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# A Myth as a Replacement for a History: Ethnogenetic Elements in De Administrando Imperio and the Chronicle of the Priest of Duklja\*

We will examine how the diversity of historical sources affects the portrayal of the Balkan Slavs by following two writings that notably differ. First is *De Administrando Imperio*, written in the X century. Our second source is the *Chronicle of the Priest of Duklja* about which very little is known. The two sources have a strong influence on our understanding of the earliest history of the Slavs that dwell in the Western Balkans. Hence, on our understanding of the modern nations, i.e. Croats and Serbs. These sources are so different when regarding their historicity, time of composition etc. But in terms of myths, we see the same patterns: coming of pagan peoples in Roman Dalmatia, story of their origin, how they were baptised, who were their rulers, what kind of dynasties they had, when did it happen and many more. Following this general ethnogenetic and mythological framework,

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we will try to conclude the relationship between myth and the identity of a European populace. To achieve this goal, we used qualitative and quantitative content analysis and provided their narrative networks of the mentioned texts. These networks illustrate patterns of connections between different ethnogenetic elements in the writings that serve to form groups identities of interest.

Key words: De Administrando Imperio, Chronicle of the Priest of Duklja, Croats and Serbs, ethnogenesis, historiographical myths, narrative networks

# Мит као замена за историју: етногенетски елементи у De Administrando Imperio и Љетопису попа Дукљанина

Испитаћемо како различитост историјских извора утиче на приказ балканских Словена, пратећи два списа која се значајно разликују. Први је De Administrando Imperio, написан у X веку. Наш други извор је Љешойис йойа Дукљанина о коме се врло мало зна. Ова два извора имају снажан утицај на наше разумевање најраније историје Словена који живе на Западном Балкану. Отуда, и на наше поимање модерних нација, односно Хрвата и Срба. Ови извори су толико различити у погледу њихове историчности, времена настанка итд., али у погледу митова, видимо исте обрасце: долазак паганских народа у римску Далмацију, прича о њиховом пореклу, како су крштени, ко су били њихови владари, које су династије имали, када се то догодило и још много тога. Пратећи овај општи етногенетски и митолошки оквир, покушаћемо да закључимо однос између мита и идентитета једног дела европског становништва. Да бисмо постигли овај циљ, користили смо квалитативну и квантитативну анализу садржаја и обезбедили наративне мреже поменутих текстова. Ове мреже илуструју обрасце веза између различитих етногенетичких елемената у списима који служе за формирање групних идентитета од интереса.

Кључне речи: De Administrando Imperio, Љеѿоӣис ӣоӣа Дукљанина, Хрвати и Срби, етногенеза, историографски митови, наративне мреже.

## 1 INTRODUCTION

We can characterise a myth as a primordial story or the endeavour to explain the phenomena we are surrounded by. On the other hand, we can describe it as an umbrella concept that enfolds a wide range of ideas, which is why defining a myth is challenging; it has too many diverse meanings. However, if we were to abstract and get to the most fundamental characteristics of a myth, it can be roughly defined as a historical narrative that describes shared experiences of a particular community/group to construct the identity<sup>1</sup> of that very community (Chlup 2020). A myth has a historical character, but what substantially distinguishes it from a historical narrative are the *dramatic* aspects that aim to convey a specific message regarding the national identity of the group to which the myth refers (*Ibid*; Berger 2009). Certainly, Hesiod's and Homer's view of myth differs from the historiographer's interpretive perspective. Our historical researcher is primarily interested in the ethnogenetic elements of mythologising. According to Berger (2009), myths were a central tool used by nationbuilders to create a common ethnocultural history. However, as Berger notes, with the 19th-century scientific historiography, under increasing reliance on the scientific historical method, also began the attempts to demystify national myths about ethnogenesis.

Following the described modern scientific approach to the myth, we will examine the ethnogenetic and other identity-forming elements in myths, with a special focus on the settlement of the Slavs in the Balkan Peninsula. For this purpose, we have chosen two drastically different writings that represent precisely the focus of the identity ideas about the Balkan Slavs. The first is *De Administrando Imperio* (which we will continue to address simply as 'DAI') by Constantine VII Porphyrogenite (913–959), written in the X century. And the other is *the Chronicle of the Priest of Duklja* (which we will continue to address simply as 'PDRS')<sup>2</sup>,

Identity, like a myth, is complicated to define. In the further course of our paper, we will adhere to the understanding of identity as a category that changes over time but with a holistic context in which a particular group, nation, or *demos* remains the same. Here we can cite the analogy of the *Ship of Theseus*, where a new one replaces every ship's plank over a certain period. However, the ship remains the ship of Theseus, although it does not possess any component of its original construction. This interpretation of identity is philosophical because it attempts to instantiate the identities of groups and collectives in the most general sense. See more in Szifris (2021).

<sup>&</sup>lt;sup>2</sup> An abbreviation for 'Presbyteri Diocleatis Regnum Slauorum' which is how Ivan Lučić called it in his History (GRS II, 37). We chose this name since it is similar enough to the title proposed by Tibor Živković and Dragana Kunčer for this work together with the *Croatian Redaction* 'Gesta Regum Sclavorum' based on the correct reading from the *Belgrade manuscript* (GRS I, pp. v-vii), but because we didn't include the *Croatian redaction* we wanted to make a distinction between the two and to have the name of the author in the title of the text for it has been so influential in historiography when concerning this text (Mijušković 1967, 7–8). Also, methodologically speaking, in terms of genre, the work is not a chronicle but *gesta* (GRS II, 27), so we didn't want to use the

also known as *the Genealogy of Bar*, about which very little is known. DAI is, at the same time, a work of encyclopaedic character and a strictly confidential state document. The emperor dedicated it to his son and heir, Romanus II (959-963), to inform him about the people who surrounded and lived in the borders of the empire, their history, their relations with Byzantium, and how to deal with them. On the other hand, the only information we have about PDRS is what we are told by the author himself, an anonymous priest from the Archdiocese of Bar, who probably wrote this text in the late XII century or even later. The oldest preserved copy of the chronicle is a Latin manuscript from the XVII century. However, some parts of the text were translated or included in other historical writings in previous centuries.

The two selected writings, and their ethnogenetic focus, despite their specificity and content, are not an exception in the identity-mythological history of European nations. This type of legendary history was to be found in post-Roman Europe among the newly established barbarian kingdoms, not solely during Late Antiquity in the Mediterranean.3 Starting from general premises such as the myth of origin (γενεαλογία/origo), we will examine how the two writings we have chosen approach the narrative of rulers and their dynasties. This paper will not address the nature of the sources, their historical truth, or anything accurate behind these writings, but rather what a myth is and how it is constructed. We have more mythological elements in the work of the Priest of Duklja because the entire chronicle is a mythology-like narrative. However, parts of the Porphyrogenite also recount local Slavic traditions as recorded by the Byzantines. Following this general ethnogenetic and mythological framework, we will try to show the relationship between the myth and identity of the Balkan Slavs.

To achieve this goal, we will conduct a two-step content analysis of the two mentioned writings – a qualitative and a quantitative one. Qualitative analysis is the first step of our study precisely because it allows us to identify, separate, and analyse the elements of these writings in more depth and without overlooking the relevant content that quantitative analysis *per se* 

misleading title containing the word 'chronicle' nor 'genealogy'. That is why we used the old traditional name given first by Lučić, keeping the original misreading of 'regnum' instead of 'regum' because the alteration of that one word would need to make the acronym be changed to 'PDGRS' or 'PDDRS', thus losing the connection with the old title. The reasons for this will be made clear in the further text.

<sup>&</sup>lt;sup>3</sup> On this subject, see: Reimitz 2015. On the general importance of the early Middle Ages for European nations today, see: Geary 2002, 7, 9.

might ignore. Our qualitative analysis will focus on identifying common thematic units in the DAI and PDRS writings, such as historical, religious, topographical, dynastic, and genealogical elements of myth that form the basis for the formation of a collective identity in the preindustrial agrarian societies. Then, the thematic unit selection, as a result of our qualitative analysis, will be used for further quantitative content analysis. Here we will use Epistemic Network Analysis (ENA) to illustrate the connections between the selected themes. This approach is a critical complement to qualitative analysis because, unlike the traditional statistical approaches, it does not ignore meaningful patterns of connections between units of analysis. In other words, our quantitative content analysis focuses precisely on the patterns of specific connections between the elements used to form national identities described in mentioned writings.

