

**Establishing the authentic corpus of the Latin verse of Paul the Deacon:
a philological, textual and statistical study**

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Abstract

The thesis is a study, in eight chapters, of the poetic corpus attributed to the Lombard cleric Paul the Deacon (ca. 725-799) and its object is to determine the likelihood of his authorship of each of sixty-eight poems.

Chapter 1 describes the state of literary culture in the period of Paul's writings, summarises the two major biographical studies of him and some shorter, but important studies, and discusses the content of the two major editions of his poems and the extent to which their editors agree and disagree. Chapter 2 reviews nine studies of the works of Paul's recent predecessors and contemporaries, commenting on the types of evidence employed to establish authorship and the extent to which such evidence has yielded reliable conclusions. Chapters 3-7 are an original contribution to the investigation of Paul's authorship. Chapter 3 provides the first systematic study of the difficulties specific to studying the poetic corpus of Paul. Chapters 4 and 5 (the latter devoted entirely to the hymns) give a detailed account of the philological, textual and historical evidence for and against his authorship of the works studied, and an estimate of the likelihood of his authorship. Chapter 6 describes the relevant principles of statistical testing, while Chapter 7 describes its employment in this study, including the particular test devised for investigating metrical patterns in poems composed in dactylic metres. The test is illustrated, and its reliability is evaluated by ascertaining whether it has any propensity to throw up false positives or negatives, before applying it to poems of doubtful authorship. Finally, Chapter 8 summarises the conclusions, proposing the addition of four poems, including one which has never before been unequivocally attributed to him, to the provisional canon consisting of the twenty-eight which Dümmler and Neff agree are the work of Paul.

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Preface

This study has its origin in two events which took place during my school-days in the 1940s. One was that I became interested in choral singing, and the other was my choice of Greek rather than Latin as the classical language to study for School Certificate and the concomitant exemption from the Matriculation examination. Over the years my musical interest became focused on mediaeval, Renaissance and baroque sacred music, which in turn led me to regret that I had never formally studied Latin. That deficiency was to some extent remedied during my studies with the Open University (2004-10). The classics elements of my degree in Humanities and Classical Studies consisted of two courses in Latin and two in Greek, while the humanities components included a course on the Renaissance in Europe. In 2007, while I was engaged in the Continuing Classical Latin course, I sang with a group which performed a Mass for the feast-day of St John the Baptist, and it was then that I sang the hymn for that feast, *Ut queant laxis*, for the first time. I knew that the words of its first verse were the source of the mnemonic device invented by Guido d'Arezzo in the mid-eleventh century for the purpose of teaching sight-singing, and which, with the inclusion of *te* for the seventh note of the octave and the replacement of *ut* by *doh*, was the basis of the tonic solfa system used by teachers in the elementary schools of nineteenth- and twentieth-century England. The reproduction of the plainchant to which *Ut queant laxis* was sung shows why it was chosen; the initial syllables of each hemistich of the first verse fall on an ascending scale, the notes of which are currently represented as G, A, B, C, D, E. These are the notes of the so-called hard hexachord, in which the B is natural, rather than flat, and it is those six notes which are the lowest notes of Guido's gamut (so called since the G which is the *ut* of the root hexachord was conventionally represented by Γ). In 2008, while studying the Renaissance in Europe, I read a good deal about the culture of the Carolingian and Ottonian eras, and came across references to Paul the Deacon, to whom the words of *Ut queant laxis* have been widely, though by no means universally attributed. I became interested in the controversy about its authorship and, after graduating from the Open University, decided to investigate the possibility of engaging in some postgraduate research on the topic. In the course of the preparatory work which I carried out before formulating a research proposal, I discovered that there were some sixty verse compositions attributed to Paul by various scholars, but that only fifteen were attributed to him in all four of the major studies. The scope of this study extends, therefore, to the entire body of poetry and hymnody attributed to Paul, with a view to establishing, so far as possible, the authentic corpus of his verse works.

