

The Journal of
**HISTORICAL
NETWORK
RESEARCH**

9 | 2023
special issue

Networks of Manuscripts, Networks of Texts

EVINA STEIN | GUSTAVO FERNÁNDEZ RIVA



Imprint

Université du Luxembourg 2023

Luxembourg Centre for Contemporary and Digital History (C²DH)

Université du Luxembourg

Belval Campus

Maison des Sciences Humaines

II, Porte des Sciences

L-4366 Esch-sur-Alzette

Editors

Asst. Prof. Dr. Marten Düring (Luxembourg Centre for Contemporary and Digital History | C²DH)

PD Dr. Christian Rollinger (Universität Trier)

Dr. Cinderella Petz (IEG – Leibniz-Institut für Europäische Geschichte)

Dr. Ingeborg van Vugt (Königlich Niederländische Akademie der Wissenschaften)

Clemens Beck, M. A. (Friedrich-Schiller-Universität Jena)

ISSN 2535-8863

Contact

Principal Contact

JHNR-editors@historicalnetworkresearch.org

Support Contact

Dr. Marten Düring (Université du Luxembourg)

JHNR-support@historicalnetworkresearch.org

Cover Design and Typesetting

text plus form, Dresden, Germany

Cover image

Evina Stein

Copyediting

Andy Redwood, Barcelona, Spain

Published online at

<https://doi.org/10.25517/jhnr.v9i1>

This work is licensed under a Creative Commons License:

Attribution-NoDerivatives 4.0 (CC BY-ND 4.0)

This does not apply to quoted content from other authors.

To view a copy of this license, please visit

<https://creativecommons.org/licenses/by-nd/4.0/deed.en>



IRIS DENIS/SHARI BOODTS

The pseudo-Augustinian S. App. 121 and its medieval textual connections

A testcase for the development
of network visualizations
in the PASSIM Research Tool

Journal of Historical Network Research 9 (2023) 1–35

Keywords Network visualizations, Medieval manuscripts, Reception Studies, Patristic and Medieval Preaching

Abstract This article investigates the benefits and challenges inherent in using networks to visualize and analyze the textual connections between Latin patristic sermons as transmitted in medieval manuscripts. Patristic sermons, which had a dynamic reception in the Middle Ages and were the subject of an extensive and complex scholarly tradition, are an ideal test case for an inquiry into the manipulations of texts as part of the process of textual transmission in the Middle Ages. Using the pseudo-Augustinian *sermo* 121 as a case study, we will first describe the textual history of the sermon. Subsequently, we will translate this narrative of the scholarly history of PS-AU s 121 into network visualizations of increasing complexity and reflect on the accuracy, usefulness, and challenges of this method for the study of the myriad textual connections between patristic sermons in medieval contexts. This case study on network visualizations is part of a larger project to develop a digital application and database, the PASSIM Research Tool, to chart the dissemination and manipulation of patristic preaching in the Middle Ages.

1. Introduction

This article investigates the benefits and challenges inherent in using networks to visualize and analyze the textual connections between Latin patristic sermons as transmitted in medieval manuscripts. This inquiry deals very specifically with sermons, which have particular characteristics both with regard to their genre conventions, as well as in terms of their transmission and reception in the Middle Ages. However, the method we discuss can be applied to many different types of texts, and the conclusions extrapolated to achieve a better and broader understanding of medieval textual transmission and knowledge dissemination. This understanding has been a focal point of historical and philological research for a very long time, but the Digital Turn in the Humanities, and in Manuscript studies more specifically, is helping scholars to overcome many obstacles that have been in place for centuries.

First, we will provide some context to our inquiry, describing the specificities of patristic sermons and their medieval reception and outlining their aptness as a test case for our particular investigation. We will also introduce the PASSIM Research Tool, which provides the interface and dataset for the networks we will generate. Next, we will describe the textual history of the pseudo-Augustinian *sermo* 121, which we have selected as our case study. Subsequently, we will translate this narrative of the scholarly history of PS-AU s 121 into network visualizations of increasing complexity. Finally, we will reflect on the accuracy, usefulness and challenges of this method for the study of textual connections between patristic sermons in medieval contexts.

Let us begin with the medieval context of textual transmission and knowledge dissemination, which has the manuscript as its central element. Every manuscript, whether plain or lavish, old or young, meticulously copied or haphazardly

Acknowledgements: This article was written in the context of two research projects: ‘Patristic Sermons in the Middle Ages. The Dissemination, Manipulation, and Interpretation of Late-Antique Sermons in the Medieval Latin West (PASSIM)’, funded by the European Research Council (ERC) under the European Union’s Horizon 2020 research and innovation programme under grant agreement No. ERC-2018-stg 802210 (2019–2023), and ‘On the trail of Alanus of Farfa. Tracing the formation of Augustine’s authority in medieval sermon collections for the liturgy (ALANUS)’, funded by the Netherlands Organization for Scientific Research (NWO) under the Innovational Research Incentives Scheme: VENI, under grant number 016.Veni.195.127 (2018–2022). See <https://applejack.science.ru.nl/passimproject/> for more information on both projects. We would like to thank Riccardo Macchioro, Gleb Schmidt, Menna Rempt, Erwin Komen, and Thijs Hermesen – all members of the PASSIM research team – for their contributions to the development of the dataset and research tool presented in this article.

Corresponding author: Iris Denis, Radboud University Nijmegen, iris.denis@ru.nl; and Shari Boodts, Radboud University Nijmegen, shari.boodts@ru.nl

thrown together, represents an act of reception, a very small cog in a very large medieval machine that toiled tirelessly to disperse knowledge and that has unalterably changed our collective literary and intellectual heritage. The problem is, of course, that the reconstruction of the medieval ‘machine’ of textual transmission is extremely challenging, and gaining an accurate picture of each individual manuscript as a driver of reception is to a certain extent contingent upon an understanding of the entirety of the transmission.

The main method by which scholars have attempted to penetrate the depths of this machine of knowledge dissemination is through the discipline of stemmatology: the charting of the genealogical relations, or ‘family tree’, of extant manuscript copies of a text, in order to reconstruct the most original version currently accessible to us based on the copies that remain.¹ Almost as a by-product, stemmata also involve information on the historical context of the medieval copies, and from there the medieval manipulation and interpretation – the medieval reception – of the text in question. As anyone who has ever attempted it can attest, building a stemma is an arduous and time-consuming task, often laced with frustration. There is usually a lot of uncertainty, textual variations can be interpreted in multiple ways, contamination in the manuscripts is rife, etcetera. Because of the labor-intensive nature of stemmatology, it tends to focus on small individual case studies and traditions. A natural consequence of this situation is the fact that modern scholarship is inclined to focus on texts and manuscripts that have been identified as ‘significant’ – a frustratingly vague term – by previous generations of philologists, and that we are still leaving large parts of the corpus of medieval texts and manuscripts untouched.

Still, much progress has been made since the Digital Turn in Manuscript Studies.² One of the objectives of the Digital Turn is to facilitate and speed up the process of generating a stemma, to make it possible to easily compare and combine traditions, both of manuscripts and of texts.³ The experiment we undertake in this article is part of this scholarly trend. Though our focus is primarily on con-

1 For further information as well as a critical reflection on stemmatology, see Tarrant, *Texts, Editors, and Readers*; Roelli, *Handbook of Stemmatology*. Another useful resource is Echard and Partridge, *The Book Unbound*.

2 To get a sense of developments in the field, see, for example, Hamidović, Clivaz and Bowen Savant, *Ancient Manuscripts in Digital Culture*; van Lit, *Among Digitized Manuscripts* as well as the activities and publications of the *Digital Medievalist* community (<https://digitalmedievalist.wordpress.com/>, last accessed 24 July 2023). A special issue of the *Journal of Data Mining and Digital Humanities* is devoted entirely to recent and future developments in the field of Digital Manuscript Studies (<https://jdmdh.episciences.org/page/on-the-way-to-the-future-of-digital-manuscript-studies#>, last accessed 24 July 2023).

3 See Roelli, *Handbook of Stemmatology*; Andrews and Macé, *Analysis of Ancient and Medieval Texts*; Pratt et al., *The Dynamics of the Medieval Manuscript*.

nections between (the versions of) texts, we will see that the medieval vehicles of these texts, the manuscripts, are never far away.

Our particular approach is to look at Latin patristic sermons, i.e., the sermons preached by the Fathers of the Early Church – Augustine, Gregory, Leo – and their contemporaries in the period between, roughly, 350 and 750 AD.⁴ The importance of patristic preaching has now been widely acknowledged for several decades. These sermons are valuable sources for our understanding of the early stages of Christianity. They tell us about the process of Christianization, the development of rituals, the competing heresies and their levels of success, and much more. They also provide unique insights into the personal development and thinking of some of the most important authorities in history, and especially show us the nuances that are absent from the more formal theological treatises of the Church Fathers.

However, the patristic sermons' relevance for the history of early Christianity is only half of their story. These texts had a dynamic and complex medieval after-life. They circulated throughout the Middle Ages, usually as part of larger collections of patristic preaching. Both the collections and the sermons themselves were heavily manipulated as part of their medieval reception. Additionally, they circulated alongside and became intertwined with an enormous corpus of pseudo-epigraphic sermons that were attributed to one of the authoritative Church Fathers but of which the origin, whether late antique or medieval, is often uncertain.⁵ Patristic sermons in medieval contexts demonstrate variation on multiple levels: there is variation in the composition of collections of texts and in their paratexts, there is textual variation of such intensity that texts can be considered deliberately different versions while clearly based on the same source, and of course there are the inevitable small (or not so small) errors introduced by the scribe who had the intention of copying the text faithfully.

It is on the second of these three types of variation that our focus will be in this article. Patristic sermons showed themselves to be a very malleable genre, inviting myriad adaptations as they were reused in and refitted for new contexts in the Middle Ages.⁶ Without aiming to be exhaustive, we mention here for the purpose

4 For a general overview of Latin patristic preaching as well as references to further reading, see Dupont et al., ed., *Preaching in the Patristic Era*. For the Greek perspective, see, in the same series though much older, Cunningham and Allen, *Preacher and Audience*.

5 For more on the medieval reception of patristic preaching and the corpus of pseudo-epigraphic patristic sermons, see, for example, Boodts, "Navigating the vast tradition"; Diesenberger et al., *Sermo Doctorum*; Dolbeau, "La Transmission de la Prédication Antique de Langue Latine"; Pignot, *Latin Anonymous Sermons*; Weidmann, "Discovering Augustine's words."

6 See for example Martin, "The Italian Homiliary," especially 286–92, who argues that the author of the Italian Homiliary has occasionally adapted his patristic sources to his Caro-

of illustration some types of manipulation that patristic sermons underwent as part of their *Nachleben*.⁷ Sermons could be abbreviated or text could be added to them, either newly created or taken from another existing sermon. Caesarius of Arles (d. 542), who adapted numerous Augustinian sermons for use by the priests of his diocese, is a well-known early example of this practice.⁸ There were cut-and-paste jobs to merge sermons together, such as PS-AU s Mai 66, a *cento* which adapts Augustinian sermons for the martyrs Perpetua and Felicitas into a sermon for a different saint, Victoria.⁹ Other times the connection is reduced to the level of an echo, where a few sentences or popular patristic one-liners are spliced into an otherwise entirely different text. We will encounter an example of this below, with the cluster surrounding the sermon known by its incipit, *hodie uerus sol*. On the other end of the spectrum, sermons can simply receive some new ‘window dressing’ with an alternative incipit or explicit. Such is the case for AU s 168, where an incorrect split between title and incipit in the archetype of the tradition has led different copyists to adjust the incipit slightly to correct the error.¹⁰

This abundance of versions and textual overlap, while highly interesting from the point of view of reception studies, can also be intensely frustrating when trying to rigidly catalogue and identify the sermons as found in the manuscripts.¹¹ Manuscripts are not printed books. Each rendition of a text in the manuscript tradition has the potential for much greater individual variation. Every copyist is a potential editor or even author. While scholars have certainly not been blind to the variety possible in the medieval reception of patristic preaching, there is a certain forcedness in trying to fit this reality into the existing modes of analysis and description, with an ever-present concern for the reconstruction of the original at the forefront. This focus makes it difficult to appreciate the dynamic of adaptation as a powerfully creative part of the medieval literary landscape. Of course, this tension is not exclusive to patristic preaching in medieval manuscripts. Many

lingian lay audience, even though the collection at a later stage would “make its entry into the monastic world” (295). See also Diesenberger, “Introduction,” 8: “In the process of copying, compiling, and disseminating the sermons different techniques were used, which reflect the cultural variety that accompanied the production of these new texts.”