In the next chapter, we will present the theoretical background of our research through a detailed review of the DAI and PDRS writings. A good understanding of these materials is necessary to proceed to the empirical analysis, that is, to qualitative and quantitative content analysis. In the third chapter, we will present our research methodology and describe the advantages of the qualitative and quantitative approaches we have chosen. In the following fourth chapter, we will present the research results. After the qualitative analysis that results in descriptions of each of the selected themes in the two writings, we will show how we can create narrative networks for both writings to find similarities and differences between them. These models represent relationships between the ethnogenetic-mythological elements used to form the identity of a given group the writings are focused on. Finally, we will provide an interpretation of these results and a general discussion of their significance for understanding the ethnogenetic elements of myth.

# 2. THEORETICAL BACKGROUND

Since the days of Ivan Lučić (1604-1679) and his *De Regno Dalmatiae et Croatiae*, which was published in Amsterdam in 1668, two works, one of Constantine Porphyrogenite and the other of the so-called Priest of Duklja, have sparked a debate among those invested in the study of the earliest history of the Slavic peoples who dwell on the Eastern shores of the Adriatic Sea. Ivan Lučić was the first author who has used both the Byzantine text known as the *De Administrando Imperio*, written by the scholarly circle

<sup>&</sup>lt;sup>4</sup> For the perspective on the understanding of these categories for a prenational collective identity, we followed the concepts of Gellner, 1983. and Hobsbawm, 1990.

around the emperor Constantine VII Porphyrogenite (913/945-959), as well as an enigmatic Latin manuscript which is traditionally known as the *Chronicle of the Priest of Duklja* or *The Genealogy of Antibaris*, written by an anonymous cleric from the city of Antibaris (modern Bar) at some time during the Late Middle Ages. These two texts have been debated ever since (DAI II, 94-95, 98-99; GRS II, 21, 25-26; Mijušković 1967, 7-8, 15, 35-36). *De Administrando Imperio* (DAI) is regarded as one of the most complicated works in the entire Byzantine history (Stanković 1999/2000, 67), and no better is the *Chronicle of the Priest of Duklja* (PDRS) which Tibor Živković described as one of the most complex historical accounts of the Middle Ages (GRS II, 376).

DAI is just one of the works composed by the imperial intellectual circle around the learned Constantine Porphyrogenite. Other notable works include Vita Basilii, De Thematibus, and De Ceremoniis, which were written by Porphyrogenite with his assistants at the imperial court. This was just an acme of a wider encyclopaedic movement that started in IX century Byzantium, usually known as the 'Macedonian Renaissance', which underwent changes during the reign of Constantine VII, the biggest propagator of the imperial ideology among the members of the Macedonian dynasty. The emperor himself had a difficult time ascending to the throne - begotten in a controversial marriage in terms of legality. he was only seven years when his father Leo VI (886-912) passed away. which put him in the hands of his closest family members and other influential people in Constantinople (such as the patriarch) to secure his position on the throne. Only in 944 did he manage to become the sole emperor, getting rid of his in-laws at the imperial palace, as a grown man at the age of almost 40 years. This fact made him very protective of his dynastical claims, which he worked hard to promote by means of literary production. He wasn't the first in his family to do so - his father, Leo VI, also authored many written works, using his own literacy as one of the instruments of his reign. Constantine VII Porphyrogenite, however, had a whole circle of intellectuals as associates who worked for him, under his surveillance.5

DAI was authored by Constantine VII, who, in the preface, addresses his son and heir, Romanus II (959-963), explaining to him the importance of the subject that will be dealt with in this work. The topic will be helpful

On this subject, see in: DAI, 7-10; Mango 2011, 220, 238-241; ODB, 502-503; 696-697, 1210-1211; Rusenkvist 2014, 71-94; Shepard 2008, 493-518; Stanković 2003, 83-85, 91-93, 98, 104-125, 203-204.

for the future emperor, teaching him how to rule properly (hence the title De Administrando Imperio, given to the work by Johannes van Meurs who first published it in 1611). DAI deals with foreign peoples bordering Byzantium and what kind of relations the Empire should conduct with respect to them. In the work, all these nations are described, where they live, how, what kind of diplomacy is suitable in dealing with them, etc. It is also believed that DAI was created from a previous work called  $\Pi \varepsilon \rho i$  $\dot{\epsilon}\theta\nu\tilde{\omega}\nu$  (meaning 'On the Nations') around 940, which had the purpose of accompanying another Porphyrogenite's work - De thematibus. DAI itself would be completed between 948 and 952.6 It consisted of various texts of the older and newer dates that were incorporated into DAI. The oldest manuscript dates to the second half of the XI century and was copied not from the autograph but from another manuscript that was drawn from the autograph. Our oldest manuscript was copied for the personal library of caesar John Ducas, one of the most influential and most powerful political figures in the late XI century Byzantium. This fact, as well as the nature of DAI, proves just how important it was for the Byzantine imperial palace to have such a text in its chambers. It was a secret imperial document, but still with a strong sense of Macedonian dynastical propaganda<sup>7</sup> promulgated by Constantine Porphyrogenite (DAI, 12–16, 24, 32; Stanković 1999/2000, 67-70, 82-83).

Caesar John Ducas and his contemporaries faced danger from various peoples bordering and attacking the Empire, such as the Normans or the Seljuk Turks (Angold 1997, 35–55), and we know that this same manuscript from Ducas's library was read during the XIV century when the Ottoman Turks started penetrating the Balkan peninsula (DAI, 19–20). The nature of DAI kept it always relevant for the one who held it in his hands. Its descriptions of foreign peoples always seemed relevant for the future generations who were searching for explanations about the barbarians who never ceased to wage war with them. For example, one would look up the paragraphs regarding the emergence of Islam in Arabia to better understand the faith of Ottoman conquerors (*Ibid*).

Even though DAI is a complex work about which very much was written since the beginning of the XX century, with insufficient results

<sup>&</sup>lt;sup>6</sup> For a different opinion that Porphyrogenite didn't have the time to finish DAI because he himself made the last changes in 959 just before his death, see: Živković 2013, 3–5, 8–11, 16.

Again, for a different opinion on the dynastical bias in DAI and its secrecy, see: *Ibid.*, 12–13.

in understanding this challenging account, at least we know where it comes from (although the sources themselves of DAI are still debated) and who was behind its creation – the imperial palace in the middle of the X century Byzantium (Živković 2013, 23, 5–6, 8–11 17; Stanković 1999/2000, 67, 72).8 The same cannot be said for PDRS. Since there was a lot written about PDRS, but there is no consensus among the scholars, we will, for the purpose of this article, follow the results of Tibor Živković, who published the latest critical edition of this source. Likewise, he has also given answers to almost all questions that one might look for regarding PDRS – we will reflect on his explanation in order to have the best possible solution for this complicated text.