In the course of a working life now in its seventh decade, first as a lecturer in chemistry in the University of London (1958-82) and now, after qualification and call to the Bar in 1983, as a practising barrister, I have devoted a great deal of time to obtaining evidence, assessing its credibility, considering the inferences that may properly be drawn from it, and assessing the relative weight to be accorded to conflicting items of evidence. Although I have engaged in

those tasks in very different contexts from that of the present study, I believe that the same principles of evaluation which I have applied to the resolution of the scientific and legal questions that have arisen in my working life can be successfully applied in the evaluation of the very different types of evidence which fall to be analysed in the course of this work.

Acknowledgments

I am deeply indebted to my supervisor, Dr Mary Garrison, initially for her agreement to take on the supervision of this project, without which it would never have seen the light of day, and also for her generous and unfailing help and guidance throughout its progress. An aspect of that help which I particularly wish to acknowledge is that she was instrumental in introducing me to two scholars, Dr. Francesco Marzella and Dr Pierre Chambert-Protat, who gave me valuable assistance on one important area of this work. I am extremely grateful to them, and to Ilaria Ciolli, of the Biblioteca Apostolica Vaticana, for their careful examination of the manuscript in the Ottoboniani collection, Rome, Biblioteca Apostolica Vaticana ott.lat.532, which conclusively demonstrated, despite erroneous assertions in publications from 1980 onwards, that that manuscript does not contain the text of the hymn in honour of S. John the Baptist, *ut queant laxis*, whose authorship has generated more controversy than that of any other verse composition attributed to Paul. I am additionally indebted to Dr. Chambert-Protat for suggesting how that error might have arisen. I am also grateful to my friend, fellow-singer and classicist, Muriel Hall, for assistance with the complexities of scansion displayed in early Carolingian poetry and with other questions of prosody and vocabulary. Finally, it is a pleasure to acknowledge the continued support and interest of my wife and family, my friends in the world of early music, and my professional colleagues, particularly the management of my Chambers, whose support has extended to indulging my academic pursuits while ensuring the smooth functioning of my legal practice.

Author's declaration

I declare that this thesis is a presentation of original work and that I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.

Establishing the authentic corpus of the Latin verse of Paul the Deacon: a philological, textual and statistical study

Introduction

Who was Paul the Deacon ?

A man so various that he seemed to be

Not one, but all mankind's epitome

When John Dryden so described George Villiers, second duke of Buckingham, the 'Zimri'² of the poem in which those lines appear, it was with no complimentary intention towards their subject, whom he went on to lampoon as one who

in the course of one revolving moon

Was chymist, statesman, fiddler, and buffoon

Paul, in contrast, was a figure of the European eighth-century cultural landscape worthy of the laudatory description of the first couplet. Manitius, in his seminal work on mediaeval Latin literature,³ numbered him among the 'universal men of letters'. And Paul was truly versatile; teacher, grammarian, philologist, historian, composer of an important homiliary, religious controversialist and, most importantly in the context of this thesis, poet and hymnographer. Yet Paul was no mere scholarly recluse. He was a prized member of, and performed valuable functions in the Lombard royal court at Pavia as tutor to Desiderius' daughter Adelperga and subsequently, if Neff is to be believed,⁴ as adviser to Desiderius at the time of another of his daughters' betrothal to Charlemagne, and during Desiderius' rapid repudiation of that alliance. When Adelperga married the newly created Duke of Benevento, Arichis II (758-787) Paul soon followed them to the Beneventan court, and Belting⁵ has much to tell us about Paul's role in developing the centre of learning that arose there under Arichis' rule.

Dales testifies to the wide scope of his role at Charlemagne's court, particularly mentioning his composition of the homiliary, and to the fact that he was an author of some importance

2 For the identification of the Biblical Zimri, see J.Q. Wolf, 'A note on Dryden's Zimri', *Modern Language Notes* 47(2), (1932), 97-99, who proposes both the Zimri who brought a Midianite woman into the Israelite camp (Num. xxv, vv. 6-15) and the Zimri whose sins included 'the treason that he wrought', 1 Kings xvi, 9-20. The poem is Dryden's satire, 'Absalom and Achitophel'.

3 M. Manitius, 'Die universalen Schriftsteller: 41, Paulus Diaconus' *Geschichte der lateinischen Literatur des Mittelalters*, vol. 1 (Munich: C.H. Beck, 1911-31): 257-72.