7 We do not address here the issue of forgeries, which is a difficult term to use in the context of medieval attitudes to sermon adaptation, where many activities that to our modern eyes would be considered forgery (or at least plagiarism) were not perceived as such. Machielsen, “Contribution à l’étude” gives a list of possible categories of pseudo-epigraphy, which, however, is not without its problems.

8 De Maeyer and Partoens, “Preaching in Sixth-Century Arles.”

9 Weidmann, “Der Augustinuscento *Sermo Mai 66*.”

10 Boodts, “The manuscript transmission of the *Quinquaginta homiliae*.”

11 This tension is clearly visible in the seminal reference works for (pseudo-epigraphic) patristic preaching, such as Machielsen, *Clavis patristica*; Gryson, *Répertoire général*. See also Weidmann, “Discovering Augustine’s words,” which touches on both the problem of identification and the opportunities for further research in the corpus of pseudo-epigraphic patristic preaching.

other genres display the same flexibility and malleability, on the level of the text, the level of the collection, or both. The potential to document and explore this variety is present for schoolbooks, encyclopedias,¹² catenae, commentaries,¹³ glosses, and verse narratives,¹⁴ to name but a few. Our experiment with network visualizations of textual overlap in Latin patristic sermons and their medieval adaptations is a small contribution to this enterprise.

With the context and relevance of the inquiry now in place, we will move on to a description of the PASSIM Research Tool, which houses the data and interface for the networks we will generate.

2. The PASSIM Research Tool

The PASSIM Research Tool¹⁵ in its current form aims at charting and analyzing the interrelations between the medieval manuscripts that transmit Latin patristic sermons. It consists of a database of metadata on manuscripts that transmit patristic sermon collections and an interface designed to allow for sophisticated querying of the data. In due course, this digital tool intends to grant access to a greater number of relevant manuscripts than has heretofore been studied. It is also meant to create a semblance of order in the extensive and complicated scholarly tradition of identifying Latin patristic sermons and their medieval incarnations. In doing so, the PASSIM Research Tool strives to open up new avenues for the study of the reception of Latin patristic preaching. Simultaneously, it intends to contribute to the methodological framework and digital toolbox necessary to further embed manuscripts in the study of medieval history.

The possibilities for analysis and visualization of the PASSIM Research Tool are emphatically not intended to supplant the existing research instruments. In fact, they make extensive use of existing reference works. The data are sourced from heuristic tools such as Claves, manuscript catalogues both digital and in print, relevant databases, critical editions, studies of the manuscript transmission of the Church Fathers, and case studies in the field's major journals, though

12 See, for example, the recent work of Evina Steinova; Steinova, "Two Carolingian Redactions"; Steinova, "The Oldest Manuscript Tradition."

13 See, for example, Witt, Christensen and Ueli, "Re-Conceiving the Christian Scholastic Corpus"; or the Scholastic Commentaries and Texts Archive (<https://secta.info/>, last accessed 24 July 2023).

14 See Pratt et al., *The Dynamics of the Medieval Manuscript*.

15 A beta-version of the PASSIM Research Tool is currently available, though (free) registration is required (<https://passim.rich.ru.nl/>, last accessed 24 July 2023). Additionally, the source code of the research tool is available on GitHub (<https://github.com/ErwinKomen/RU-passim>, last accessed 24 July 2023).

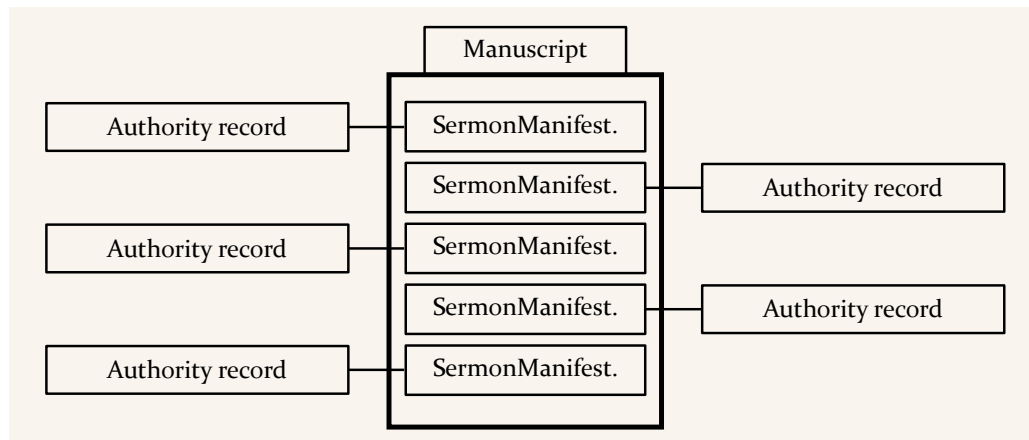


Fig. 1 Schematic representation of the PASSIM database structure.

they can, of course, be manually checked and enriched.¹⁶ Simply put, the PASSIM Research Tool, through the integration and further enriching of the existing data, presents the information in such a way that more varied, wide-ranging, and nuanced inquiries are facilitated. Furthermore, whereas new discoveries or conclusions may currently remain isolated in journal articles for a long time, the digital context of PASSIM means that new findings can quickly become part of the shared knowledge of the scholarly community and the dataset at their disposal to do research in the field.

In the rest of this section we present the fundamental structural principles of the PASSIM database (Fig. 1). These structural features are important, as they will inform the network visualizations as we will present them later on.

At present, the interface allows entry into the database via three main queries: you can search for one or more manuscripts, you can look up the authority file of a sermon, which reflects the current scholarly *communis opinio* on a sermon's author and critical text,¹⁷ and you can explore manifestations of a sermon, i.e., with all of the unique features the sermon has in a particular manuscript witness. Each manifestation of a sermon as found in a manuscript is linked to the corresponding authority file. In addition to these three central functionalities, searches for specific historical collections through keywords and other minor categories are also possible.

16 The entire list of sources used to populate the PASSIM database may be consulted through the Bibliography page (<https://passim.rich.ru.nl/literature/list>, last accessed 24 July 2023).

17 For the moment, however, the full text of the sermons is not accessible through the PASSIM Research Tool.

For every manuscript, the database contains a set of metadata including shelfmark, date, place of origin, provenance (if known), support, extent, format, as well as bibliography and external links to digital images or catalogue records. A composite manuscript is always separated into the codicological units it consists of. For each codicological unit, a detailed analysis of the content, including structural features such as the presence of *capitula*, is provided.

For every sermon manifestation (a sermon as it appears in a manuscript, with all the deliberate and accidental variants and changes made to the text and paratext by the scribe), the database contains the locus of the item in the manuscript, the attributed author, title (including section titles or *lectiones* that might precede the sermon in the manuscript), incipit, explicit, and, if applicable, postscriptum, feast or other liturgical occasions, Bible reference(s), and keywords. The manifestation is also linked to the corresponding authority file and the necessary identifying information from that authority file (reference codes or numbers, editions and literature) is provided.

An authority file for a sermon consists of the (real) author (according to the current academic consensus), incipit and explicit, a unique PASSIM code as well as other codes or reference systems currently in use, existing critical editions, and bibliography. Also listed are keywords, any known historical collections the sermon belongs to, and manuscripts in the database that contain this sermon. Furthermore, the authority file provides an archive of sorts of scholarly conclusions on the sermon – mostly author attributions – that are no longer upheld. Finally, the page also contains a list of all sermons (authority files) that – according to existing reference works and scholarship – share text with the sermon described. If known, the degree and direction of the overlap is indicated using a system of link types.

Links between authority files consist of two components, a quantitative and a qualitative/directional part (Fig. 2). The quantitative component roughly indicates the amount of textual overlap. The research tool in its current state offers three choices: ‘nearly equals’, for extensive textual overlap in the whole text, with differences only on the level of individual sentences; ‘partially equals’, when text overlap is concentrated on one or more paragraphs within the sermon; and ‘echoes’, for overlap limited to just a few sentences. Appointing a sermon to the ‘partially equals’ category is usually possible on the basis of information provided in secondary literature, as reference works tend to indicate which paragraphs are shared with another sermon. For the subtler ‘nearly equals’ and ‘echoes’ labels, recourse to a comparison of the critical texts is usually necessary. The label ‘partially equals’ is both the most common and most neutral, which is why it was chosen as the default setting. This simplest link type essentially indicates that there is some textual overlap between two authority files, but we cannot say anything more about it. Depending on the amount of information offered by the reference works we consult, as well as our own findings through a direct comparison

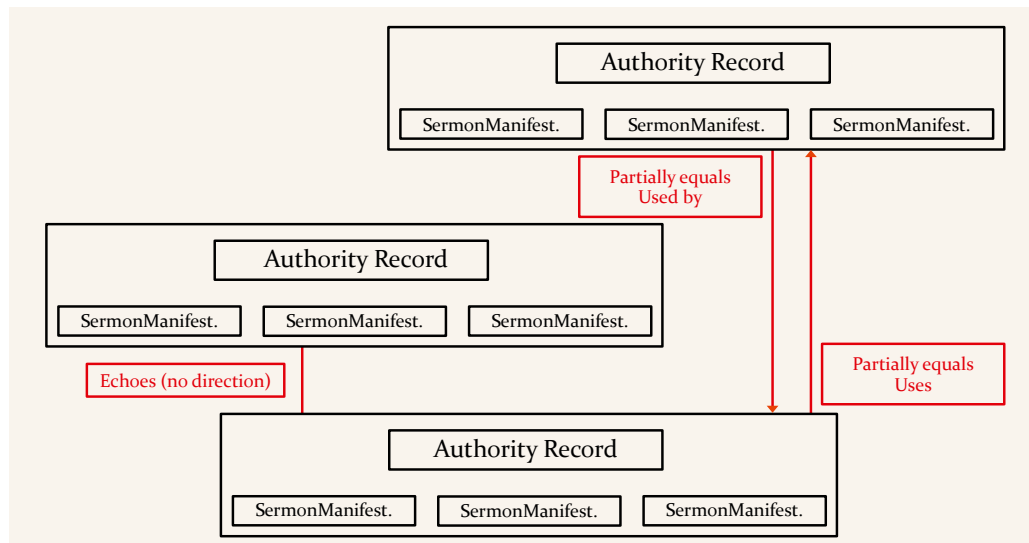


Fig. 2 Schematic representation of linked authority files in the PASSIM database.

of the texts, the link type can be further specified through the use of direction: ‘is part of/has as its part’, ‘uses/used by’, and ‘uses/used by (indirect)’. The link type ‘uses/used by (indirect)’ indicates that we know that the connection is definitely not direct, and that there were known intermediaries. Another link type, ‘common source’ is used for texts that show textual overlap and that we know have independently used the same source, and ‘unspecified’ serves as a default directional specification, for those instances of textual overlap of which the precise circumstances are (still) unknown. Furthermore, it is possible to add a note, for example to indicate that a text is completely included in a larger text, to specify which parts of the texts overlap, or to refer to specific reference works or a bibliography. Of course, these specifications represent the current state of our knowledge on the texts, and may thus be updated as our knowledge evolves.

Quantitative	Directional/explanatory (optional)
Nearly equals	Is part of/Has as its part
Partially equals (default)	Uses/Used by
Echoes	Uses (indirect)/Used by (indirect)
	Common source
	Unspecified (default)

Tab. 1 Main link types used in the PASSIM database.

By connecting the authority files through this system of link types, we are effectively creating an annotated network of patristic and pseudo-epigraphic patristic sermons that reveals how the sermons changed over the course of their medieval transmission. The next step is to make this network visually accessible within the PASSIM Research Tool. To explore the benefits and challenges inherent in creating a serviceable network of a sermon's textual relations, we will use as a testcase the pseudo-Augustinian sermon 'App. 121,' a Christmas sermon on the topic of the Virgin birth.