Who wrote PDRS, and what kind of text is it? Briefly speaking, PDRS is a mythical account of the oldest history of Croats and Serbs (i.e., from the early VI century, according to PDRS) up until the middle of the XII century. It mostly deals with the mythical ruling dynasty, hence the name *The Genealogy of Bar,* which is sometimes also in use. Because of this, modern historians regarded it not as a history but as a kind of fiction or belles*lettres*, considering thus the work of Priest of Duklja (a.k.a. the anonymous author) the first original piece of literature among the South Slavs comparing him with other such European writers from the Early Middle Ages (although the Priest of Duklja was believed to have lived in the late XII century). The traces of PDRS through history were very obscure - the first one to publish it was a Ragusan Benedictine monk, Mauro Orbini (1563–1614), as an Italian translation which he had incorporated in his Il Regno de gli Slavi, published in 1601 in Pesaro. The only known Latin copy until 1962 was a manuscript found in the Vatican from the middle of the XVII century that Ivan Lučić found and published in his *History* - since then, only one more manuscript was found in 1962 that was also copied at the same time as the Vatican manuscript. The two copies seem to be drawn from the same Latin manuscript, which was probably in Dubrovnik since we know that another Ragusan historian, Ludovik Crijević Tuberon (Ludovicus Cerva Tubero) (1459-1527), utilised it for his writings. Already since the late XIX and early XX century, historians noticed that PDRS is made up of different sources - at least three: one concerning the mythical account of Goths in Dalmatia, another one

For a most recent study with a slightly different view on the life and work of emperor Constantine VII Porphyrogenite, his intellectual circle and historical texts commissioned by his court, as well as the early history of Slavs (including Croats and Serbs) and their relations with Constantinople, see: Komatina 2021.

would be a legend about prince John Vladimir and lastly a local history of the most recent events in Duklja. We have no time here to discuss the whole journey of the history of theories regarding PDRS, so we will just get straight to the hypothesis put together by Tibor Živković: PDRS was written, as Živković proposed, by a certain Cistercian monk, called Rudger, from the XIII century. He was from Bohemia, a learned cleric who lived at some point in Italy (probably in Bologna, where he was able to acquire excellent knowledge of contemporary European literature), but then settled in Split. There he became an advocate and protégé of the Croatian ban Paul I Šubić of Bribir (1273/5-1312), an exponent of a very influential and powerful Croatian noble family. Ban Paul was a very ambitious nobleman, one of the key players in the struggle for accession to the Hungarian throne, and a partisan of the Neapolitan Angevins, to whom he tried to bring the Crown of St. Stephen. Although a vassal of Hungary, he was very much an independent actor in these events who wanted to expand his territories in Bosnia and Nemanid (Nemaniić) Serbia. In Split, Rudger had the chance to read the works of Thomas the Archdeacon and other local histories, so once he had been transferred from Split to Kotor, he again had the chance to research the written sources of the area, until, in 1298, he finally became the archbishop of Bar (the main Roman Catholic see in Serbia at the time). There he served as archbishop for almost three years until he was expelled, probably for his relations with ban Paul, who was at the time in war with the Serbian king Stephen Uroš II Milutin (1282-1321). Before coming to Zeta (how Duklja was called during the reign of the Nemanids), Rudger already wrote a work in Latin that would, in its Croatian translation, be known as the Croatian Chronicle or Croatian Redaction, which was probably already read in the XIV century Split and by the Venetian doge and chronicler Andrea Dandolo (1306-1354) but was rediscovered yet again in 1500 near the city of Omiš (previously it was believed that the Croatian Redaction was a modification of PDRS, but there were other theories about their correlation as well)9. When Rudger came to Bar, he employed his earlier material to write a new work, reusing what he already wrote and adjusting it to his new environment in old Duklja while adding new material that he came across in and around Bar. He didn't write it openly to ban Paul because he wasn't allowed such a thing for political reasons (being an archbishop in Zeta under the Nemanids), but he still had the

On one of these theories regarding the relationship between the two texts from the earlier historiography, see: Mijušković 1967, 8–15; Bujan, 2008, 5–6.

same agenda of promoting Croatian claims of the areas in which ban Paul was trying to conquer (GRS I, pp. i, vii-x; GRS II, 22, 25–33, 37–50, 311, 321–322, 339, 341–342, 348–350, 354, 360–377).

Was Rudger really the author of PDRS who wrote it for ban Paul I Šubić is not essential for our aim at this moment – he might as well be. For the purpose of this article, we will use the hypothesis of Tibor Živković since there has been no better and, accordingly, not as profound answer given in historiography. In order to compare our two texts, we would need at least some kind of framework for such a pursuit regarding their general identity. The exactness or the faultiness of the hypothesis does not question the general motives of a late mediaeval Latin writer to compose such a work, and such motives were widely spread (GRS II, 32–33). Živković has illustrated that other mediaeval histories from the relatively same period were even more fictional in comparison to PDRS, and they usually had a similar purpose – the best example is the *Historia Regum Britanniae* by Geoffrey of Monmouth from the middle of the XII century (*Ibid.* 77).

Now the question is why should we even compare these two sources in the first place? These texts were, as we emphasised, highly debated for their content – first was Lučić who didn't believe emperor Porphyrogenite that Croats and Serbs came from the lands of West Slavs because the first spoke a language that was not as that of the latter. Afterward the same debate continued until, in the first half of the XX century, new discoveries had revealed that proposed lands from where Croats and Serbs were mentioned in sources outside of Byzantium and independent from DAI – even though that still wasn't enough for all scholars to agree on this topic (DAI, 95–96). That being said, outside academia, to this day, many pseudo-historians try to question or better yet, accuse Constantine VII of fabricating false claims concerning the earliest history of Balkan Slavs (Radić 2017). On the other hand, children in schools in Serbia i.e., learn the earliest national history based on the information that was provided by DAI, and in every textbook for history, there is more or less something about this important historical source (Samčević 2022, 81). But Lučić didn't criticise just the Byzantine emperor - he had a lot to say about the Priest of Duklja as well, labelling his work as a fairy-tale. And so did the future scholars, who either criticised it for its fiction or interpreted it as a nonhistorical genre (Mijušković

For a different interpretation of the texts' tradition and the identity of the priest of Duklja, see: Bujan, 2008; Komatina, 2020. These scholars, unlike Živković, believe that PDRS wasn't a medieval text at all, but a forgery fabricated by Mauro Orbini using some earlier material that was circulating in humanist Dubrovnik.

1967, 15–38). The above-mentioned pseudo-historians, in contrast, utilise fictional narrative from PDRS to make their false interpretations about mediaeval Serbian history, cherry-picking that information that suits their own narrative (Deretić 2000, 247–282). But without any abuse of stories found in PDRS, the Priest of Duklja is nevertheless regarded as an important figure for South Slavic literacy and the history of literature – that is why in the city of Bar since 1987, there is an annual cultural manifestation called *Barski ljetopis* ('The Chronicle of Bar'), that was named after the Priest of Duklja and his work (Barski ljetopis: o nama 2017).

We believe we clarified why these sources are so important for contemporary Serbia. There is no need to explain which is more historically valuable for our knowledge of the earliest history of South Slavs and Serbs. 11 Still, we do not wish to pursue such a path anyways - rather, we would like to examine another phenomenon that concerns these texts, and that is their myths. Both authors of DAI and PDRS collected various sources from the areas where Croats and Serbs lived and incorporated them into their narratives for their own purposes, which we elaborated on above. We won't engage in the difficult task of tracking these sources, but we will just clarify that many of them were Latin-based (others being Slavic), at least when they reached our writers (DAI II, 98-101; GRS II 321-322; Stanković 1999/2000, 67-69, 72, 83). But again, how useful is comparing them? Besides DAI. PDRS is certainly not the oldest account (for we already said that the author of PDRS read Thomas the Archdeacon - a Croatian chronicler from XIII century Split - and not vice versa) that we have on the earliest history of South Slavs, or more specifically Croats and Serbs. However, they are *perceived* as such. They are two sources that are so distinct in many aspects, telling different tales on the same subject. Yet they are so controversial in modern historiography (and beyond scholarly circles as well), and they both use myths in their narratives. Myths that are not so far apart. Živković noticed that there is a certain connection between the tales found in both DAI and PDRS, but also in Thomas the Archdeacon's Historia Salonitana and Thomas Tuscus's Gesta imperatorum et pontificum that leads to a potential historical account about Dalmatia and Salona in the V and VI century (GRS II, 88). Our goal is not to explore the historical truth behind the narratives presented in our sources but rather to analyse the myths as they reached us in those two sources, with all modifications and adaptations that were certainly being made over time.

On the history of Serbs and other Slavs in the Early Middle Ages, see: Živković 2007, 185–289; Ferjančić 2009, 24–74.

