortunately, it is also the most difficult to realise, because of the lack of modern, let alone standardised digital editions of many Neo-Latin works. However, in this area too there are numerous developments and projects that seek to change this situation.³⁹ Regarding the role of *MVR* in this development, my project also seeks to make the texts that were previously unedited available in a digital format.

4 *Mapping Visions of Rome – Sharing Results*

So far I have discussed the ways in which I envisage the Digital Humanities as offering tools for doing research, and for exchanging and sharing research material so as to make this research more interdisciplinary, more systematic, and – in some ways – more attuned to the complexity of the object of research itself. In this way the technological development of the digital tools themselves, albeit of crucial importance and of great interest, remains restricted to the realm of *methodology*. However, one of the advantages of working with material in a digital format is that it also enables the publication of this material, and the results based on them, in this same digital format, on a digital platform. This impacts not only the organisational lay-out of these results, but also the potential audience.⁴⁰ In the context of *MVR* I am thinking thus beyond the primary sources and set of cross-references, which at some point can be made available via the public interface, with the added possibility that other scholars can also contribute from their specific expertise. The real challenge would be to find a way in which the results, i.e. the answers to the research question itself and their relevance, can be conveyed to the larger public.⁴¹

While not yet fully completed, my research aims to show that elements from the ancient Roman legacy build up to images of Rome that reflect a certain link between the past and

³⁸ See [24]; [16].

³⁹ E.g. the *Digital Latin Library* (<https://digitallatin.org>).

⁴⁰ See [3].

⁴¹ See [4].

the present; that all these images belong to certain fixed domains connected to Rome from Antiquity onwards (power, morality, landscape and learning); that these images derive their rhetorical power from the authority of Antiquity in general, and of the ancient Roman empire in particular; that these images do not function in a vacuum, but participate in contemporary debates about who is most entitled to this ancient legacy; and that these images are not static, but develop and change dynamically according to changing purposes.

Whereas the monograph based on this research takes the separate domains as organisational structure, a digital publication could take a more dynamic approach.⁴² Although I have not yet taken concrete steps in this direction, I envisage features like clouds of topics related to certain images, visual distinctions between images and counter-images, or the possibility to dynamically follow certain images of Rome through space and time according to changing cultural and religious politics.

With regard to the contemporary relevance of the results, such an environment could show that many of the images and counter-images of Rome we can identify in the Renaissance are still powerful today. As an example I could show the front page of *Il Messaggero* reporting on the damage done to the Barcaccia Fountain at Piazza di Spagna by Dutch football hooligans in 2015, and compare it to a drawing of the Colosseum by Hieronymus Cock, since they both adopt the traditional topic of Rome damaged by barbarians.



Fig. 15. Front Page of *Il Messaggero*, 20 February 2015

The reaction to the latter event by Dutch students and professors was no less stereotypical, as they emphasised that when it concerns entitlement to the Roman legacy, 'we are Romans too'. This image of Rome as 'communis patria', which can be regarded the counter-image of the distinction between Romans and barbarians, is part of a long tradition too, exemplified in the poetry by Francesco Petrarca among others. In the end these are all examples of how the past can be strategically employed for present purposes; how it can

⁴² See [30]; [34].



Fig. 16. Etching by Hieronymus Cock, 1551

legitimise the inclusion and exclusion of certain groups; and how national stereotypes can be activated for rhetorical uses: processes that are neither restricted to Rome, nor to the past. The question remains: can we find a way to make these processes insightful by visualising them schematically?



Fig. 17. Reaction from Dutch students and scholars

5 *Digital Roman Heritage – Furthering Collaboration*

One final aspect of Digital Humanities that specifically appeals to me, is collaboration. The collaboration they enable and call for: to further develop the resources, tools and standard methodologies. I have already reflected on the possible interconnections between *MVR* and other resources in the fields of geographical annotation, thematic annotation and intertextual analysis. However, data exchange can only be fully realised by the exchange of ideas and insights by real people, as exemplified by conferences like this AIUCD. This is the reason that in 2015 I organised a first conference (*e-Rome*) and started a web portal www.digitalromanheritage.com⁴³ to identify people and projects that are related to the digital legacy of Rome as well as the areas in which collaboration is both possible and worthwhile. Let me thus end my paper with this invitation, for anyone working in this area, or interested in participating, to join the collaboration, and work towards a second *e-Rome* in the near future.

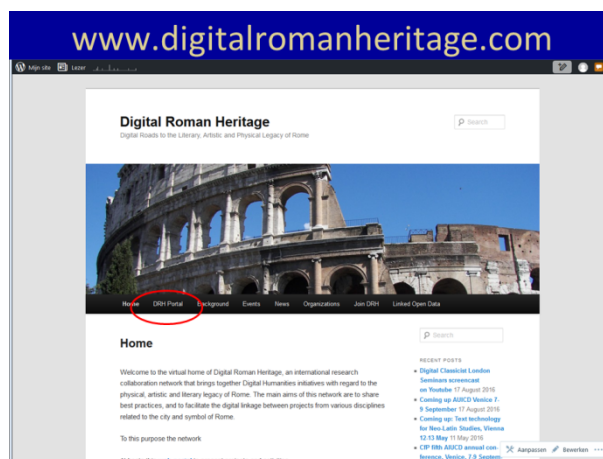


Fig. 18. Digital Roman Heritage Homepage

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