3. The pseudo-Augustinian sermon App. 121

The pseudo-Augustinian sermon printed under the name 'App. 121' (hereafter PS-AU s 121)¹⁸ is an apt example of the complex interrelations that can exist between texts labelled as 'patristic sermons.' The most recent edition¹⁹ dates to 1845, but is in fact a near-exact reprint of a late seventeenth-century edition of Augustine's *Opera Omnia*.²⁰ It is the editors of this edition – the Benedictines of St. Maur – who are responsible for giving the sermon its number, and for placing it in the appendix to their edition of Augustine's authentic sermons, containing sermons they considered either inauthentic or of dubious authenticity. Hence the name 'Pseudo-Augustine, sermo Appendix 121', by which it has been identified ever since. The sermon has been the subject of several inquiries, which makes it very well-studied compared to many other pseudo-epigraphic texts.²¹

We also find an entry for PS-AU s 121 in a seminal resource for the study of pseudo-epigraphic preaching, Machielsen's *Clavis patristica pseudoepigraphorum medii aevi. 1: Opera homiletica* (CPPM).²² This heuristic tool describes and cross-references a significant number of Latin sermons wrongly attributed to patristic preachers. Under the name Augustine, the most popular authority to which medieval scribes, readers and authors attached sermons, there are several thousand different items listed, a number that, while already very impressive, of

-
- 18 We present here a summary of the intertextual tradition of PS-AU s 121. The full dataset reflecting the scholarly tradition and underlying the network visualizations to follow, with reference to consulted literature and editions, can be accessed via "Authority file PASSIM 051.0103" in *PASSIM Research Tool, beta-version*. Radboud Institute for Culture and History, 2021 (<https://passim.rich.ru.nl/ssg/details/1176>, last accessed 24 July 2023).
- 19 Jean-Paul Migne, ed. *Patrologiae cursus completus. Series Latina*. Vol. 39, col. 1987–89. Paris: s.n., 1865.
- 20 *Sancti Aurelii Augustini Hipponensis episcopi operum tomus quintus, continens sermones ad populum* [...] Tomus V. Opera et studio monachorum ordinis S. Benedicti, è Congregatione S. Mauri, Parisiis, 1683–1684, col. 155–56.
- 21 Barré, "Le sermon pseudo-augustinien App. 121"; Bouhot, "L'homélaire de Saint-Pierre du Vatican," 105–106; Aschoff, "Studien," 41–46. An overview of earlier scholarship on this sermon can be found in Barré, "Le sermon pseudo-augustinien App. 121," III–12.
- 22 CPPM I 906, CPPM I 906a, CPPM I 906b.

course does not cover the full extent of sermons in medieval manuscripts wrongfully attributed to Augustine.

This lack of exhaustivity is an important realization, because it immediately highlights the inevitable incompleteness of any network generated by PASSIM. Until a full survey of every medieval manuscript that contains a sermon by or attributed to a patristic preacher has been made, it is a virtual certainty that there are still currently unknown versions or adaptations that we are missing. This is an inevitability to which we will return later on. For now, we want to make it clear that the narrative we will develop in this section and the visualizations that will follow, are based on a careful study of the existing reference instruments, studies and editions, supplemented here and there by the study of available manuscript witnesses. We have not, however, made a full transcription of every sermon referred to here in every manuscript witness. In other words, we have followed the traces and leads that are clearly defined in the existing scholarly literature, but have not gone far beyond that. This is a deliberate choice, because it is exactly the balance the PASSIM dataset as a whole is geared toward. We cannot make full analyses of all sermon manifestations, which run into the thousands, during the term of the project, but we do try to integrate as much as possible of what has been studied in the past within our database. Through the work of integrating, checking, and enriching these data we are, of course, able to add discoveries of new excerpts, versions, and manuscript witnesses, but our primary target is to amass as much data as we can.

Previous²³ scholarship has shown that **PS-AU s 121** as printed in the Maurist edition is, in fact, a compilation of two separate texts.²⁴ These two texts – **PS-AU s 121a** and **PS-AU s 121b** – were originally transmitted as part of decidedly different manuscript traditions.

PS-AU s 121a encompasses the first half of paragraph 1, plus paragraphs 4–5 from the text printed in *Patrologia Latina* as **PS-AU s 121**. Among its many manuscript witnesses we find various homiliaries (collections arranged according to the liturgical cycle) associated with the Abbey of Fleury.²⁵ It is further preserved in two well-known homiliaries currently housed in Wolfenbüttel²⁶ and Monte

23 To make it easier to compare the narrative we develop in this section with the visualizations in the next, the references to the sermons are printed in bold.

24 The Maurist editors already noted the interpolation that would later be labelled PS-AU s 121b (*Patrologia Latina* 39, col. 1987, n. b).

25 Orléans, Médiathèque municipale, 154 + Paris, BnF, NAL 1598 + Paris, BnF, NAL 1599, p. 14–17 (s. viii); Orléans, Médiathèque municipale, 155, p. 29–33 (s. x–xi).

26 Wolfenbüttel, Herzog August Bibliothek, Weiss. 12, f. 2r–2v (s. ix–x). This manuscript has lost its first leaves, which makes it impossible to say with certainty whether it transmits PS-AU s 121 or PS-AU s 121a. However, the Christmas sermons surrounding our text make it very likely that it was in fact PS-AU s 121a.

Cassino,²⁷ as well as the famous homiliary of Rochester Cathedral.²⁸ **PS-AU s 121a** often appears alongside several other Augustinian and pseudo-Augustinian Christmas sermons.²⁹ A shorter version of the sermon with a different incipit is transmitted in a codex associated with the Abbey of Lorsch.³⁰

Textual overlap with **PS-AU s 121a** can be discerned in a few texts associated with Ambrose. Most notable among these is the fragment *In natale Domini* (**CPPM I 137**), which is considered by Barré to be an indirect source for **PS-AU s 121a**.³¹ Our sermon also has textual passages in common with a number of other sermons and *centones*. These include two sermons found in the homiliary of Alanus of Farfa (**PS-ILD s 7**³² and **PS-AU s 194**³³).³⁴ Another variant connected to **PS-AU s 121a** is the Pseudo-Jerome's *cento* **CPPM I 5036**.³⁵ There is also an indirect connection between our sermon and the Late Antique compilation *Contra Iudaeos* (**AN Jud**).³⁶

-
- 27 Monte Cassino, Biblioteca Statale del Monumento Nazionale, 12, p. 4–5 (s. x–xi).
- 28 Vatican, BAV, Vat. Lat. 4951, f. 15r–16r. A group of English manuscripts from the twelfth century (including Durham, Cathedral Library, Cod. B. IV. 12, f. 81v–82r, and London, British Library, Harley 3027, f. 157r–158r) transmits our sermon alongside a cluster of patristic texts that seem to overlap with the homiliary of Worcester; see Lambot, “La tradition manuscrite,” 233 (especially n. 1); Sharpe, *English Benedictine Manuscripts*, 60–61.
- 29 See Wilmart, “Easter Sermons,” 339–40 (especially n. 1); Barré, “Le sermon pseudo-augustinien App. 121,” 112; Lambot “La tradition manuscrite,” 227–39.
- 30 Vatican, BAV, Pal. Lat. 220, f. 69r–70v (s. ix^m). Other early manuscripts containing **PS-AU s 121a** include Cambridge, University Library, Add. 3479, f. 178r–179r (s. ix^{med.}); Montpellier, Faculté de Médecine, H 59, f. 108v–109v (s. ix–x); Reims, Bibliothèque municipale, 296, f. 13v–14v (s. ix–x); Rome, Archivio di Stato, Rome, Osp. San Sal. 996, f. 45v–46v (s. xi).
- 31 The fragment is cited and ascribed to Ambrose by Cassian in his *De incarnatione contra Nestorium* VII, 25 (CSEL 17, 383–84, see also CPL 183). The fragment is seen as authentic and as an (indirect) source for **PS-AU s 121a** in Barré “Le sermon pseudo-augustinien App. 121,” 115–21. However, Bouhot argues that the fragment is inauthentic and was probably taken from **PS-AU s Cai I, 10a**, which may have circulated under Ambrose’s name; see Bouhot “L’homélaire de Saint-Pierre du Vatican,” 106, n. 15. See **CPPM I 137** for an overview and further literature.
- 32 See **CPPM I 5263** (= **CPPM I 156**).
- 33 It is the third paragraph of this sermon that shares text with **PS-AU s 121a**. See also **CPPM I 979**.
- 34 In Alanus’s collection, these sermons are located in the Summer part, items II, 64–65 according to the (problematic) reconstruction in Grégoire, *Homiliaires*, 127–88. Bouhot mentions that these two sermons may have been created for the primitive Roman homiliary, of which Alanus of Farfa’s collection is a close descendant; see Bouhot “L’homélaire de Saint-Pierre du Vatican,” 106, n. 14; and also below, section 4.4.
- 35 Folliet, “Deux nouveaux témoins,” 181–82.
- 36 Aschoff, “Studien,” 41–46; *Anonymi contra Iudaeos*, especially viii, n. 16.

The second component, encompassing the second half of paragraph 1 and paragraphs 2–3 of **PS-AU s 121** as printed by the Maurist editors, is **PS-AU s 121b**. This sermon is thought to derive from a lost African sermon dating to the fifth century.³⁷ Our text is found in the ninth-century or tenth-century manuscript Montpellier, Fac. de Médecine H 59 (f. 81r–81v), which also transmits **PS-AU s 121a**. Moreover, the PASSIM description of the recently digitized Homiliary of Otto-beuren has made it unambiguously clear that this manuscript is another witness to **PS-AU s 121b**.³⁸ Our collation of these witnesses shows that the latter deviates in many small instances from the edited text, while the Montpellier manuscript is slightly closer to the text incorporated in **PS-AU s 121**, though both manuscripts also share a number of variants in contrast to the edition.³⁹ In addition, an abbreviated and interpolated variation of **PS-AU s 121b**, which incorporates various sources and has a different explicit, was apparently disseminated more enthusiastically. This reworking, associated in the reference instruments with Pseudo-

37 Bouhot, “L’homélie de Saint-Pierre du Vatican,” 106. Two other derivations from this same lost sermon are PS-AU s Cai I, 13 and PS-AU s Cas II, 168. See also CPPM I 906b, CPPM I 1243, and CPPM I 1542.

38 A description of the Homiliary of Otto-beuren (Rome, Bibl. Naz. Centr. Vit. Em. II, Vitt. Em. 1190, s. ix^{1/2}) can be found via <https://passim.rich.ru.nl/manuscript/details/1870/> (Menna Rempt 2022, last accessed 24 July 2023). Previous (otherwise excellent) descriptions of the manuscript are not unanimously clear on which version is actually present in the manuscript (f. 80r–81v). The digital images confirm that Barré rightly identified the Homiliary of Otto-beuren to contain PS-AU s 121b (expl. *Christus uobis hodie redemptor apparuit*); Barré, “Le sermon pseudoaugustinien App. 121,” 121. More recent descriptions made this identification look doubtful. Gregoire refers to both PS-PET s Liv 5 and PS-AU s 121 but prints a different explicit than the one found in the manuscript; Bouhot writes that the text in the Homiliary of Otto-beuren is the version from ‘Alanus of Farfa’ (PS-PET s Liv 5); the entry for the manuscript in MANUS online refers to the text printed by Liverani and includes a different explicit; the detailed description found via Omeliari in scrittura beneventana refers to both PS-PET s Liv 5 and PS-AU s 121b; see Gregoire, *Homiliaires*, 325; Bouhot, “L’homélie de Saint-Pierre du Vatican,” 106; MANUS online (<https://manus.iccu.sbn.it/risultati-ricerca-manoscritti/-/manus-search/cnmd/69660>, last accessed 24 July 2023); and Omeliari in scrittura beneventana (<http://omeliari.unicas.it/>, last accessed 24 July 2023).

39 We limit ourselves here to only a few significant variants: in praesepio positum *ed. Ott*] positum in praesepio *Mont* fratres karissimi *add. Mont Ott*; nulli uirginitas seruituti succumbit *ed. Mont*] *om. Ott*; portabat *ed.*] gestabat *Mont Ott*; sancta credidit, sancta concepit *ed.*] sancta credidit *om. Mont Ott*; nasciturus ex uirgine *ed.*] ex uirgine nasciturus *Mont Ott*; mater *ed.*] antequam mulier *add. Mont Ott*; impraegnabatur *ed.*] implebatur *Mont Ott*; uita nobis hodie de coelo est data. Hodie super terram canunt angeli *ed.*] uita nobis hodie uenit super terram. Canunt angeli *Mont* uitam hodie super terram canunt angeli *Ott*; quia restauratur genus humanum per interitum *ed.*] quia restaurator hominum pro/per interitu *Mont Ott*; redemptor apparuit *ed.*] qui cum patre et spiritu sancto uiuit dominator (dominator *Mont*) et regnat (regnat deus *Mont*) in saecula saeculorum amen *add. Mont Ott*.

Peter Chrysologus (**PS-PET s Liv 5**⁴⁰), is found in the already mentioned Roman homiliary and homiliary of Alanus of Farfa, as well as several other prominent liturgical collections.⁴¹

To our knowledge, the compilation printed by the Maurists as **PS-AU s 121** is not extant in any known manuscript.⁴² However, an intersection of **PS-AU s 121b** and **PS-AU s 121a** is not completely without precedent in the manuscript transmission. Both **PS-PET s Liv 5** (the version closely connected to **PS-AU s 121b**) and **PS-AU s 121a** are traced back to a shared principle source: **PS-AU s Cai I, 10a**.⁴³

This is a brief but representative overview of the current consensus on this sermon and an apt illustration of the complex tangle of versions and manuscripts that characterizes the medieval reception of late antique sermons. We will now explore whether networks can have an added value in visualizing this tradition. Far from wanting to replace the meticulous textual comparisons between all these different versions executed by Barré, Bouhot and others, the network will not only be aimed at making the established textual links and connections instantly clear, in a single view, but also at allowing users to build on these scholarly observations through the accumulation and integration of the intertextual links of a greater number of texts in a single network. After all, the process of identifying and editing sermons, particularly anonymous or misattributed ones, is still very much ongoing, as testified by the newly edited texts and textual links discovered and published each year.⁴⁴

40 See CPPM I 1965 (= CPPM I 6356). PS-PET s Liv 5 was edited in Liverani, *Spicilegium Liberianum* I 193–95; *Patrologiae Latinae Supplementum* III, col. 180–82. Its final paragraphs are also found in a sermon labelled PS-AU s Mai 176 (= CPPM I 1786), edited in Mai, *Nova Patrum Bibliotheca* I, 397–98; *Patrologiae Latinae Supplementum* II, col. 1274–75. The precise relations between this sermon and the compilation are not quite specified in scholarship.