# 3. MFTHOD

Our methodology is based on two steps: qualitative and quantitative. Qualitative content analysis allows a more in-depth insight and a sounder understanding of the topic we are haggling with (Krippendorff 2018). On the other hand, the quantitative analysis is a kind of extension of the qualitative part and quantifies the already carefully selected and assessed features of the analysed material. The quantitative analysis enables modelling and statistical and visual insights that provide new information that cannot be obtained in qualitative research (Shaffer 2017). This two-step methodology covers all relevant factors and minimises the likelihood that essential aspects will be overlooked in analysing a particular phenomenon.

# 3.1 Qualitative analysis

Data collection and literature analysis were conducted using two sources: DAI and PDRS. The textual material was then thematized and analysed via *Quirkos software* (Quirkos 2.4.1, 2020). The parts of the text that were divided into meaningful units of analysis were from chapters from 29 to 36 of DAI and from I to XXIII of PDRS. We have chosen these parts from our sources since they seem to be concerning the same issues of our interest. Quirkos is commonly used in qualitative research to organise themes represented as 'bubbles' or 'quirks' (Figure 1).<sup>12</sup> This allows connections to be made between or within theme areas. In the present study, the initial theme categories were constructed by focusing on crucial aspects and the most common associations in the aforementioned DAI and PDRS texts. We singled out five categories: Fundus, Origo, Genealogia, Conversio, and Loci Sancti. The total number of coded sentences is 173; the most prominent theme is *Genealogia* (67 sentences, 6.206% of the coded material). It is followed by Fundus (38 sentences, 5.908% of the coded material), Origo (33 sentences, 3.976% of the coded material). Loci Sancti (25 sentences, 2,363% of the coded material). and Conversio (10 sentences, 1.099% of the coded material). It should be noted that 173 sentences are an operative number. Some sentences belong to different subjects simultaneously, increasing the total number of sentences. Of the 173 coded sentences, 89 belong to DAI and 84 to PDRS. In the following subsection, we will explain each selected theme in detail.

It is feasible to use many other softwares for qualitative content analysis, such as NVivo or ATLAS.ti. Our choice of software was based on the convenience of the report Quirkos provides after the analysis, which is very handy.

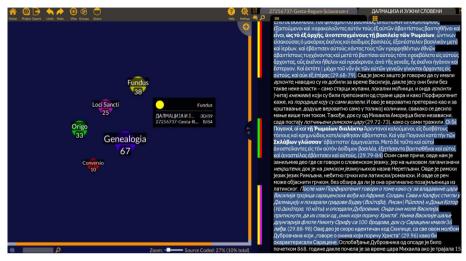


Figure 1. Example of our five themes and dataset in Quirkos software

#### 3.1.2 Themes

As mentioned earlier, in our in-depth deconstruction of the DAI and PDRS writings, we focused on their central and prevailing themes. Extracting these themes is a significant methodological step. The themes represent nodes in the narrative network that later become codes by which we will quantify the narratives, obtain statistical results, and illustrate patterns of their connections with graphs and models.

We have given Latin labels to the themes we singled out as a symbolic description of their semantic scope. We used Latin and not Greek nor Old Church Slavonic because our sources are, as we stated above, largely Latin-based (and it will be most convenient for our objective to use Latin for the appellation of the themes). The themes that we constructed for the purpose of this article are as follows:

I Fundus – or *basis* or *themelios* in Greek, stands for the historical background of the stories in our sources. The narratives relate who was the Byzantine emperor in the time of certain events, or they give us another chronological marker that defines our stories when they occurred in history. Those kinds of elements of the tales are important since they merge the 'known historical figures' with the local legends. For example, both texts give us the name of the Byzantine emperor when Croats and Serbs (in DAI), that is, the Goths (in PDRS), came to the Roman province of Dalmatia. In

DAI, it is emperor Heraclius I (610-641) (DAI, 31.8-20, 31.59, 32.9-10, 32.19). 32.146-147, 33.10, 34.5, 35.7, 36.7-8), and in PDRS, it is emperor Anastasius I (491-518) (GRS I, 4.6-10.). This kind of information is extremely valuable. especially because in a myth, the historical figure at the place can be easily altered for the myth's purpose. At another place in DAI, there is a legend about how the Lombards came to Italy - in the text, there is a reference to the famous general Narses (who is best known as the general under Justinian I (527-565)), and empress Irene (probably Irene Tzitzak, a Khazar princess who was married to the heretic emperor Constantine V (741-775) (DAI II, 89)) who had a guarrel and Narses invited Lombards to Italy as a revenge for the empress's maltreatment of him (DAI, 27.16-36). We find the same legend in *Origo gentis Langobardorum* by Paul the Deacon, who tells pretty much the same tale, but instead of Narses and empress Irene, the guarrel is between him and empress Sophia, the wife of emperor Justin II (565-568) (DAI II, 89). So over time, when this myth about the arrival of the Lombards reached Porphyrogenite (or some of his predecessors in Constantinople), the storyline already changed a little bit, substituting the distant memory of empress Sophia with a more recent heretical empress Irene - having thus a story with two figures, (Narses and Irene) who lived two centuries apart, as contemporaries. That being said, it also seems that in PDRS, the laudable emperor Justinian I was replaced by a heretical emperor Anastasius I, to make the arrival of Goths look more like a good thing (GRS II, 73). This is a radical example of how far a myth can be altered in certain situations, which is present in both of our texts. There are also other emperors and historical figures mentioned in DAI in PDRS, but we wanted to clarify what falls under our category of *Fundus*. Consequently, every part in the text that can be historically tracked in any way is categorised as Fundus. The baptism of Croats and Serbs under Heraclius I (DAI, 31.20-25, 32.27-29)13 is also in this theme, as well as relations between king Svetoplek and pope Stephen V (885-891) (GRS I, 34.10-11), since there is a mention of real historical figures who interact with the protagonists of a myth.

II Origo – or *katagoge* (a noun from the verb *katagomai* – κατάγομαι – which is often present in DAI when talking about the origin of a people group)<sup>14</sup> in Greek, stands for the origin from whence a certain people came

Živković believes this Heraclius should actually be Heraclius Constantine, known as emperor Constans II Pogonatus (641–668) – for this interpretation, see: Živković 2013, 29–32, 35.

<sup>&</sup>lt;sup>14</sup> Concerning Croats, Serbs, and other South Slavs from the Adriatic coastline in: DAI, 31.5, 32.3, 34.4, 36.6; but also in some other chapters, just to cite a few: Ibid., 38.2 or 45.3.

from, who are they related to, how did their nation come to be, etc. In this theme, we also have placed all instances regarding the etymology of their names or similar matters. Etymologies are very often in DAI, where they are sometimes real etymologies and sometimes folk etymologies, whereas, in PDRS, they are almost non-existent, but still, some are present – one of the most representable cases would be when in PDRS, the author narrates the arrival of Bulgars and explains that they have got their name from the river Volga (GRS I, 22.7-13). In DAI, an etymology is usually introduced with the word 'έρμηνεύεται', which would mean  $it\ means\ /\ it\ is\ translated\ as$  and usually it is followed by the word 'διάλεκτος', which means a speech or language.15

III Genealogia – from the Greek word γενεαλογία which would indicate someone's origin, however, we have utilised it here as 'genealogy', understanding under this label the narrative about the ruling dynasty and all anecdotes around it - who begotten whom, how a ruler died, who assented to the throne, etc. PDRS is almost entirely constituted from these kinds of tales, from the most obvious examples when the author introduces the three Gothic brothers, sons of king Senudslavus, who came to Pannonia (GRS I, 4.19-6.13), to other cases, such as that when king Svetoplek gave his brothers the titles of bans or dukes to rule in certain areas of his realm (*Ibid.*, 58.12-15); or when there are descriptions of heroic and tragic deaths of Ostrovllus and Časlav respectively (*Ibid.*.. 16.11-19, 92.21-94.25) - all those narratives fall under this theme. In DAI, the same kind of stories was categorised in Genealogia, from the most understandable examples when Porphyrogenite traces the line of Serbian princes from the unknown prince from the reign of Heraclius I until prince Višeslav (DAI, 32.30-36), as well as the less obvious cases such as that when there is a short description of prince Michael Višević who didn't belong to the Serbian ruling dynasty but from another, probably a Polish<sup>16</sup> one (DAI, 33.16-19).