4 K. Neff, *Die Gedichte des Paulus Diaconus: Kritische und erklärende Ausgabe* (Munich: C.H. Beck, 1908), in the commentary to *carm. vi, Ordinar unde tuos laudes* (ML 46), Paul's poem in praise of S. Benedict, 23-24.

5 H. Belting, 'Studien zum Beneventanischen Hof in 8. Jahrhundert', *Dumbarton Oaks Papers* 16, (1962): 141- 93, particularly section IV, Hofschule und Kunst unter Arichis; 1, Das Bildungszentrum am Hof und Paulus Diaconus, 164-68.

before that time. This chimes with Goffart's assessment⁶ that 'However brief, Paul's stay at the Frankish court was a professional and personal success'. Of Paul's poetry, Dales says that:

Throughout his life, Paul wrote poetry of various kinds. In addition to the poem on his brother's misfortunes, he wrote several epitaphs, some mildly satirical poems on the craze among Charles' court scholars of exchanging riddles and letters in verse, although he obligingly furnished his share, two poems in praise of S. Benedict, and a beautiful and justly famous description of Lake Como in his homeland. Aside from those on his brother and Lake Como, his poems are not remarkable, although they are more correct than Alcuin's. For those two, however, he must be ranked among the major Carolingian poets⁷.

Paul was one of four scholars who stood out as the intellectuals of the Lombard court, the others being Fardulf, Peter of Pisa and Paulinus of Aquileia. Unlike them, he did not prosper in the immediate aftermath of Charlemagne's conquest of Lombardy in 774. Fardulf and Peter of Pisa joined Charlemagne's entourage soon afterwards; Paulinus did so in 776, to his advantage, as his family had been loyal to Charlemagne⁸. Paul's brother, however, had been implicated in the rebellion of 776 and suffered confiscation and exile; Paul himself was confined to monastic life for several years and when he did join Charlemagne's court in the early 780s, he compared his life there to a prison.⁹ But Charlemagne developed great affection for the '*famulus supplex*'¹⁰ who, among other works, composed the homiliary which attained such importance in Charlemagne's programme of religious reform, who became '*familiaris clientulus noster*', and received, after his return to Montecassino, a verse greeting ostensibly from Charlemagne but which was almost certainly composed by Alcuin¹¹.

This part of the Introduction ends with a tribute of a quite different nature. When William Dudley Foulke¹² translated the *Historia Langobardorum* into English, he sent a copy to his friend, the then President, Theodore Roosevelt, who concluded his reply with the words:

'What a delightful old boy the Deacon was; and what an interesting mixture of fact and fable he wrote !'

6 W. Goffart, *The Narrators of Barbarian History (A.D. 550-800)*, (1988 rpt revised edn., Notre Dame: Indiana, Notre Dame University Press, 2005), 342.

7 R.C. Dales, *The Intellectual Life of Western Europe in the Middle Ages* (Brill: Leiden, 1995), 83-85.

8 R.G. Witt, *The Two Latin Cultures and the Foundation of the Renaissance* (Cambridge: Cambridge University Press, 2012), 18-19.

9 Neff, 'Brief an Theudemar', *Gedichte*, xiv, 69-73. '*sed ad comparationem vestri coenobii palatium carcer est*'

10 Neff, 'Paulus an Karl', *Gedichte, carm. xxxii*, in the prose dedication preceding the poem, *Ampla mihi vestro, est humili devotio servo*, 133.

11 Neff, 'Karl an Paulus', *Gedichte, carm. xxxiii, Parvula rex Karolus seniori carmina Paulo*. 135-38.

12 E. Peters, ed., W.D. Foulke, trans. *The History of the Langobards*. Philadelphia: University of Pennsylvania Press, 1907. The quotation is from the introduction by Peters to the paperback reprint edition entitled *History of the Lombards*, Philadelphia: University of Pennsylvania Press, 1974, reprinted 2003), vii. Peters refers to Foulke in the heading to the introduction as 'a sometime medievalist from Indiana'.

What verse is Paul said to have composed ?