41 The sermon is found, often combined with other texts, in at least the following collections and manuscripts: Homiliary of Alanus of Farfa I, 2e (cf. Grégoire, *Homiliaires*, 127–88; compilation); Homiliary of Egino of Verona, 2d (cf. Grégoire, *Homiliaires*, 189–221; compilation); Homiliary of St. Peter (Vatican, BAV, Arch.Cap.S.Pietro.C.105, 16d, f. 41v–43v, s. x^{med.}; cf. Grégoire, *Homiliaires*, 223–44; compilation); Venice, Biblioteca Marciana, ZL CLIII (1951), f. 72v (s. xii).

42 The assembly of a full heuristic overview is complicated by the fact that PS-AU s 121 and PS-AU s 121a (and sometimes even PS-AU s 121b) are not always clearly distinguished from each other in manuscript catalogues. See also Barré, “Le sermon pseudo-augustinien App. 121,” 136.

43 See CPPM I 906a. Cf. Bouhot, “L’homélaire de Saint-Pierre du Vatican,” 106 (especially n. 15), who states that PS-AU s Cai I, 10a is an older, unedited version of the sermon printed in Caillau, *Collectio selecta*, 97–99 (PS-AU s Cai I, 10 = CPPM I 906).

44 A pertinent example is an Easter sermon recently edited and studied in Dolbeau, “Un sermon pseudo-augustinien pour la fête de Pâques, confronté à ses sources,” III–23 (especially 116–17). Dolbeau’s analysis reveals textual echoes between the opening lines of the newly edited sermon and PS-AU s 121 (and, we might add by extension, PS-AU s 121a), a

4. Network visualizations

The network visualizations shown and analyzed in this section are made using two programs. As part of the PASSIM Research Tool, the option to generate different types of visualizations is built into the application itself.⁴⁵ At the moment, we are still experimenting with customization options. Thus, the PASSIM visualization options are still under development. For the purpose of demonstrating the potential of such customization options, we have also used the program Node XL.⁴⁶ In the figures below, we have clearly distinguished which are at this time the product of the PASSIM application, and which were made using Node XL. It is our goal, however, to eventually integrate all options presented in this chapter into the PASSIM Research Tool.

The networks should be understood as follows. Every node represents an authority file, a ‘standard’ text (often the printed version). In our database, each of these authority files has its own PASSIM-code, and is linked to all manifestations of this text in the manuscripts currently in the database (Fig. 1 and Fig. 2 above). Every edge represents the recorded textual overlap – *any* textual overlap – between two sermons.

4.1 Simplest network

We start with the simplest version of the network, which shows all connections with PS-AU s 121 to the first level, i.e., mainly the texts mentioned in our summary of the tradition of PS-AU s 121a and PS-AU s 121b in the previous section (Fig. 4). These connections are quite easy to glean from the reference works and are also presented in a single list view on the page with the authority file for PS-AU s 121 in the PASSIM Research Tool (Fig. 3).⁴⁷

While this network can, of course, be useful as an alternative way of looking at the data otherwise presented in a traditional list view, at this point, it does not

passage in Lactantius’s *Divinae Institutiones* (IV, 18, 12) and several hagiographical texts. These discoveries have not yet been included in the network presented here. However, the flexibility of the PASSIM environment ensures that they can easily be added in future.

45 The PASSIM environment in principle offers the option to download and reuse both the images of the visualisation (in SVG and PNG format) and the underlying data (in JSON format). Note, however, that this functionality could be suspended for specific pre-existing datasets which have been imported in PASSIM with permission of their owners. Such datasets are recognisable in PASSIM through a project label.

46 Downloadable at <https://nodexlgraphgallery.org/Pages/Registration.aspx> (last accessed 24 July 2023). The visualizations presented in this article are generated through the Harel-Koren Fast Multiscale algorithm.

47 Cf. note 18.

echoes	Unspecified	(no Passim code)CPPM I 5036(by Undecided) hodie, dilectissimi nobis, uerus sol...-...pertingere merebimus A N
partially equals	Common source	(no Passim code)PS-AU s Mai 176 CPPM I 1786(by Undecided) deus ab angelis proditur et agnus pastoribus demonstratur...-...coheredes christus dominus noster, qui... N
echoes	Uses (indirect)	PASSIM 012.0006AM vg CPL 145(by Ambrosius Mediolanensis) si iuxta caelestis sententiam ueritatis uerbi...-...uicisset gladium quem quaerebat inuenit N
partially equals	Common source	PASSIM 051.0001AF I, 2e PS-PET s Liv 5 CPPM I 1965 CPPM I 6356(by Anonymus) praedicamus hodie natum de uirgine...-...ut faceret cohaeredes christus dominus noster qui... N
partially equals	Uses (indirect)	PASSIM 051.0028PS-AU s Cai I, 10a CPPM I 1240a(by Anonymus) diei huius aduentum...-...quia ipse est splendor gloriae aeternae domini nostri iesu christi N
partially equals	Common source	PASSIM 051.0186PS-AU s Cai I, 10 CPPM I 1240(by Anonymus) diei huius aduentum si pleno possimus ore...-...bona sunt praestare dignetur per iesum christum dominum nostrum qui est benedictus in saecula saeculorum amen N
partially equals	Uses	PASSIM 051.0218PS-AU s 121a CPPM I 906a(by Anonymus) quis tanta rerum uerborumque copia...-...gloria aeterna domino nostro iesu christo cui est...
partially equals	Common source	PASSIM 051.0243PS-AU s Cas II, 168 CPPM I 1542(by Anonymus) dominus noster iesus christus fratres karissimi qui semper...-...christus nobis apparuit qui cum patre... N
partially equals	Common source	PASSIM 051.0244PS-AU s Cai I, 13 CPPM I 1243(by Anonymus) si natiuitatem christi domini consideremus...-...manifestatus in carne qui cum patre... N
partially equals	Common source	PASSIM 051.0434AF II, 64 PS-ILD s 7 PS-MAX s 12 CPPM I 156 CPPM I 2257 CPPM I 5062 CPPM I 5263 CPPM I 5578 CPPM I 5945(by Anonymus) celebritas hodiernae diei nos admonet ut in laude...-...commendare dignetur in coelis apud dominum deum nostrum, qui... N
partially equals	Unspecified	PASSIM 051.0474AU s 194 add CPPM I 581(by Anonymus) in hac enim die ad saluanda omnia...-...uirgineus uenter idoneus fuit
partially equals	Unspecified	PASSIM 051.1032AN Jud CPL 360(by Anonymus) doctor gentium in fide et ueritate paulus exhortans nos...-...qui offerebat et quod offerebat explicit
partially equals	Uses	PASSIM 051.1290PS-AU s 121b CPPM I 906b(by Anonymus) praedicamus hodie natum de uirgine...-...hodie redemptor apparuit N
partially equals	Unspecified	PASSIM 052.0005CPPM I 137(by Dubius) uidete miraculum matris dominicae...-...qui uenerat sanare corrupta
partially equals	Common source	PASSIM 052.0065AF II, 65 PS-AU s 194 CPL 368.194 CPPM I 5041 CPPM I 979(by Dubius) adest nobis dilectissimi optatus dies beatae...-...benedicta pretium ferre mundi N
partially equals	Common source	PASSIM 052.0186MAX s Mu 61B [MAX] h 5 CPL 219a.61b CPL 220.5 CPPM I 2072 CPPM I 5759(by Dubius) proxima dominica dilectionem uestram admonuimus...-...ut possimus eum non timere cum iudicat

Fig. 3 List view of textual connections of PS-AU s 121 (PASSIM).

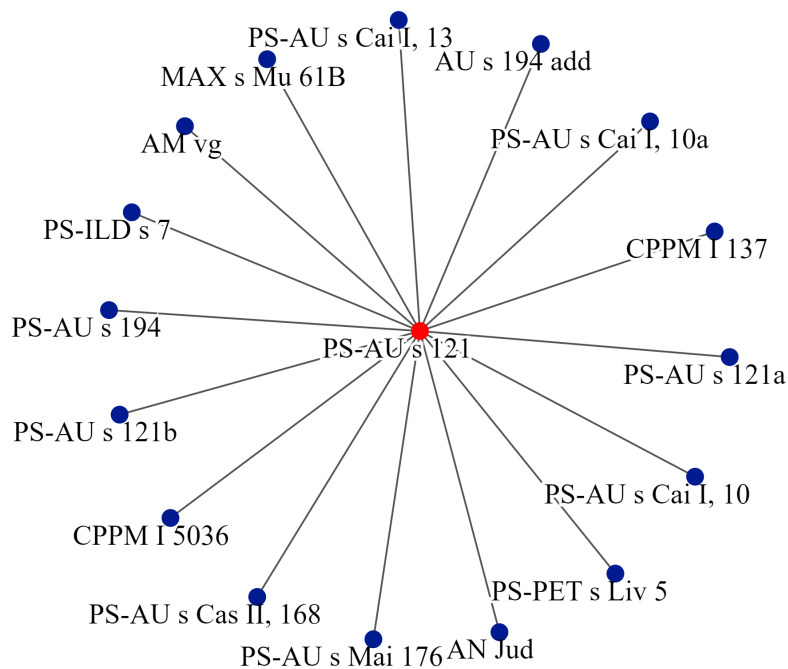


Fig. 4 Simple network of PS-AU s 121 (PASSIM).

offer any new information. Rather, the list view has the upper hand here, containing more details on the link types and on the sermons themselves.

4.2 Second-level network

The network does offer substantially new information once we visualize a higher degree of connections. For the first further development, we limit ourselves to the second level, which includes all of the sermons – or better yet, authority files – that demonstrate textual overlap with PS-AU s 121, and all of the authority files linked to this first set, i.e., those sermons that share texts with the sermons connected to PS-AU s 121, but not with PS-AU s 121 itself. In the network, the starting point, PS-AU s 121, is indicated in bright red, the first-level nodes are burgundy, and the second-level nodes are dark blue (Fig. 5).

This visualization is an interesting exercise in balance. It is not exhaustive, as there are still further connections that go beyond the current limits of the network. In fact, the visualization even distorts, or at least obscures, the reality of the texts. An example is the *cento* CPPM I 5036,⁴⁸ which is connected in the network to PS-AU s 121 and several of its sources and reworkings, and also to several nodes that represent versions of a sermon *Hodie uerus sol* (MAX s Mu 45 and PS-AU s Cai II, app. 22, but also the sermons that *use* either of these versions, PS-AU s Cai II, 26 and EUCH s 1). The network does not, however, show that these sermons also share text with each other, giving an impression of a large number of individual sermons overlapping separately with the compiled version CPPM I 5036, while in reality it is connected to a cluster.

However, this second-level network does offer an overview of all sermons that conceivably share a common source with the sermon we started with. While you can get to these data by clicking through the linked authority files on the page of PS-AU s 121, to find all further connections of the sermons listed there, it is clear the network has an advantage this time: it provides one comprehensive picture, but more importantly, the network also shows how those sermons listed as having textual overlap with PS-AU s 121 interconnect with each other.

Significantly, however, this added value is counterbalanced by several deficiencies. First, the network has no nuance: rather, every link type is represented by the same type of edge. Second, it does not contain any information about the manuscripts, which, if included, would provide context to the textual connections between the sermons. Third, the network is undirected, not offering any information on which sermons are the models, and which the derivations. The latter two deficiencies, we aim to correct in the PASSIM environment by including a number of custom options, which we will discuss further in section 4.4.