IV Conversio – or usually *baptismos* in Greek, stands for the conversion of the pagans to Christianity. Under this theme we understood those parts of our texts that openly regard the Christianisation of Croats and Serbs, since that process is of major importance for European populations who by the act of accepting the Christian faith became part of the mediaeval

Some examples in our chapters include: DAI, 31.7, 33.11-12, 33.15, 34.13-14, 34.16-17; and in other places in DAI: *Ibid.*, 9.25 or 27.70.

<sup>&</sup>lt;sup>16</sup> For the interpretation that 'Λιτζίκη' are Poles, see: DAI II, 139.

European civilisation.<sup>17</sup> That is why it is a separate theme from other religious based topics of the sources. While in PDRS there are obvious traces of the mission of Cyril and Methodius (GRS I, 30.24-32.21, 34.10-40.6), in DAI there is none to this mission, but rather the Christianisation of Croats and Serbs is linked to certain emperors – mostly Heraclius I (DAI, 31.21-25, 31.31-34, 32.27-20 (although here the emperor it is not named explicitly, it is clear from the narrative that is still the same emperor, i.e. Heraclius), but also at one place to Basil I (867-886) (*Ibid.*, 29.68-75). Although in PDRS there are mentions of other political actors, it also cites the Byzantine emperor, Michael III (842-867), concerning the baptism of the Slavs (GRS I, 42.25-44.2, 48.4).

V Loci Sancti - or hieroi topoi in Greek, stands for the instances in the text affiliated to religious matters (except for the conversion which we gave a separate theme as we stated above). Loci Sancti has two meanings: it can be literal references in our sources to holy places such as some important churches or relics of saints that can be found in them (*Ibid.*, 62.14-16; DAI, 29.235-236, 29.240-245, 29.261-262, 29.268-271, 29.275-284); the other meaning is a topos (i.e. a literary commonplace) regarding a sacred matter, such as the maltreatment of Christians under the pagan kings<sup>18</sup> or a remark on some famous Christian saints like St. Benedict of Nursia (480-547) (GRS I, 14.5-6.), tales of local holy men who have visited the Croats (since we have no such tales for the Serbs in DAI and in PDRS it is hard to say what applies to both peoples and what only to the Croats for the earlier narrative that we are examining), like Martin or Constantine (Cyril) (DAI, 31.42-54; GRS I, 30.24-32.21, 34.10-40.6), relations with the pope, 19 etc. Nevertheless, even though this kind of stories are very conventional and often repetitive, some narratives are unique - an example of this would be in DAI where the island of Mljet is said to be mentioned in the Acts of the Apostles in the story how St. Paul was attacked by a snake which did him no harm whatsoever (DAI, 36.16-20). This is remarkably interesting since the island that is cited in the Bible is not Mljet but rather Malta (Porphyrogenite calls Mljet 'Μέλετα' and says it is just another name for 'Μελίτη' i.e. Malta) - however, it seems that there was a local myth that

On the subject of Byzantine missions and their influence among the Slavs, see: Šepard 2011, 248–265.

<sup>18</sup> There are more different examples on this subject, but one illustrative would be: GRS I, 18.21-24.

Again, this is quite frequent in our texts, but a particularly descriptive example would be when the pope made a special covenant with the Croats: DAI, 31.34-42.

identified a regional island with the familiar passage from the Scriptures (Πράξεις, 28.1-6).

One theme that we did not add but that might seem missing would be one regarding geography *per se*. Nevertheless, we did not wish to complicate our models with too many themes, and geography would be unnecessary. The reason for this is that the most crucial geographical passages fall under the themes of *Fundus*, *Origo* and *Loci Sancti*. Thus, the only ones we did not categorise were the descriptions of borders that didn't have any particular story behind them or other elements that one would consider being part of a myth. Not to say that kind of information is not important – on the contrary, yet for the purpose of our analysis, a separate geographical theme would be too much since it already falls under the three themes we already mentioned.

# 3.2 Quantitative analysis

Epistemic Network Analysis (ENA) is a quantitative ethnographic technique for modelling the structure of connections in data. ENA assumes that it is possible to identify a set of meaningful features in the data systematically, that the data have a local structure, such as a conversation or narrative, and that an essential feature of the data is the way the themes within those narratives are connected (Shaffer 2017; Shaffer, Collier, & Ruis 2016; Shaffer & Ruis 2017). For example, when Constantine Porphyrogenite and the Priest of Duklja in DAI and PDRS talk about the connection between Christianisation and the settlement of Slavs in the Balkan peninsula, they are talking about important themes such as Conversio and Genealogia and the questions they raise. They have several explanations about different ethnographic elements that they consider important in discussing Balkan Slavs' identity. The most suitable way to interpret and grasp the association between the aetiological myths, on the one hand, and the identity of a group of the dissimilar populace, on the other, is to model how Constantine Porphyrogenite and the Priest of Duklja think about the affinities between Fundus, Origo, Loci Sancti and other vital parts of their arguments (Arastoopour et al., 2015).20

ENA was initially developed to model cognition, discourse, and culture theories. The view was that the connections people make in discourse are a crucial level of analysis (Shaffer et al. 2009). Although ENA was originally developed to address challenges in learning analytics, the

ENA theory and methods are partly generated via the generate write-up section of ENA Web Tool (version 1.7.0).

method is not limited to it. The key focus of the method is *the structure of the connections* in the data, as the most important aspect of the statistical analysis. In other words, ENA is an appropriate technique for any context where the structure of the connections is meaningful (*Ibid*). ENA is, therefore, a helpful technique for modelling elements of myth and identity in DAI and PDRS and a suitable tool for understanding the Constantine Porphyrogenite and the Priest of Duklja standpoints because it can model the relationships between the critical questions posed by our protagonists as they occur within source texts.

In the previous chapter on qualitative content analysis, we mentioned that we divided 173 sentences into five different themes. However, we noted that they are not 173 different sentences since specific sentences can belong to different themes simultaneously. The final analysis, in which the themes we selected become codes within the narrative matrix, was performed on a sample of 103 sentences. In Table 1, we have illustrated part of the process of coding sentences by their binary classification into the theme they belong to, where 1 indicates belonging, and 0 indicates not belonging to the respective theme. ENA models the connections between codes by quantifying the co-occurrence of codes within conversations and creating a weighted co-occurrence network, along with corresponding visualisations for each data analysis unit. Crucially, ENA analyses all networks simultaneously (*Ibid*). The result is a set of networks that can be visually and statistically compared.