Paul may have written fable as well as fact, but almost everything that was written about him between his death in the last decade of the eighth century and the studies by Mabillon (1632-1707)¹³ and Lebeuf (1687-1760)¹⁴ was, as Bethmann subsequently demonstrated, fable.¹⁵ The task of establishing the authentic canon of Paul's verse compositions, which is the purpose of the present work, is made difficult by the lack of any collection of Paul's poetry, its dissemination among a large number of manuscript sources, and early attributions which lack evidential support. This work systematically examines all the available evidence for and against Paul's authorship of the sixty-eight poems which constitute its subject-matter.¹⁶ It explores the divergences of opinion of the two major biographers,^{17, 18} the disagreements between the content of the two major editions, the criticism in Neff's edition¹⁹ of the conclusions reached by the biographers and of the content of the edition by Dümmler²⁰ which preceded his own edition, and the subsequent eleven decades of more limited studies. In so doing, it examines and applies methods used in the authorship studies which are discussed in Chapter 2. It also tests and employs statistical analysis of metrical characteristics by a method which I have specially adapted for this study.

The first known attribution of any poetic work to Paul is by the twelfth-century Peter the Deacon.²¹ It is, as this thesis will show, quite likely that he correctly attributed the hymn *ut queant laxis*, (ML 64) in honour of S John the Baptist, to Paul, though he gave no reasons for doing so. The legend subsequently woven by Durandus (1236-89)²² about its composition adds nothing to the credibility of an attribution which Raby described as 'a late and uncertain tradition.'²³ It is very much more certain that the Neapolitan physician, Petrus Pipernus, was wrong in attributing two poems in honour of the warrior saint Mercurius to Paul, in his

13 J. Mabillon, *Acta Sanctorum Ordines S. Benedicti* (Paris, vol. I, 1668; vol.II, 1703).

14 J. Lebeuf, *Dissertations sur l'histoire ecclésiastique et civile de Paris*, vol I, (Paris, 1739), 404-423.

15 L. K. Bethmann, 'Paulus Diaconus Leben und Schriften,' *Archiv der Gesellschaft für ältere deutsche Geschichtskunde* 10 (1851): 247-334, particularly at 250-252 where he exposes the fantasies and fabrications of the Salernitan Chronicle, Benedict of Soracte, Leo of Ostia and Peter the Deacon, among others writing in the first four hundred years after Paul's death.

16 The Master List at Table A1, in the Appendix, is a numbered list of those poems, which are identified throughout this work by their Master List (ML) numbers.

17 Bethmann, 'Paulus Diaconus Leben und Schriften.'

18 J.S.F. Dahn, *Paulus Diaconus* (Leipzig: Breitkopf and Hartel, 1876).

19 K. Neff, *Die Gedichte des Paulus Diaconus: Kritische und erklärende Ausgabe* (Munich: C.H. Beck, 1908).

20 E. Dümmler, (ed.), *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini*, vol. I (Berlin: Weidmann, 1881), 27-86, 625-28.

21 Petrus Diaconus, *De viris illustribus casinensibus*, c.8, L.A. Muratori (ed.), *Rerum Italicarum scriptores*, vol.6. (Milan: Muratori, 1725): 10-62.

22 Gulielmus Durandus, *Rationale divinatorum officiorum* (Naples: J. Dura, 1859): 681-82.

23 F.J.E. Raby, *Christian Latin Poetry*, 2nd edn., (Oxford: Clarendon Press, 1953): 164-5.

'wonderful book' *De magis effectibus*,²⁴ and that Arnold of Wion (1554-1610)²⁵ was equally in error when he attributed the poem *O Benedicta soror*, in praise of Benedict's sister, S, Scholastica, to Paul.