48 Folliet, “Deux nouveaux témoins,” 181–82.

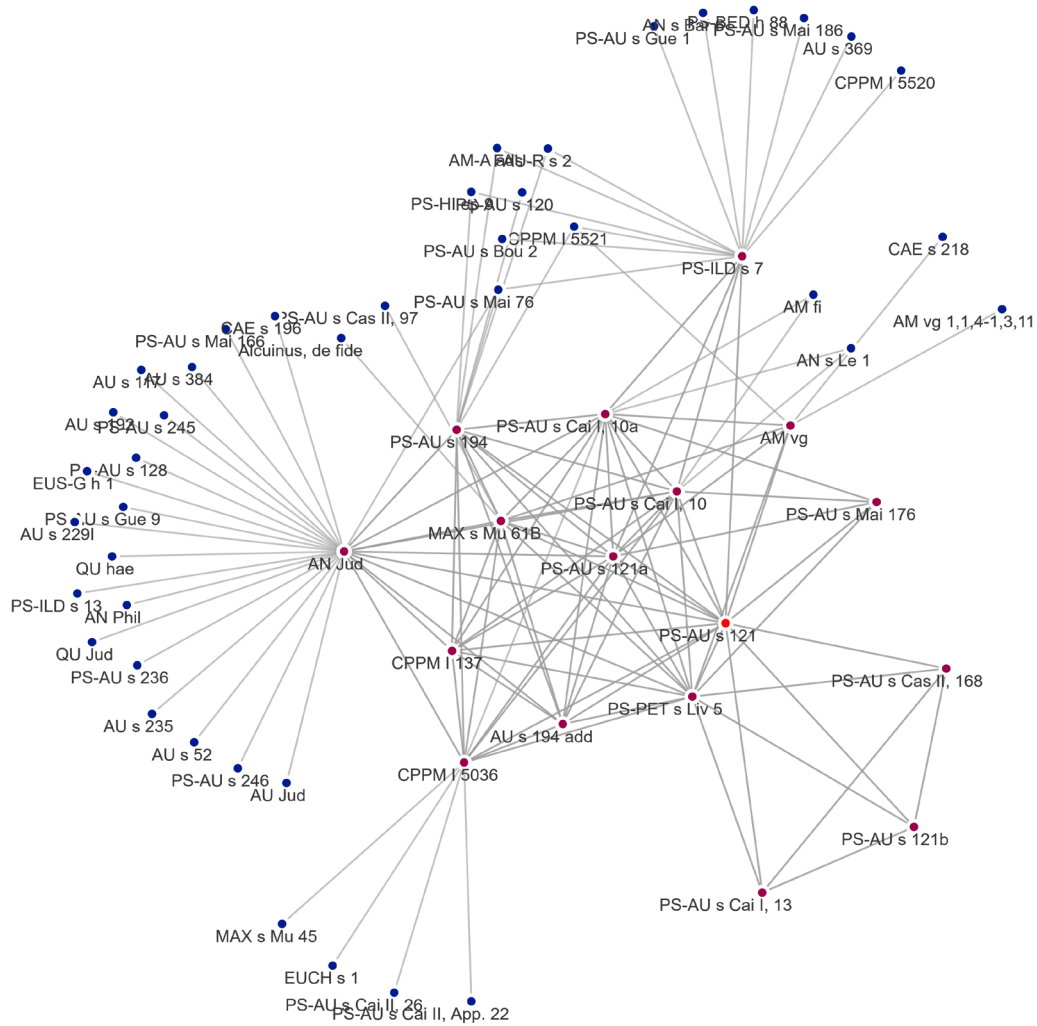


Fig. 5 Second-level network of textual connections of PS-AU s 121 (PASSIM).

The lack of nuance, however, remains a problem. For example, a passage from the aforementioned fragment CPPM I 137 (Pseudo-Ambrose's *In natale Domini*) is repeated in several sermons in the network. This short paragraph⁴⁹ – or part of

49 *Videte miraculum matris Dominicae: uirgo concepit, uirgo peperit, uirgo cum parturiit, uirgo grauida, virgo post partum, sicut in Ezechiele dicitur: et porta erat clausa et non est aperta, quia Dominus transiuit per eam. Gloriosa uirginitas et praeclara fecunditas. Dominus mundo nascitur, et nullus est gemitus parientis: uacuatur uterus, infans excipitur, nec tamen uirginitas uiolatur. Fas erat, ut Deo nascente meritum cresceret castitatis; nec per eius egressum uiolarentur integra qui uenerat sanare corrupta* (ed. Petschenig, Cassianus, 383–384).

it – is found in at least the following texts: CPPM I 137, PS-AU s Cai I, 10a, PS-AU s Cai I, 10, PS-AU s 121a, PS-AU s 121, MAX s Mu 61b, CPPM I 5036 (PS-HI), AU s 194 add, PS-PET s Liv 5, PS-AU s 194, and AN Jud. Some of these sermons, such as CPPM I 5036 and PS-AU s 194, share little more than a few lines with the *In natale Domini*-fragment, with some variation, while for others, such as PS-AU s 121a and PS-AU s Cai I, 10a, the overlap is far more substantial. We may include the option to customize the network by showing the link types through labels, or by making the edge darker or paler depending on the strength of the connection.

However, this does not address the true problem. The vast majority of the textual connections we have described for PS-AU s 121 fall in the default category ‘partially equals.’ Because our standard mode of data entry relies by necessity on reference works and catalogues, rather than full-text transcription and collation of all the relevant sermons, this will be the case for most sermons in the PASSIM database, especially considering the fact that most of them have not been as well-studied as the case study we are developing here.

The lack of nuance remains an issue, but it is, at least, an obvious one. Another, less conspicuous problem is the fact that the network shows us *all* textual connections expressed in the scholarly literature and reference works, i.e., also those that were hypothesized in scholarship, but may be mutually exclusive or proven incorrect at some stage. In the case of PS-AU s 121, different ideas by different scholars are at this point presented without preference for one over the other, because all instances of textual overlap are considered ‘equal.’ For example, even though PS-AU s Cai I, 10a is identified by Bouhot as a source for many of the sermons surrounding it (including PS-AU s 121a and PS-AU s Cai I, 10),⁵⁰ it appears in the network simply as one of the nodes connected in that cluster: it is the observation that there is textual overlap that determines the link between two nodes, not their *fons-usus* relationship. While the state of the data we use as source materials can only very gradually be improved upon, we must be aware of these weaknesses when using the visualization options.

Enriching the network with information on the types of links or their direction will always by necessity be an incomplete and imperfect process. It is highly unlikely that adding clear and unambiguous stemmatical information for all nodes in a large network is feasible. Also, adding stemmatical information highlights that many nodes are technically missing from the network. Two sermons which are connected because of textual overlap may be separated by several intermediary versions which are simply lost. The ‘common source’ link type refers to at least one other text which may not be extant. One could argue that adding specifications, directional or explanatory, to a network of textual overlap is muddying the waters. Given its imperfect state, it is certainly not recommended to use the

50 See note 43.

‘nuanced’ connections for grand proclamations on the entirety of the network. However, on a micro-level, when a single node or a small cluster is the point of interest, the nuances do give information that can be useful, if only to alert users to additional notes added to the authority files.

Researchers interested in PS-AU s 121 can, even before delving into the relevant secondary literature, gain a quick overview in a single glance of all of the texts (or better yet, authority files) they should investigate in order to get a full picture of the models, alternative versions and offspring of this sermon. They can spot, for example, that the two constituent parts of PS-AU s 121 – PS-AU s 121a and PS-AU s 121b – do not themselves connect to each other, that the former is part of an intricate cluster, but that the latter does overlap with a sermon – PS-PET s Liv 5 – that is also attached to this cluster. Also, if users were looking for their next case study, they might be intrigued by PS-ILD s 7, which appears – at least from this version of the network – to be either a *cento*, combining a great many sources, or a model that has been heavily used in other sermons.

This brings us to the next section, where we move away from what network visualizations can do for users who already know what they are looking for, and toward networks as gateways to serendipitous discoveries and motors for general, abstract, and overarching research questions.

4.3 Complete network

The visualization becomes vastly more complex and expansive still if we maximize the number of edges and follow the network to its natural limits (Fig. 6). This means that we add all the additional textual links to each of the nodes until there are no more textual links to add.⁵¹ Eventually, we hope to generate a network that combines the entire set of authority files and their textual overlap in the PASSIM database. While this is at the moment still a distant point of the horizon, we can use a complete network of PS-AU s 121 as an illustration of the possibilities of such a comprehensive visualization.⁵²

At this point, the connection with the sermon that formed our starting point is flimsy. As such, its usefulness for the study of PS-AU s 121 is limited. However, there are several other gains to be had. First, and most obviously, the network

51 Note, however, the methodological questions that arise when trying to establish textual links and visualizing information based primarily on previous scholarship (see below, 4.4 and 4.5). For the purposes of this experimental network, we have incorporated textual links (particularly between sermons) that are clearly and specifically defined in our reference works or the result of our own observations.

52 Because the functionality to calculate beyond six levels is not yet working properly in the PASSIM Research Tool, we show a visualization generated using Node XL, though based on the same dataset.

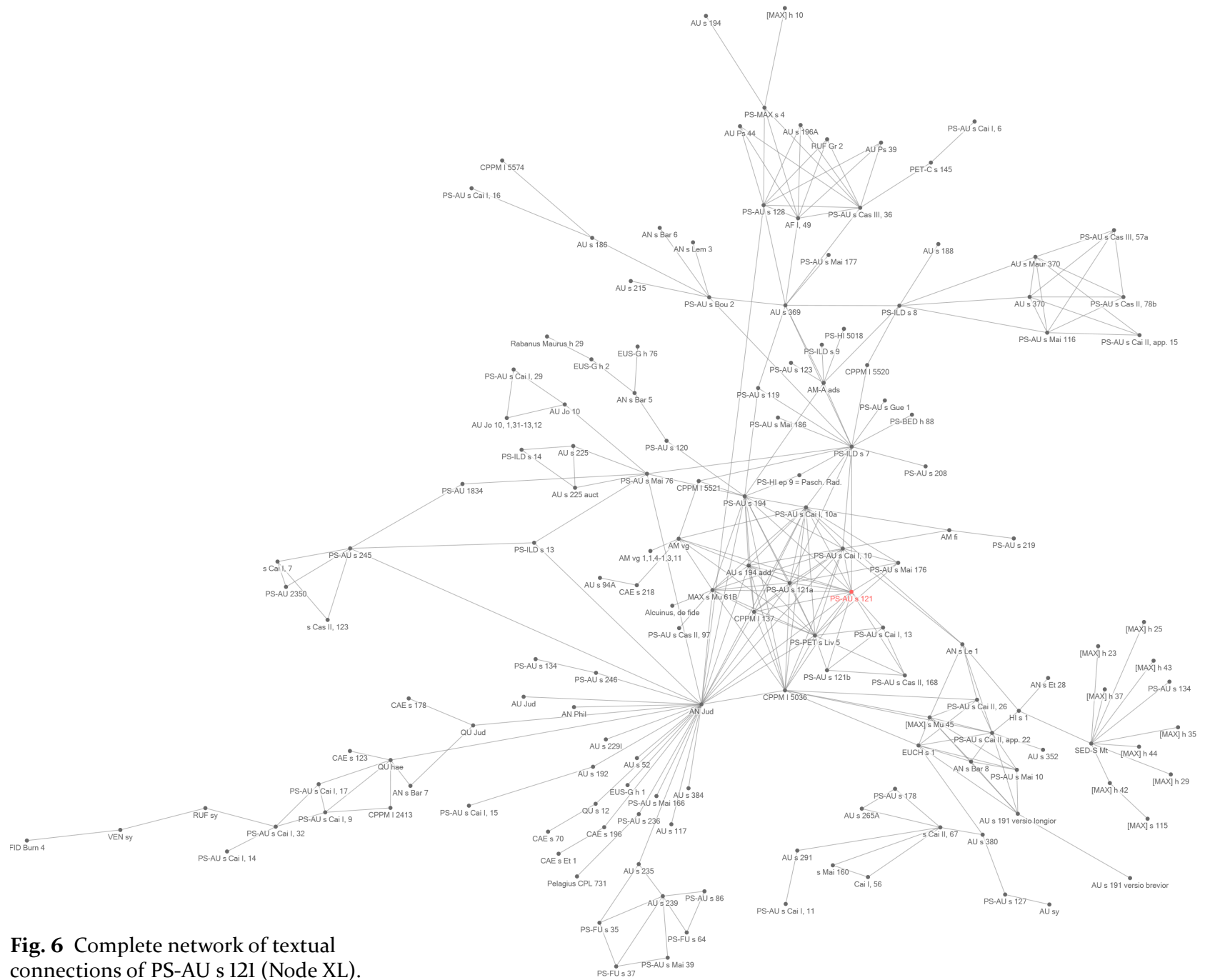


Fig. 6 Complete network of textual connections of PS-AU s 121 (Node XL).

presents in one view what would be a highly laborious task to puzzle together from reference works and secondary literature. Rather than giving any detailed information on the formation and influence of one particular pseudo-epigraphic sermon, the network gives an impression of the dynamic of a significant group of sermons, how they interacted, and how they are intertwined.