Table 1. Example of data input matrix for ENA

Line	Source	Text	Fundus	Origo	Genealogia	Conversio	Loci Sancti
47	DAI 29-36	Παγανοί δὲ καλοθύται ιδιά τὸ μή καταδέξασθαι αὐτούς τῷ τότε καιρῷ βαπτισθήναι, ότε καὶ πάντες Σέρβλοι ἐβαπτίσθησαν. Καϊ γὰρ Παγανοί τῆ τῶν Σελάβων διαλέκτιν ἀβαπτιατοί ἐρμηνείονται, τῆ τῶν Ροιμαίων δὲ διαλέκτω ἡ γὰρα στίσν Άρεντε καλέται, ἐξ οῦ κάκετοι παρά τὰν Ροιμαίων Αρεντανοί κολοθύται.	0	1	0	0	0
48	DAI 29-36	ν/Ισος έτερα μεγάλη τὰ Μέλετα, ἦτοι τὸ Μαλοζεάται, ἦν ἐν ταῖς Πράξεσι τῶν ἀποστόλων ὁ ἄγιος Λουκᾶς μέμνηται Μέλιτην ταύτην προσυρφούων, [ ἐν ἦ καὶ [ ἔχας τὸν ἄγιον Παῦλον ἀπό τοῦ δακτύλου προσήψατο, ἦν καὶ τῷ πυρὶ ὁ ἄγιος Παϊδλος κατάφλεξεν	0	0	0	0	1
49	PDRS I-XXIII	Regnante in urbe Constantinopolitana imperatore Anastasio qui se et alios multos Eutychiana harersi maculawerat, Romae vero praesidente Gelasio papa [secundo] eo tempore praeclaruerunt in Italia Germanus episcopus et Sabinus Canusinae sedis episcopus atque venerabilis vir Benedictus apud Cassinum montem, exiit quoque gens a septentionaliplaga quae Gothi nominabantur, gens ferox et indomita, cui erant tres fratres principes, filli regis Senudslavi. Quorum nomina sunt heze: prinus Brus, secundus Tolit, sertius vero Ostropilus.	1	0	1	0	0
50	PDRS I-XXIII	Itaque qui maior ceteris erat defuncto patre Brus sedit in solio eius regnavitque pro eo in terra nativitatis suae.  Totila vero et Ostroyllus, ut sibi ma gnum nomen facerent, consilio et voluntate primo geniti fratris congregantes exercitum magnum valde et fortem exierunt de terra sua et venientes debella verunt Pannoniam provinciam et bellando obtinuerunt eam.  Post haec cum valida multi tudinie pervenerunt in Templana. Tunc rex Dalmatinorum, qui in civitate magna et admirabili Salona manebat, misit nuncios et litteras ad regem Istriae provinciae ut congregaret exercitum quatenus in simul exirente is obviame at defenderent se.	0	1	1	0	0
51	PDRS I-XXIII	Igitur ambo congre gantes exercitum gentis suae exierunt obviam Gothis. Venientes itaque castramentati sunt iuxta eos. Tunc per spatium octo dierum, quia prope erant castra ad castra, hinc inde armati procedentes per partes graviter se vulnerabant ac trucidabant. Octavo vero die omnes hinc inde christiani et gentiles armati exierunt et commissum est magnum proelium ab hora diel tertia usque ad vesperam et Dei judicio, cui nemo audet dicere cur ita faciat, quia forte aliquod magnum peccatum latebat in christianis, victoriam Gothi crudeles habuerunt. Ceciditque pars christianorum et interfectus est rex Istriae et multa milia hominum christianorum in ore gladii mortus sunt et plurimi captivi ducti sunt. Evasit autem rex Dalmatinorum cum valde paucis militibus et aufugit in civitatem suam Salonam.	0	1	1	0	0

# 3.2.1 ENA Methods

In this study, we applied Epistemic Network Analysis to our data using the *ENA Web Tool* (version 1.7.0) (Marquart et al. 2018). The units of analysis were sentences or paragraphs that represent a meaningful whole in the source material (DAI and PDRS), represented as *Line* in the ENA (see Table 1). The ENA algorithm uses a moving window to construct a network model for each Line in the data, showing how codes in the current Line are connected to codes occurring in the most recent temporal context (Siebert-Evenstone et al. 2017). The resulting networks are aggregated for each unit of analysis, or line, in the model. In this model, the network aggregation was done via weighted summation, such that the networks for each unit of analysis reflect the square root of the product of each pair of codes.

Our ENA model included the following codes: *Fundus*, *Origo*, *Genealogia*, *Conversio*, and *Loci Sancti*. The ENA model normalised the networks for all units of analysis before subjecting them to a dimensional reduction, which accounts for the fact that different units of analysis may have different amounts of coded lines in the data. For the dimensional reduction, we used a singular value decomposition that produces orthogonal dimensions that maximise the variance explained by each dimension.<sup>21</sup>

The networks were visualised using network graphs, with nodes corresponding to codes and edges reflecting the relative frequency of co-occurrence or connection between two codes. The result is two coordinated representations for each unit of analysis: a plotted point representing the position of that unit's network in low-dimensional projected space and a weighted network graph. The positions of the nodes of the network graph are fixed and determined by an optimization routine that minimises the difference between the plotted points and their corresponding network centroids. Because of this co-registration of the network graph and projected space, the positions of the network graph nodes and the connections they define can be used to interpret the dimensions of the projected space and explain the positions of the plotted points in that space. Our model had co-registration correlations of 0.94 (Pearson) and 0.92 (Spearman) for the first dimension and coregistration correlations of 0.83 (Pearson) and 0.76 (Spearman) for the second dimension. These values show a strong goodness of fit between the original model.

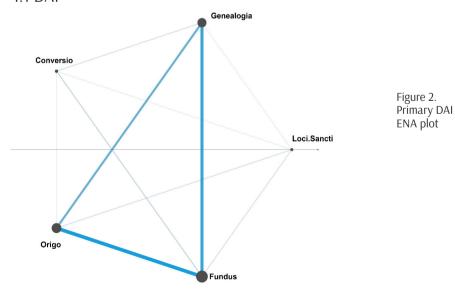
<sup>&</sup>lt;sup>21</sup> For a more detailed explanation of the mathematics see: Shaffer and colleagues (2016); and for examples of this kind of analysis see: Arastoopour and colleagues (2016).

ENA can be used to compare units of analysis in terms of their plotted point positions, individual networks, mean plotted point positions, and mean networks which average the connection weights across individual networks. Networks can also be compared using network difference graphs. These graphs are calculated by subtracting the weight of each connection in one network from the corresponding connections in another network. To test whether there are differences, we performed a two-sample t-test assuming unequal variance to the location of points in projected ENA space for the units in DAI 29-36 and PDRS I-XXIII, which we will show in the next chapter using a comparison network.

# 4. RESULTS

This chapter will present the results of our two-step methodology research. In addition to providing a neat and clear visualisation, the models we have created allow us to read the differences and similarities between DAI and PDRS accurately and to compare the understanding of Constantine Porphyrogenite and the Priest of Duklja concerning five themes, which we have labelled *Fundus*, *Origo*, *Genealogia*, *Conversio*, and *Loci Sancti*. In addition to the models themselves, we will also present the statistical results, after which we will elucidate the benefits of this type of analysis. Finally, we will use the displayed results to answer the dilemmas and research questions from the introduction.

#### 4.1 DAI

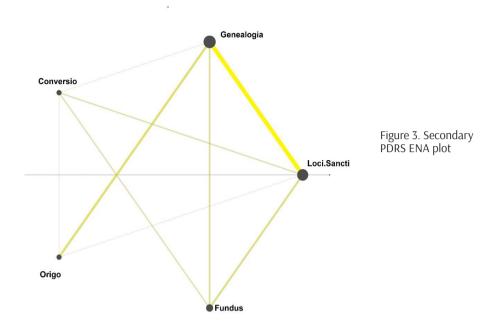


In the figure 2 we see the model of our selected chapters and sentences from DAI. This model shows a relatively balanced triangle where the main three themes are *Fundus*, *Origo* and *Genealogia*. *Fundus* is the leading connecting theme between the other two. Having in mind what we have stated above about our sources, and which one was undoubtedly considered to be more trustworthy in every aspect, it is reasonable that the model demonstrated the importance of *Fundus* in DAI. However, when talking in regard to myths, it clearly indicates that most of the information had to be *attached* to a historical framework. That being said, *Origo* and *Genealogia* are crucial for the narrative in DAI, and they are, as we can see, mostly connected via *Fundus*, rather than directly between themselves. So we can rightfully state that in DAI the main components of the myths that we have analysed are these two (*Origo* and *Genealogia*), through the perspective of *Fundus*, which is a bridge that connects the local myths to something that is essentially Byzantine.

On the other hand, Conversio and Loci Sancti are of no particular interest in DAI. This is interesting, since the entire idea of baptism is very important for the history and identity of a European mediaeval people group. It seems then that our myths of DAI are at a large-scale secular - as much as this term is anachronistic, it shows that the tales of religion have no peculiar connection to a specific theme, but are evenly connected to all of them more or less. They are omnipresent of course but looking at our model we see that they are in shade of other three themes. Maybe this should have had been anticipated since in the preface of DAI, Porphyrogenite said that every *nation* (ἔθνος) has its own *origin* (γενεαλογία), their own customs (ἔθη), their own way of life (βίου διαγωγή), and a land which they inhabit (κατοικουμένη γῆ) (DAI, P.19-21), which he continues to cite as the most important characteristics of a nation in further text as well (*Ibid*, 13.197-200). Our model shows that regarding Croats and Serbs, these characteristics fall mostly under our themes of Fundus, Origo and Genealogia, and only to a lesser extent to Conversio and Loci Sancti.

#### **4.2 PDRS**

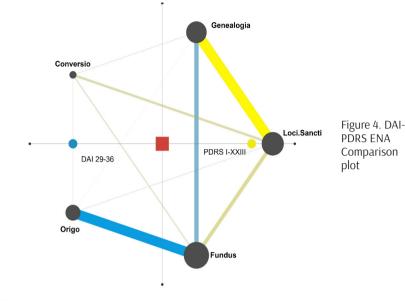
In the figure 3 we see the model of our selected chapters and sentences from PDRS. Here it is a straight line that is the strongest connection between *Genealogia* and *Loci Sancti*, with a relatively strong relation between *Origo* and *Genealogia* in comparison to all the rest. Just the fact that *Genealogia* and *Loci Sancti* are so strong confirms that this source shouldn't be titled 'chronicle' but rather 'gesta' (or even 'genealogy'). The strongest connection



tells us that in PDRS we find myths of rulers and ecclesiastic topics, but with no historical background (that being our *Fundus*). *Fundus* has no important place in a narrative that is highly fictional, not based on true events but rather various traditions where *Fundus* is only a reflection of a collective memory rather than a true historical account. *Origo* is almost exclusively linked to *Genealogia*, whereas *Fundus* can be found among all themes, but scarcely.

Based on our themes, *Conversio* isn't as important for the myths of PDRS as *Loci Sancti*. The second plays one of the two most dominant roles in our text. Again, tales of persecution of Christians and other stories that have a religious connotation are far more represented than the conversion of the people group at focus - maybe exactly because PDRS isn't concerned with historicity, but the most important legends - i.e. *gesta* or deeds, not just those of the rulers, but of clergymen and *common* Christians as well. It seems that this is the result when *a cleric writes for the youth that which they are keen on learning regarding the past* if we were to paraphrase the author of DPRS himself in his preface when he explains why he is writing in the first place (PDRS I, 2.5-24). Not just stories of battles and kings, but a big amount of ecclesiastic matters too.

# 4.3 Comparison



Units: Source Conversation: Text

In the figure 4 we see the model of our selected chapters and sentences from DAI and PDRS compared. The model seems bipolar, with the pole of DAI being the relation *Origo-Fundus*, and that of PDRS *Genealogia-Loci Sancti*; the themes intervene in *Fundus* > *Genealogia* where DAI is the dominant text and in *Loci Sancti* > *Fundus* where PDRS is the dominant text. In this case, *Conversio* is again the weakest link; nevertheless, it is mainly in PDRS and not in DAI. Although in this new model PDRS kept its previous strong bond between *Genealogia* and *Loci Sancti*, we do not have any more the triangularity of DAI's model that we had in the figure 2. However, we do have one triangle (*Genaologia-Loci Sancti-Fundus*), with an extension on *Fundus* being *Origo. Fundus*, which wasn't that important in PDRS's model, is now a link between two texts; the other one being *Genealogia*, what was to be expected. The same is true for *Loci Sancti* and DAI. *Origo* is thus left as a solely important theme in DAI when compared to PDRS.

In contrast to the previous two network plots (DAI and PDRS), the comparison plot (DAI-PDRS) provides insight into the statistical results of the similarities and differences between the narrative networks and graphs we constructed.

Along the X axis, a two sample t test assuming unequal variance showed DAI 29-36 (mean=-0.25, SD=0.38, N=48 was statistically significantly different at the alpha=0.05 level from PDRS I-XXIII (mean=0.22, SD=0.40, N=55; t(100.28)=-6.04, p=0.00, Cohen's d=1.19).

This means that there is a significant statistical difference between *Origo* and *Loci Sancti* in the DAI and PDRS datasets, which we explained above. In this way, we suitably verified our qualitative insights.

Along the Y axis, a two sample t test assuming unequal variance showed DAI 29-36 (mean=0, SD=0.43, N=48 was not statistically significantly different at the alpha=0.05 level from PDRS I-XXIII (mean=0.00, SD=0.48, N=55; t(100.91)=0.00, p=1.00, Cohen's d=0).

This suggests that there are no significant statistical differences between *Genealogia* and *Fundus* in the DAI and PDRS datasets, which we also explained above, thus verifying our qualitative findings.

By combining the qualitative interpretation of the visual representation of the narrative networks and graphs we constructed as well as the statistical results of the quantitative software analysis, we obtain a complete comparative picture of the DAI and PDRS portrayals. Due to the nature of the selected writings and their interpretive complexity, our two-step methodology is appropriate and possibly one of the few ways in which it is suitable to compare the understanding of the connection between myth and identity in Constantine Porphyrogenite and the Priest of Duklja at all.

## 5. DISCUSSION AND CONCLUDING REMARKS

After these analyses, what can we say about our texts, how are they regarding myths? There is no need in pointing out how differently they treat their myths. Briefly speaking, the biggest difference are the themes of focus. As we have seen in our models, DAI is much more historically oriented and it has an encyclopaedic point of view, where it aims to describe a people using their own myths, but focusing on their origin, etymologies, names of rulers etc. That is perfectly normal for a text that was composed under the learned emperor Porphyrogenite. Also, these myths have a strong political purpose as well. And that political purpose has more to do with things that were more represented in our model of DAI. The political purpose of PDRS is more oriented toward the church and Christianity not to mention that DAI lacks Christian moralising when describing the people at focus, which is present in PDRS. PDRS also mentions a heretic emperor during whose reign Goths came in Dalmatia, whereas DAI doesn't have a problem mentioning the greatness of an emperor who was well

known for his repercussions of Christians, Diocletian (284–305) (Stanković 1999/2000, 76–78), or an emperor who was, we can say from our point of view, as big as a heretic as Anastasius I - that being Heraclius  $\rm I.^{22}$ 

How does a DAI myth of ethnogenesis look like, and how does it look in PDRS, after everything that has been said (reading our models)? A DAI myth is composed of two sides – on one there is the new people that come in the land of another. They, who are unknown, interact with the known actors of the past thus becoming part of the known world. Christianisation in regard to this is not very much crucial, it is an episode between the omnipresent Byzantine emperor and the new peoples. They have their own rulers and they interact with other nations, not just Byzantium. But that seems irrelevant, since everything that is crucial for them came from Constantinople. Even Rome, a religious centre, needs a mediator, which is the Byzantine emperor. These peoples also have their own customs, language, institutions, etc. Their origin is linked both to their peculiarities and to the new environment where they have come. The PDRS myth is more linear - rulers, who besides the matters of war, inheritance, and other dynastical issues also get involved with the questions of faith. Sometimes they have a historical background, but it is mostly a tale that doesn't change its course too much. DAI myths are more complex, they have more aspects, different varieties of information, etc.

This kind of an approach that we have pursued is a new method toward an old discussion. We did not try to give new answers, but rather to try to broaden the perspective on the questions we can (and should) pose. We believe that these sources should be analysed from various different perspectives, in order to get new ideas on how to understand them. This is crucial since, as we have already stated, they treat the always relevant question of the ethnogenesis of modern European nations.

To conclude our paper, we will briefly point out some further guidelines for our future research. We have shown that this kind of methodology could yield interesting and significant results, and it would be instructive to employ it in the future research on even more in-depth analysis of the sources that DAI and PDRS have used. It can even include linguistic analysis, thus exploiting our texts in maximum capacities. Hopefully, this

We have in mind here the fact that heresy of monothelitism was linked to the name of emperor Heraclius I. On this subject, see: Kartašov 2009, 429–431, 440–441. However, as with Diocletian, an emperor wasn't remembered only by his heresy if he was engaged with many more important matters - on this wider subject of memory of emperors after the first way of iconoclams, see: Marjanović 2017.

research will inspire others to follow a quirky and interdisciplinary path in finding suitable perspectives for interpreting always controversial and exotic topics about myths.