At this point, users would not necessarily have to start from a text they already know to find what they are looking for, but can rather explore the network for interesting case studies with a specific query or topic in mind. For example, for a scholar looking to investigate practices of rewriting and compiling patristic materials, the network can highlight the most promising texts to look into. The interesting clusters would be not only the set of overlapping texts surrounding PS-AU s 121a, but also the aforementioned cluster around sermons starting with *hodie uerus sol*, and – perhaps more significantly – the observation that at least two different texts (CPPM I 5036 and AN s Le 1)⁵³ form a ‘bridge’ between these two clusters without being connected to each other. In fact, both of these sermons are *centones* that incorporate and paraphrase snippets of texts that are shared by both of the clusters. This observation could, in turn, be an entryway for a researcher to also compare all versions, search for additional information on the manuscripts that transmit these versions, and – for instance – try to identify or reconstruct a manuscript or collection that may have been available to the compilers of both *centones*. Still, the network at this point of course does not guarantee that such potential gateways necessarily provide the expected results. To more efficiently highlight potentially interesting case studies, the network needs further specification and adaptability (see below, 4.4).

The function of each of these anonymous sermons as ‘bridges’ between clusters illustrates an additional point. When we move from specific queries to the methodological perspective, it is particularly interesting that this network partially reshapes the traditional perspective: the eye is not drawn primarily to the ‘originals’, namely the authentic sermons by the authoritative Church Fathers. Many of these are lingering at the outskirts of the network, while a more central position in the network is occupied by the texts that have the most edges, i.e., that connect the most to other texts. These can be (authentic or pseudo-epigraphic) sermons that have served as important source texts (e.g., AU s 369 or PS-AU s Cai I, 10a), but are more often still *centones* that combine several sources, such as PS-ILD s 7, PS-PET s Liv 5 or AN s Le 1. Many of the nodes at the center of the network represent the ‘problematic’ or ‘unstable’ texts that embody the medieval attitude to the patristic source material. So, as an exercise in shifting and broadening one’s perspective and departing from traditional scholarly approaches, it is quite successful. Still, we must not overstate this feature. It is still possible that the nature

53 See (respectively) Folliet, “Deux nouveau témoins,” 181–82; Leclercq, “Les inédits africains de l’homiliaire de Fleury,” 55–56.

of the reference works distorts ‘the true picture’. One question to be aware of, for example, is how often cataloguers described a sermon as ‘authentic this-or-that’ without noticing – or mentioning – that what is in the manuscript is in fact a variation on the authentic text? How much difference between two texts is necessary to no longer identify them as identical in the context of a catalogue?

It is perhaps through the warping of traditional research perspectives that this type of visualization provides a concrete opportunity to further delve into a question that emerges when examining pseudo-epigraphic patristic preaching materials: how do we explain the perceived textual instability of pseudo-epigraphic patristic sermons? At least for the set of sermons in our case study, the observation is that relatively few authenticated sermons intertwine extensively with other materials, while many of the pseudo-epigraphic patristic sermons we have examined exist in multiple versions and as part of complex constellations. This observation, however, requires careful examination. On the one hand, the transmission of sermons in multi-author collections, especially liturgical homiliaries, does seem to promote the malleability and the manipulation of texts. However, on the other hand, the way in which sermons are described in the scholarly reference works magnifies the perceived difference between authenticated and pseudo-epigraphic sermons, since altered versions of authenticated sermons are often not described and referenced as separate texts. We can and should search for contextual and historical factors to explain textual variation, but always in conjunction with an awareness of the biases inherent in the scholarly tradition.

While this version of the network triggers many fascinating questions, there is still something missing before we can truly approach the answers. What we really need is to add a layer on top of what we currently have, a layer that combines the textual data with information about the manuscript transmission of each sermon, its date and place of creation (wherever known), and its genealogical relations with the nodes it is connected to, i.e., whether it is a parent, child, or sibling of the sermons it shares text with. So, for the final part of this article, we want to spend some time exploring one type of further development of the network that would, in our view, significantly increase its usefulness.

4.4 Customized network

One of the most important challenges to overcome for the PASSIM Research Tool as we see it, is to bring together, to truly integrate, what we know about textual connections with what we know about manuscript traditions; in other words, to link the abstract, out-of-context intertextual relationships to information on their material, manuscript contexts. The key premise is that, at the point in time when a ‘new’ sermon was created, all of its sources must have been physically present in some form or other. The more information we have – about the direction of the *fons-usus* relationship between two sermons and about the manuscripts that transmit them both – the more vivid and detailed such a physical connection can

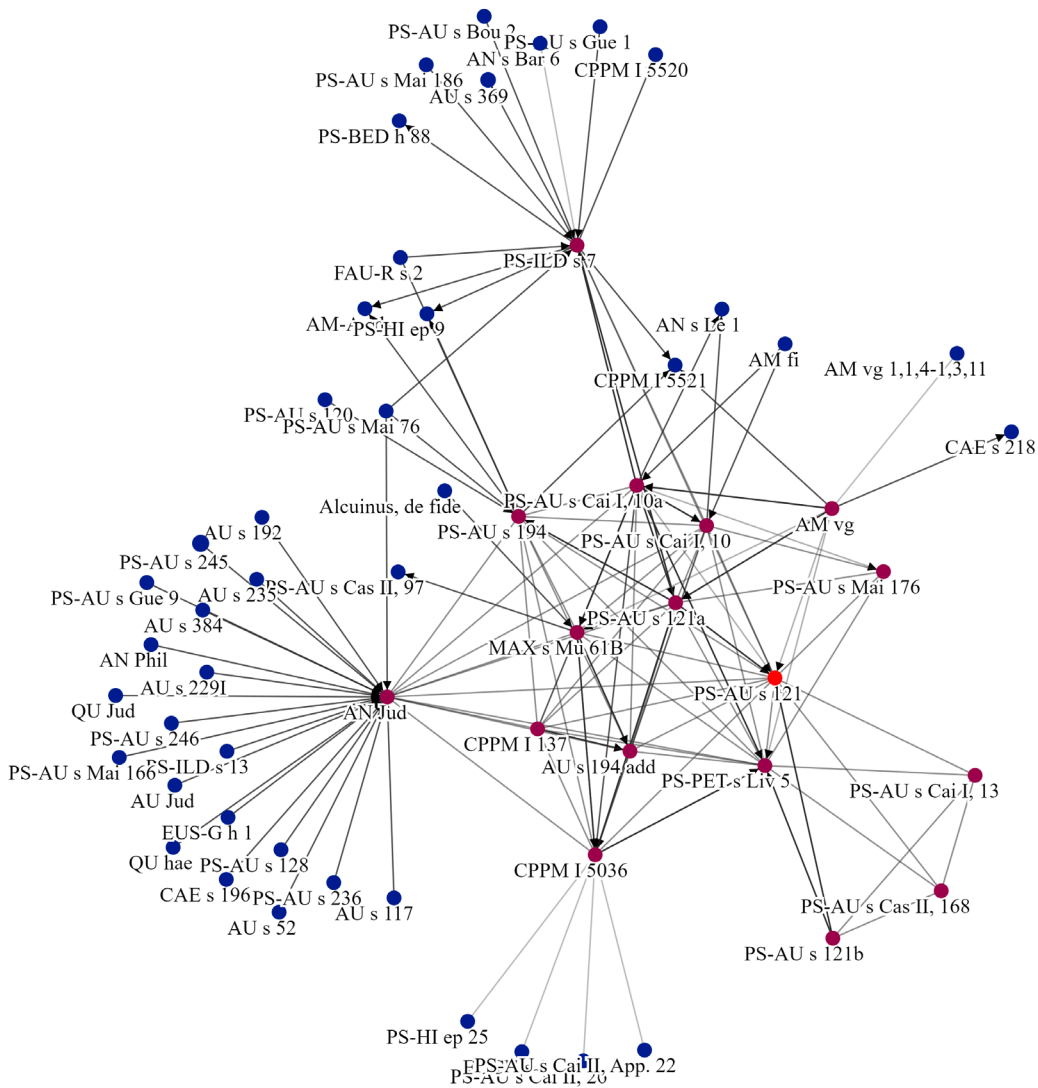


Fig. 7 Directed second-level network of textual connections of PS-AU s 121 (PASSIM).

become. This ostensibly simple principle can be a gateway to bigger topics such as patterns of transmission, the reconstruction of lost collections, or strategies of selection and dissemination. All of these are especially hard to determine for the early medieval period, when manuscript evidence is limited.

To pursue this integration of textual data and manuscript data in the PASSIM visualizations, we are working on several options to customize the networks. Firstly, there is the option to add a direction to the edges, when this is known (Fig. 7). This means that the optional directional link types (cf. Table 1) can be

visualized, either by simply adding arrowheads to the edges wherever possible, or a more sophisticated version, which differentiates between the different types of directional link types.

Second, there is the possibility to add information on the manuscripts that transmit the sermons that are part of the visualization (Fig. 8). In this version of the network, the size of the nodes corresponds to the number of manuscripts in which the sermon is found. The bigger the node, the more extant manuscripts. It is important to emphasize here that the size of the nodes in this particular visualization is, for many nodes, based on an estimation, with differing degrees of uncertainty. For certain sermons, we do have a full grasp of their manuscript transmission, while for others we can make a reliable reconstruction, but again for others we were only able to make an educated guess as the dataset is a work-in-progress and reliant on many different types of resources, some more comprehensive than others. Third, we are developing the option to visualize in which known historical collections a sermon is transmitted.⁵⁴ For this customization, the color of the node changes, according to a legend of historical collections represented in the network, which is organized by order of the number of sermons in the network that attaches to each collection. A user can choose to activate all custom options at once or move back and forth between them.

Without jumping to conclusions, this first, experimental network (Fig. 8) shows how a number of blue-coloured nodes in the network, representing texts such as PS-PET s Liv 5, PS-ILD s 7, PS-AU s 194, PS-ILD s 8 or PS-AU s Cas III, 36, reflect reworkings or *centones* preserved in the collection of Alanus of Farfa (and sometimes also in the Roman homiliary that formed its most important source). Even though some of these sermons and their sources have been studied in the past,⁵⁵ the network gives insight into the compiled texts in a collection and their potential sources on a larger scale.

As such, this development of our initial network has the potential to help the user in identifying hypotheses for further exploration in several interesting and important areas of research in the field. The network can show which texts were transmitted together in the same collection, and from there whether they potentially had a common source, thus putting the user on track to discover collections

54 The definition of a historical collection is not a straightforward one. Technically, every unique combination of sermons in a manuscript could be termed a collection. We reserve the term in the context of PASSIM for those groups of sermons that (1) were already put together as such in Late Antiquity or the early Middle Ages, or (2) were particularly widespread.

55 Bouhot offers examples of sermons that are thought to be the work of the compiler of the Roman homiliary; Bouhot, “L’homélaire de Saint-Pierre du Vatican,” 105–6, particularly 105, n. 12. See also *Ibid.*, 106, n. 14 for the observation that PS-AU s Cai I, 10a or a text close to it may have been a source for PS-ILD s 7 (AF II, 64) and PS-AU s 194 (AF II, 65).