## References

- Angold, Michael. 1997. *The Byzantine Empire, 1025–1204: A Political History.* 2nd Ed. London-New York: Longman.
- Arastoopour, Golnaz, David Williamson Shaffer, Zachari Swiecki, A. R. Ruis & Naomi C. Chesler. 2016. "Teaching and assessing engineering design thinking with virtual internships and epistemic network analysis." *International Journal of Engineering Education* 32 (2): 1492–1501.
- Arastoopour, Golnaz, Naomi C. Chesler, David Williamson Shaffer, and Zachari Swiecki. 2015. "Epistemic network analysis as a tool for engineering design assessment." In 2015 ASEE Annual Conference & Exposition, 26–679.
- Barski ljetopis: o nama. 2017. *Barski ljetopis*. http://www.barskiljetopis.me/onama/festival/ (Accessed September 28, 2022).
- Berger, Stefan. 2009. "On the role of myths and history in the construction of national identity in modern Europe." *European History Quarterly* 39 (3): 490–502.
- Bujan, Solange. 2008. "La Chronique du prêtre de Dioclée. Un faux document historique." *Revue des études byzantines* 66 (1): 5–38.
- Chlup, Radek. 2020. "Competing myths of Czech identity." *New Perspectives* 28 (2): 179–204.
- DAI II Constantine Porphyrogennitus *De Administrando Imperio*, Vol. II: Commentary. 1962. Ed. R.J.H. Jenkins. London: University of London, The Athlone Press.
- DAI Constantine Porphyrogenite *De Administrando Imperio*. 1967. New, Revised Edition, Gy. Moravcsik & Tran. R. J. H. Jenkins, eds. Washington: Dumbarton Oaks.
- Deretić, Jovan I. 2000. Antička Srbija. Temerin: Jugo-PIRS.
- Ferjančić, Božidar. 2009. Vizantija i Južni Sloveni. Beograd: Ethos.
- Geary, Patrick J. 2002. *The Myth of Nations: The Medieval Origins of Europe.*Princeton: Princeton University Press.
- $Gellner, Ernest.\ 1983.\ \textit{Nations and Nationalism}.\ It haca: Cornell\ University\ Press.$
- GRS I *Gesta Regum Sclavorum I.* 2009. Prir. i Prev. Dragana Kunčer. Beograd: Istorijski institut.
- GRS II *Gesta Regum Sclavorum II*. 2009. Kom. Tibor Živković. Beograd: Istorijski institut.

- Hobsbawm, Eric J. 1990. *Nations and Nationalism since 1770: Programme, Myth, Reality.* Cambridge: Cambridge University Press.
- Kartašov, Anton V. 2009. *Vaseljenski sabori*. Prev. Mira Lalić. Beograd: Srpska književna zadruga.
- Komatina, Predrag. 2020. "Quis Ergo Presbyter Diocleas? Rana dubrovačka istoriografija i Letopis popa Dukljanina." *Istorijski časopis* 69: 189–226.
- Komatina, Predrag. 2021. Konstantin Porfirogenit i rana istorija Južnih Slovena. Beograd: Vizantološki institut SANU.
- Krippendorff, Klaus. 2018. *Content analysis: An introduction to its methodology.* Sage publications.
- Magdalino, Pol. 2011. "Srednjovekovno carstvo (780–1204)". U *Istorija Vizantije*. Pri. Siril Mango, Prev. Maša Miloradović i Predrag J. Marković, 187–226. Beograd: Dereta.
- Mango, Siril. 2011. "Preporod učenosti". U *Istorija Vizantije*. Pri. Siril Mango, Prev. Maša Miloradović i Predrag J. Marković, 232–247. Beograd: Dereta.
- Marjanović, Dragoljub. 2017. Creating Memories in Late 8th-century Byzantium: The Short History of Nikephoros of Constantinople. Amsterdam: Amsterdam University Press.
- Marquart, C. L., Hinojosa, C., Swiecki, Z., Eagan, B., & Shaffer, D. W. 2018. Epistemic Network Analysis (Version 1.7.0) [Software]. Available from http://app.epistemicnetwork.org
- Mijušković, Slavko. 1967. Ljetopis Popa Dukljanina. Titograd: Grafički zavod.
- ODB *The Oxford Dictionary of Byzantium I-III*. 1991. Ed. Alexander P. Kazhdan. Oxford: Oxford University Press.
- Radić, Radivoj. 2017. "Istoričari pišu za one koji hoće da znaju." *Politika*, 19. septembar. https://www.politika.rs/scc/clanak/389127/Istoricari-pisu-za-one-koji-hoce-da-znaju (Accessed September 30, 2022).
- Reimitz, Helmut. 2015. *History, Frankish Identity and the Framing of Western Ethnicity*, 550–850. Cambridge: Cambridge University Press.
- Rusenkvist, Jan Uluf. 2014. *Vizantijska književnost: od 6. veka do pada Carigrada 1453.* Prev. Dejan Kuprešanin. Loznica: Karpos.
- Samčević, Vuk R. 2022. "Doseljavanje Slovena na Balkan i njihovi odnosi sa Vizantijom: paralelna analiza grčkih i srpskih udžbenika". *Godišnjak za društvenu istoriju*, 29 (1): 67–92.
- Šepard, Džonatan. 2011. "Širenje Reči božje: vizantijske misije". U *Istorija Vizantije*, Pri. Siril Mango, Prev. Maša Miloradović & Predrag J. Marković, 248–265. Beograd: Dereta.
- Shaffer, D. & A. Ruis. 2017. "Epistemic network analysis: A worked example of theory-based learning analytics." *Handbook of learning analytics*.
- Shaffer, David Williamson, David Hatfield, Gina Navoa Svarovsky, Padraig Nash,

- Aran Nulty, Elizabeth Bagley, Ken Frank, André A. Rupp & Robert Mislevy. 2009. "Epistemic network analysis: A prototype for 21st-century assessment of learning." *International Journal of Learning and Media* 1 (2).
- Shaffer, David Williamson, Wesley Collier & Andrew R. Ruis. 2016. "A tutorial on epistemic network analysis: Analyzing the structure of connections in cognitive, social, and interaction data." *Journal of Learning Analytics* 3 (3): 9–45.
- Shaffer, David Williamson. 2017. *Quantitative ethnography*. Madison: Cathcart Press.
- Shepard, Jonathan. 2008. "Equilibrium to expansion (886–1025)". In *The Cambridge History of Byzantine Empire*, c. 500–1492. Ed. Jonathan Shepard, 493–536. Cambridge: Cambridge University Press.
- Siebert-Evenstone, Amanda Lee, Golnaz Arastoopour Irgens, Wesley Collier, Zachari Swiecki, Andrew R. Ruis & David Williamson Shaffer. 2017. "In search of conversational grain size: Modeling semantic structure using moving stanza windows." *Journal of Learning Analytics* 4 (3): 123–139.
- Stanković, Vlada 1999/2000. "Idejna načela Konstantina Porfirogenita i dalmatinski Romani". *ZRVI* 38: 67–85.
- Stanković, Vlada. 2003. *Carigradski patrijarsi i carevi Makedonske dinastije*. Beograd: Vizantološki institut.
- Szifris, Kirstine. 2021. "Philosophy, Identity and the 'Ship of Theseus." In *Philosophy Behind Bars*: 1–22. Bristol University Press.
- Živković, Tibor. 2007. *Južni Sloveni pod vizantijskom vlašću 600–1025*. Beograd: Čigoja štampa.
- Živković, Tibor. 2013. *De conversione Croatorum et Serborum: Izgubljeni izvor Konstantina Porfirogenita*. Beograd: Zavod za udžbenike.

#### Figures and Tables<sup>23</sup>

- Figure 1. Example of our five themes and dataset in Quirkos software;
- Table 1. Example of data input matrix for ENA;
- Figure 2. Primary DAI ENA plot;
- Figure 3. Secondary PDRS ENA plot;
- Figure 4. DAI-PDRS ENA Comparison plot.

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