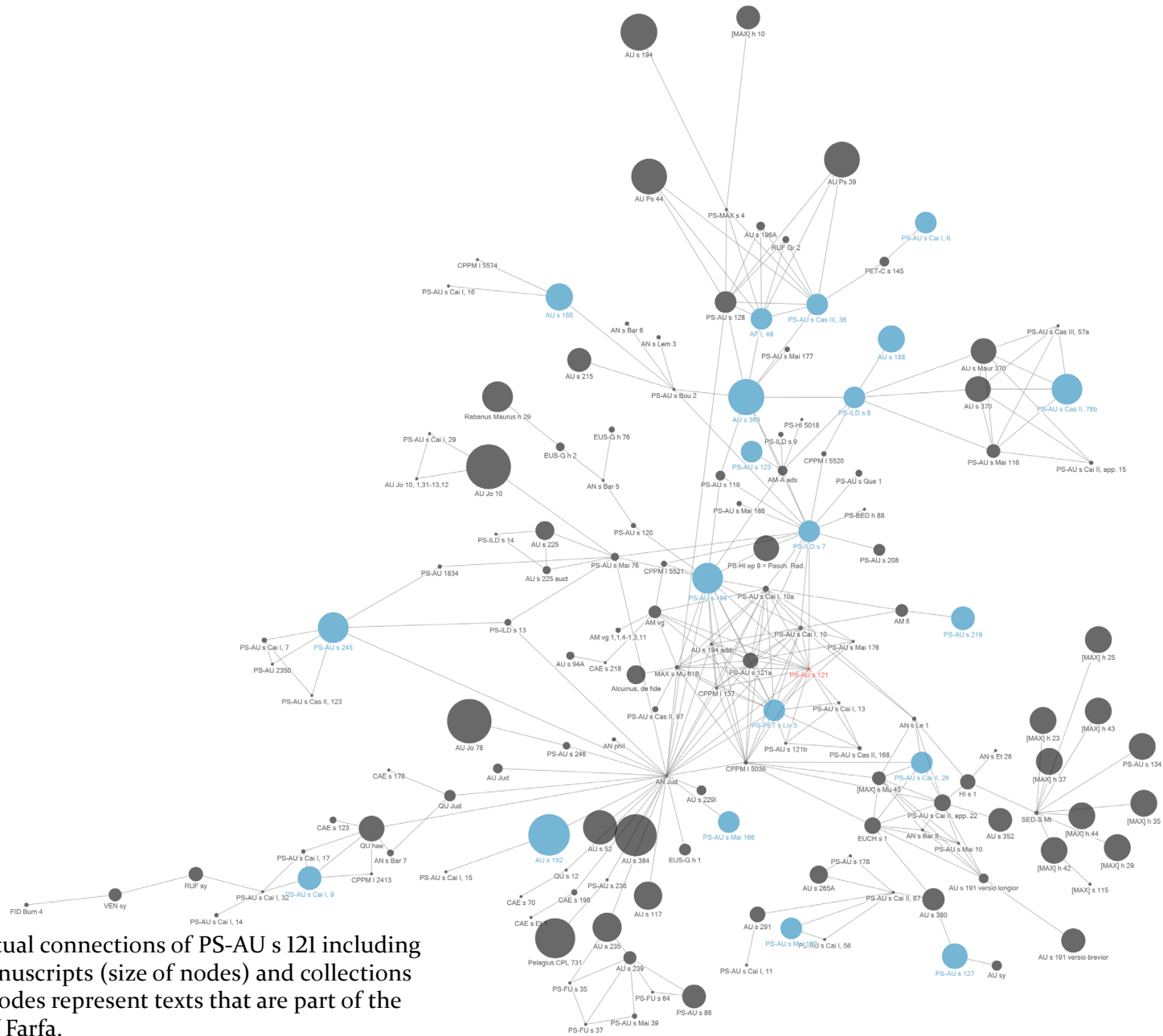


Fig. 8 Network of textual connections of PS-AU s 121 including data on number of manuscripts (size of nodes) and collections (Node XL). The blue nodes represent texts that are part of the homiliary of Alanus of Farfa.

that may have formed the basis of other collections. This is a line of research that has received considerable attention for the – often single-authored – collections of mostly authentic sermons, but not as much for pseudo-epigraphic or anonymous sermons. The network also draws attention to texts which were, seemingly, especially popular. While it is methodologically questionable to base the popularity of an individual sermon solely on the number of extant manuscripts, the network can also illustrate how dynamic a text was, by showing that it traveled in many different contexts (for instance, in lots of manuscripts that do not belong to the same collection). Furthermore, the network can identify those collections that served as key mediators or sources of inspiration for the rewriting of sermons. It can help differentiate between those collections that were relatively stable and were simply copied as such, and those collections where transmission involved a heavier manipulation of the texts. This can then be taken further into an investigation of the historical context and usage of the respective types of collections. Finally, while the network provides information on compilers we already know about, a next step would be to puzzle together traces of compilers or compilations we are not yet aware of.

However, it is important to keep in mind that these networks must be used not as providers of definitive answers, but as guides for further exploration. There remain several important caveats. The corpus of manuscripts in the PASSIM database is incomplete and thus, for the purposes of this demonstration, we have estimated the number of manuscripts based on our own research and consultation of the available heuristic tools and catalogues. However, this state of incompleteness will persist for a long time, and so the network will have to be used with caution. Aside from this straightforward note of caution, the network in this experimental phase reveals an important related problem. When looking at Fig. 8, it is immediately obvious that the nodes of the authentic texts are overall much bigger than those of the pseudo-epigraphic sermons. We do not think we can interpret this as an accurate reflection of the manuscript tradition. At least in part, this is due to the fact that the authentic sermons are much better studied: there are editions and reference lists, which make it much easier for cataloguers of manuscripts to identify authentic sermons. Thus, while it seems that authentic texts had a much larger dissemination in the Middle Ages, our intuition would be that this is often an effect of the scholarly tradition, and not necessarily the historical reality. This example shows that we cannot take this network at face value without an acute awareness of the imbalances within the material it is based on.

4.5 Methodological issues

Before moving on to the conclusion, we want to briefly mention two dilemmas that we are still trying to sort out.

The first can be summarized concisely as: ‘Where to stop?’. Publications and critical editions, especially very recent ones, can go very far in listing potential or probable sources, derivatives, and alternative versions of texts.⁵⁶ An overlap of a few words may not even warrant an ‘echoes’-link in the database. Then again, it depends where the words are located in the text. The *hodie uerus sol*-incipit, which (with some variation) is found in a number of sermons in our network, does appear to reflect a deliberate choice of the authors or compilers. It is debatable whether the single sentence (*deus factus est homo ut homo ...*) that is shared between PS-AU s 128 and several of the sermons that have the *hodie uerus sol*-incipit is of sufficient weight to posit a connection. In these instances, the person working on the data-import has a particular responsibility. While individually, one of these conundrums does not endanger the validity of the dataset or the visualization based on it, an accumulation of such instances, or worse yet, a lack of consistency and uniformity in dealing with them, can eventually have an effect. There is a solution to this and several other issues, which is to work with full text-analysis and quantitatively define the percentage of textual overlap, but that is a challenge we simply cannot tackle within the confines of the current project, and which remains an ambition for the distant future.

The second issue concerns ‘ghost’ sermons, a term which can cover several different situations. PS-AU s 121 appears to be one of these, namely a sermon that is edited, but which, as far as we know now, may very well be a construction of the editors, since we do not know of any extant manuscript witnesses. It is a legitimate question whether or not there should be an authority file for this sermon in the PASSIM database. We believe it is better that there is, since we cannot be sure about the motives and resources of the seventeenth-century editors who printed it. Still, the scholarly tradition does not treat all such cases equally. In the case of PS-AU s 121, the constituent parts are identified, as we have seen, as PS-AU s 121a and PS-AU s 121b. Another example is AU s 194. In the Lovanienses edition of 1576, this sermon is printed with an addendum, identified with AU s 194 add (= CPPM I 581). However, there is no separate existing reference number for the

56 See for example the recent publications by Clemens Weidmann, “Sermo Mai 10”; Weidmann, “Zwei Weihnachtspredigten des Eucherius von Lyon.” While the richness and detail of these studies is certainly a credit to their author, they present challenges when imported into the more rigid context of a database.

sum of both parts as it is printed in the edition.⁵⁷ Again, it makes a certain degree of sense to incorporate an authority file for the combination of both texts into the PASSIM database, but should they be considered in the same way as a sermon for which manifestations in manuscripts are known?

While these issues are not ‘deal-breakers’ and we can negotiate our way around them – eventually, hopefully even solve them – the case study we developed in this article brings them clearly to the fore. In this sense, the visualization of PS-AU s 121 and its textual network forces us to take responsibility for the data and the sources we are working with.

5. Conclusion

As we mentioned at the start of this article, our purpose was to explore the potential usefulness of network visualizations to get more (and different) insights into the textual connections between patristic sermons as recorded in the PASSIM database. In terms of potential added value, we feel the experiment was successful. We can conclude that looking at the data through a visualization indeed succeeds in pointing the user to promising research avenues and case studies beyond the traditional boundaries (and focus areas) of the existing scholarly tradition. We selected PS-AU s 121 because there was already some research indicating that it was part of a complicated tradition. This was certainly true. Assuming a researcher studied the network visualization before tackling the scholarly literature, he or she would have correctly identified the texts that overlap (significantly) with PS-AU s 121 and its parts, but would also have been alerted to the research potential of several other nodes, such as the *cento* CPPM I 5036, the cluster surrounding PS-AU s 128, or AU s 369’s apparent use as a source for several other sermons. The complete network also contains several ‘linear’ connections, which might indicate a progression from one version to the next, depending on further research, namely the stemmatical relationship revealed by a full-text collation.

Furthermore – and this was a more unexpected result – the visualization encourages the user to adopt a different perspective that does away with the prioritization of the original that is prevalent in traditional visualizations of genealogical trees or stemmata. Instead, this visualization draws the eye to the medieval reception, to patterns of sermon circulation and reuse – which is exactly what the PASSIM project wants to promote. Moreover, our effort to encapsulate both textual data and manuscript data in a single visualization may provide interesting

57 According to Gryson, the fragment is “ein unechter Zusatz zu n. 1 in der Löwener Ausgabe von 1576, gedruckt in PL 38, 1015 adn. 4, aus [MAX] s Mu 61B, 1–2;” Gryson, *Répertoire Général*, 241.

insights into the combined and connected workings of physical transmission and textual adaptation.

Though it is an obvious advantage, we want to stress their adaptability as an important strength of the PASSIM dataset and the resulting networks. The case of PS-AU s 121 clearly illustrates how much more flexible a digital environment is to display these connections than, for instance, a printed stemma such as Barré's, or a cross-referenced listing in Machielsen's CPPM.⁵⁸ Although the network as displayed here is based on the work of these scholars and others – a debt we fully acknowledge – it may very well be possible that the direction, shape or number of links will change as scholarly research progresses.⁵⁹ Scholarship will continue to discover manuscripts or study them for the first time, contributing ever more nodes, edges, versions and links. However, these new discoveries have much less value in isolation than if we can integrate them with what we already know. The very flexibility of the network visualization will allow it to be adapted to new insights on particular sermons, to evolve with new research within the field, and to hopefully also prove useful to scholarship outside of the field of sermon studies.

Of course, it's not all good news. We have also been confronted with some challenging obstacles. It all comes down to a responsible use of the network, which will remain for a long time incomplete, which may have features that invite the user to attribute meaning to certain random effects, and which is subject to distortions produced by its dependence on previous traditions of scholarship. Also, we must not lose sight of the fact that the case study we selected for this experiment consists of the textual tradition of a sermon that has already been the subject of several scholarly inquiries. The manuscript tradition is littered with texts that have not (yet) enjoyed this privilege, but that may be part of networks just as complex as PS-AU s 121. It may be far more difficult to identify intriguing research avenues for the more obscure outliers. However, despite its limits, the existing tradition of heuristic research into the corpus of patristic preaching – both authentic and inauthentic – is truly remarkable, and we must realize the full potential of these tremendous achievements of previous scholarship. Additionally, we have already identified throughout the article several features that might be useful additions to mitigate some of the current defects or to expand the applicability of the network visualizations. In this conclusion, we want to take this 'Where to next?' further still, not by entering into details, but instead by singling out three further developments that could have a significant effect both on the use of networks in philological research and for the field of sermon studies.

58 Barré, "Le sermon pseudo-augustinien App. 121," 137; CPPM I 906.

59 All visualizations in the PASSIM database will therefore be exportable with the inclusion of all necessary metadata, including, for example, search criteria, time stamps, or modifications.

The point of integrating existing scholarly research in a digital context is to provide a new perspective, but also, of course, to save time. Researchers with access to a network based on a sufficiently clean and complete dataset will be able to more quickly and profoundly take their philological research to the next level. Their analysis can focus on how all these alterations and combinations affect the content, the literary qualities, and the theological stance of the texts in question and approach them from a historical or literary background, in addition to one that is purely philological. Although scholars such as Barré have rightly drawn attention to the way in which different versions of a text seem intended to be clearer or more accessible than the texts that may have been their source,⁶⁰ or to the theological or doctrinal emphases that can come to light through a detailed comparison of comparable passages,⁶¹ these kinds of questions are rarely the focus of the philological investigations that look into individual sermons or collections. Studies such as Lisa Bailey's excellent work on the Eusebius Gallicanus collection⁶² offer tantalizing glimpses of how we might dig deeper into the historical contexts of these texts and the motives and resources of their authors and compilers.

Of course, there remains an elephant in the room, and that elephant consists of the massive corpus of medieval sermons, both in Latin and the vernacular. At the moment, medieval authors are only very sporadically mentioned in the reference works we use as the basis for our dataset, and then usually only those that have famously made extensive use of patristic sources – Raban Maur, Sedulius Scotus and the like. This state of affairs immediately pinpoints a logical further step for the network visualizations and for the PASSIM Research Tool as a whole: to eventually include the connections between patristic and medieval preaching which are, at the moment, mostly overlooked. However, here, the data on which we could base our networks are far less complete still than was the case for late antique sermons as a separate category, so we must think very carefully on when and how to expand the dataset so as not to misdirect the user.

60 Barré analyses how the later MAX s Mu 61 b extr. appears to 'clarify' the similar text of AU s Cai I, 10, 1 (and/or AU s Cai I, 10a, 1); see Barré, "Le sermon pseudo-augustinien App. 121," 120. According to communication between Machielsens and Bouhot, however, this sermon likely also relies on PS-AU s Cai I, 10a; see CPPM I 2072. MAX s Mu 61 b extr. (CPPM I 5759, identical with [MAX] h 5, CPPM I 2072) is printed in Mutzenbecher, *Maximi Episcopi Taurinensis collectionem sermonum antiquam*, 253–55.

61 Several scholars have pointed out the inclusion of several 'Nestorian' elements in PS-AU s 121a that were, apparently, not a barrier for its medieval readers; see Barré, "Le sermon pseudo-augustinien App. 121," 113, n. 17. These sections are conspicuously absent from comparable passages in AU s Cai I, 10; see Barré, "Le sermon pseudo-augustinien App. 121," 117–18.

62 Bailey, *Christianity's Quiet Success*.

Finally, if we can get our corpus sorted, we must also not forget further developments in the field of network visualization and network analysis. The PASSIM project certainly does not claim to be a great innovator here. Rather, we operate with the intention to keep improving small features that will heighten the usefulness of networks wherever we are able. An important priority is to create networks that function as bridges, not end-points. This means enabling the user to click on each node, to see the details of that authority file, and to continue to explore the database from there. We hope to make the networks as dynamic and customizable as possible, so that users can visualize precisely those types of metadata (manuscript origins, attributed authors, historical collections) that are most useful to them. A particular challenge is to visualize not just historical collections, which remain after all, abstract, reconstructed entities, but also to include individual manuscripts and indicate, for instance with a second set of edges, which sermons co-occur within them. In all these pursuits, we remain very conscious of the limitations and ambiguities of network visualizations as tools for analysis.

Eventually, all of this together can help us work towards asking and answering bigger, more all-encompassing questions. We still know relatively little about early medieval traditions of preaching and the role that patristic heritage played in them. Our understanding of how collections traveled from one place to the next, and why certain collections or sermons were prioritized over others, is limited. Medieval copyists of sermons were apparently rather free with authorial attributions, but how and why the attributed author changed from one copy to the next, and what that meant for medieval ideas about authority, remains a mystery. Many such questions can be formulated, and each case study can contribute to the answer. For now, we continue to develop the visualizations in the PASSIM Research Tool, and to build up our dataset, sermon by sermon.

6. References

- Andrews, Tara and Caroline Macé, ed. *Analysis of Ancient and Medieval Texts and Manuscripts: Digital Approaches*. Turnhout: Brepols, 2014.
- Aschoff, Diethard, ed. *Anonymi contra Iudaeos* (Corpus Christianorum. Series Latina 58B). Turnhout: Brepols, 2009.
- “Studien zu zwei anonymen Kompilationen der Spätantike. *Anonymi contra Philosophos et Contra Judaeos*.” *Sacris Erudiri* 27 (1984): 37–127.
- Bailey, Lisa. *Christianity’s Quiet Success. The Eusebius Gallicanus Sermon Collection and the Power of the Church in Late Antique Gaul*. Notre Dame: University of Notre Dame Press, 2010.
- Barré, Henri. “Le sermon pseudo-augustinien App. 121.” *Revue d’Etudes Augustiniennes et Patristiques* 9, no. 1–2 (1963): 111–37.

- Boodts, Shari. “Navigating the Vast Tradition of St. Augustine’s Sermons. Old Instruments and New Approaches.” *Augustiniana* 69, no. 1 (2019): 83–115. <http://dx.doi.org/10.2143/AUG.69.1.3286703>.
- “The manuscript transmission of the *Quinquaginta homiliae*. A stem-matical analysis with a new critical edition of Augustine’s *sermo* 168.” *Revue Bénédictine* 123, no. 2 (2013): 214–47.
- Boodts, Shari, et al. *PASSIM Research Tool*, beta-version. Radboud Institute for Culture and History, 2021. Last accessed 24 July 2023. <https://passim.rich.ru.nl/>.
- Bouhot, Jean-Paul. “L’homélaire de Saint-Pierre du Vatican au milieu du VIIe siècle et sa postérité.” *Recherches Augustiniennes et Patristiques* 20 (1985): 87–115.
- Caillau, Armand Benjamin, ed. *Collectio selecta SS. ecclesiae Patrum complectens exquisitissima opera tum dogmatica et moralia, tum apologetica et oratoria*, Vol. 130. Paris: Méquignon-Havard, 1837.
- Casavecchia, Roberta, et al. *Omeliari in scrittura beneventana*. <http://omeliari.unicas.it/>. Last accessed 24 July 2023.
- Cunningham, Mary and Pauline Allen, ed. *Preacher and Audience. Studies in Early Christian and Byzantine Homiletics*. Leiden-Boston: Brill, 1998.
- De Maeyer, Nicolas and Gert Partoens. “Preaching in Sixth-Century Arles. The Sermons of Bishop Caesarius,” in *Preaching in the Patristic Era. Sermons, Preachers, and Audiences in the Latin West*, edited by Anthony Dupont, Shari Boodts, Gert Partoens and Johan Leemans, 198–231. Leiden-Boston: Brill, 2018.
- Diesenberger, Maximilian, Yitzhak Hen, and Marianne Pollheimer, ed. *Sermo doctorum: Compilers, Preachers, and Their Audiences in the Early Medieval West*. Turnhout: Brepols, 2013.
- Dolbeau, François. “La Transmission de la Prédication Antique de Langue Latine,” in *Preaching in the Patristic Era. Sermons, Preachers, and Audiences in the Latin West*, edited by Anthony Dupont, Shari Boodts, Gert Partoens and Johan Leemans, 31–58. Leiden-Boston: Brill, 2018.
- “Un sermon pseudo-augustinien pour la fête de Pâques, confronté à ses sources,” in *Latin Anonymous Sermons from Late Antiquity and the Early Middle Ages (AD 300–800). Classification, Transmission, Dating*, edited by Matthieu Pignot, 111–24. Turnhout: Brepols, 2021.
- Dupont, Anthony, Shari Boodts, Gert Partoens and Johan Leemans, *Preaching in the Patristic Era. Sermons, Preachers, and Audiences in the Latin West*. Leiden-Boston: Brill, 2018.
- Echard, Siân and Stephen Partridge. *The Book Unbound: Editing and Reading Medieval Manuscripts and Texts*. Toronto: University of Toronto Press, 2004.
- Folliet, Georges. “Deux nouveaux témoins du Sermonnaire carolingien récemment reconstitué.” *Revue d’Etudes Augustiniennes et Patristiques* 23, no. 1–2 (1977): 155–98.

- Grégoire, Réginald. *Homélieux liturgiques médiévaux: Analyse de manuscrits*. Spoleto: Centro italiano di studi sull'alto medioevo, 1980.
- Gryson, Roger. *Répertoire général des auteurs ecclésiastiques latins de l'antiquité et du haut Moyen Âge. 5^e édition mise à jour du Verzeichnis der Sigel für Kirchenschriftsteller commence par B. Fischer, continué par H. J. Frede*. Freiburg: Herder, 2007.
- Hamidović, David, Claire Clivaz, and Sarah Bowen Savant. *Ancient Manuscripts in Digital Culture. Visualisation, Data Mining, Communication*. Leiden-Boston: Brill, 2019.
- Lambot, Cyril. "La tradition manuscrite des Sermons de saint Augustin pour la Noël et l'Épiphanie." *Revue Bénédictine* 77, no. 3–4 (1967): 217–45.
- Leclercq, Jean. "Les inédits africains de l'homiliaire de Fleury." *Revue Bénédictine* 58, no. 1–4 (1948): 53–72.
- van Lit, L. W. Cornelis. *Among Digitized Manuscripts. Philology, Codicology, Paleography in a Digital World*. Leiden-Boston: Brill, 2020.
- Liverani, Francesco, ed. *Spicilegium Liberianum*. Vol. 1. Florence: Cambiagi, 1863.
- Machielsen, Johannes. *Clavis patristica pseudoepigraphorum medii aevi*. Vol. 1, *Opera homiletica* (Corpus Christianorum. Series Latina). Turnhout: Brepols, 1990.
- "Contribution à l'étude de la pseudépigraphie médiévale en matière patristique. Problèmes d'attribution et de remaniement des textes homiletiques," in *Fälschungen im Mittelalter. Internationaler Kongress der Monumenta Germaniae Historica. München, 16.–19. September 1986, Teil 5: Fingierte Briefe, Frömmigkeit und Fälschung, Realienfälschungen*, edited by Detlev Jasper, 345–59. Hannover: Hansche, 1988.
- Mai, Angelo, ed. *Nova Patrum Bibliotheca*. Vol. 1. Rome: Typis Sacri Consilii Propagando Christiano Nomini, 1852.
- Manus Online: Manoscritti delle biblioteche italiane*. Last accessed 24 July 2023. <https://manus.iccu.sbn.it/>.
- Martin, Michael. "The Italian Homiliary: An example *pro omnibus bonis operibus* produced according to the 'new' Carolingian homiletic genre and reform measures." *Sacris Erudiri* 48 (2009), 261–338.
- Migne, Jean-Paul and Adalbert-Gautier Hamman, ed. *Patrologiae cursus completus. Supplementum*. Vol. II–III. Paris: Garnier Frères, 1960–1963.
- Migne, Jean-Paul, ed. *Patrologiae cursus completus. Series Latina*. Vol. 39. Paris: s.n., 1865.
- Mutzenbecher, Almut, ed. *Maximi Episcopi Taurinensis collectionem sermonum antiquam nonnullis sermonibus extravagantibus adiectis*. (Corpus Christianorum. Series Latina 23). Turnhout: Brepols, 1962.
- Petschenig, Michael, ed. *Cassianus, De Institutis coenobiorum, De incarnatione contra Nestorium*. (Corpus Scriptorum Ecclesiasticorum Latinorum 17). Vienna: Österreichischen Akademie der Wissenschaften, 2004.

- Pignot, Matthieu, ed. *Latin Anonymous Sermons from Late Antiquity and the Early Middle Ages (AD 300–800). Classification, Transmission, Dating*. Turnhout: Brepols, 2021.
- Pratt, Karen, Bart Besamusca, Matthias Meyer, and Ad Putter, ed. *The Dynamics of the Medieval Manuscript. Text Collections from a European Perspective*. Göttingen: V&R unipress, 2017.
- Roelli, Philipp, ed. *Handbook of Stemmatology. History, Methodology, Digital Approaches*. Berlin: De Gruyter, 2020.
- Sharpe, Richard. *English Benedictine Libraries: The Shorter Catalogues*. London: British Library, 1996.
- Steinova, Evina. “The Oldest Manuscript Tradition of the *Etymologiae* (Eighty Years After A. E. Anspach).” *Visigothic Symposia* 4 (2020): 100–43.
- “Two Carolingian Redactions of Isidore’s *Etymologiae* from St. Gallen.” *Mittellateinisches Jahrbuch* 56, no. 2 (2021): 298–376.
- Tarrant, Richard. *Texts, Editors, and Readers. Methods and Problems in Latin Textual Criticism*. Cambridge: Cambridge University Press, 2016.
- Weidmann, Clemens. “Der Augustinuscento *Sermo Mai* 66: Mit einem textkritischen Anhang zu Predigten auf Perpetua und Felicitas,” in *Sermo doctorum: Compilers, Preachers, and Their Audiences in the Early Medieval West*, edited by Maximilian Diesenberger, Yitzhak Hen and Marianne Pollheimer, 59–79. Turnhout: Brepols, 2013.
- “Discovering Augustine’s Words in Pseudo-Augustinian Sermons,” in *Tractatio Scripturarum. Philological, exegetical, rhetorical, and theological studies on Augustine’s sermons*, edited by Anthony Dupont, Gert Partoens and Mathijs Lamberigts, 41–58. Turnhout: Brepols, 2012.
- “*Sermo Mai* 10: Eine authentische Predigt des Augustinus?” *Augustiniana* 60, no. 3/4 (2010): 173–92.
- “Zwei Weihnachtspredigten des Eucherius von Lyon,” in *Edition und Erforschung lateinischer patristischer Texte: 150 Jahre CSEL*, edited by Victoria Zimmerl-Panagl, Lukas J. Dorfbauer and Clemens Weidmann, 111–38. Berlin: De Gruyter, 2014.
- Wilmart, André. “Easter Sermons of St. Augustine: Some New Texts.” *The Journal of Theological Studies* 27 (1926): 337–56.
- Witt, Jeffrey, Michael Stenskjær Christensen and Ueli Zahnd. “Re-Conceiving the Christian Scholastic Corpus with the Scholastic Commentaries and Texts Archive,” in *Digital Humanities and Christianity. An Introduction*, edited by Timothy Hutchings and Claire Clivaz, 47–76. Berlin: De Gruyter, 2021.