Studies by Mabillon and Lebeuf identified nine of the twenty-eight poems which are now generally accepted as being the authentic work of Paul, and Lebeuf's study of the manuscript Paris, BnFr lat. 528, s. ix^{ex} also identified poems by Peter of Pisa and (ostensibly) by Charlemagne from the court exchanges in which Paul took part. The first collection of verse attributed to Paul was published in *Patrologia Latina*²⁶ and consists of fifteen poems. Ten of these are now accepted as authentic. Four were identified by Lebeuf, five are epitaphs for members of Charlemagne's family and appear in the *Liber de Episcopis Mettensibus*, and one is a hymn found in book I of the *Historia Langobardorum*. That collection also included the poems erroneously attributed to Paul by Petrus Pipernus and Arnold of Wion, as well as *dux, via, vita, tuis*, (ML 24) a life of the abbot Maurus which recounts events that took place after Paul's death, and *clare* (or *clara*) *beati agnoscere* which Bethmann rejected owing to the barbarous nature of its versification²⁷.

Bethmann's study was the first to attempt any systematic approach to the authorship of the verse compositions hitherto attributed to Paul. He²⁸ commented on thirty-five poems and concluded that twenty-five were the work of Paul²⁹, (though he subsequently doubted the authenticity of the two S. Mercurius poems), his authorship of six was doubtful³⁰ and that four had been wrongly attributed to him³¹. The next major study, by Dahn, devotes more attention to biography than to poetry, but in his classification of the poems,³² all sixteen which he attributes certainly to Paul, had been accepted as authentic by Bethmann, as had four of the five which he considers very probably the work of Paul. However, there are substantial areas of disagreement between them, the most striking being Dahn's outright rejection, which has found no subsequent support, of Paul's authorship of the Lake Como poem mentioned above. Dahn also identifies six poems, not attributed to Paul by Bethmann, as perhaps, or probably, the work of Paul, though subsequent studies support him in only one of those six cases.

24 Petrus Pipernus, *De effectibus magis libri sex; ac De nuca maga Beneventana liber uncius* (Naples: Colligni, 1634).

25 Arnold de Wion, *Lignum vitae, ornamentum et decus Ecclesiae*, vol.II. (Venice: Angelericus, 1595)

26 J-P. Migne, *Patrologia Latina* (Paris, 1844-64), vol. 95, *Carmina*, clms. 1584-96. The *Epistolae* which precede the *Carmina* include a letter to Abbot Theudemar which concludes with a valedictory poem.

27 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 324-25.

28 Bethmann (1812-67) was a historian, librarian and professor; see O. von Heinemann, 'Bethmann, Ludwig Konrad', *Allgemeine Deutsche Biografie* 2 (1875), 573-574.

29 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 288-98.

30 *Ibid.*, 319-20.

31 *Ibid.*, 320-25.

32 Dahn, *Paulus Diaconus*, 70-71.

Those two studies were followed by the two major editions of Paul's poems, by Dümmler in 1881³³ and Neff in 1908³⁴. Both of those editions also contain the poems by Peter of Pisa and (ostensibly) by Charlemagne which were part of the exchanges within the court circle, and the epitaph to Paul written by Hilderic of Monte Cassino. Neff's edition also contains some biographical material. The twenty-eight poems published as the work of Paul in both editions include nineteen of the twenty-five which Bethmann considered authentic. There are ten on which they disagree, four being accepted only by Neff and six, only by Dümmler. These discrepancies led Neff to remark, in his foreword, that the opinions of Bethmann and Dahn on the solution of authorship questions had already diverged widely from one another and that Dümmler had not always arrived at the right decisions³⁵. In the eleven decades since the publication of Neff's edition, the likelihood of Paul's authorship of many individual poems has been studied, and a new edition was published in 2014³⁶, but the content of the authentic corpus of Paul's verse remains to be established.

33 Dümmler, *PLAC I*, 27-86.

34 Neff, *Gedichte*.

35 Neff, *Gedichte*, Vorwort, vii.

36 L. Citelli, ed., *Paolo Diacono Opere/2*, Corpus Scriptorum Ecclesiae Aquilensis vol. IX/II, (Rome: Citta Nuovo Editrice, 2014), 357-451.

Establishing the content of the authentic corpus

There are nine and sixty ways of constructing tribal lays
And every single one of them is right

Rudyard Kipling, 'In the Neolithic Age'³⁷

Studies of authorship can be conducted in many different ways, and the choice of method is principally determined by two factors. These are the purpose of the study and the nature of the available information. The authorship studies of early mediaeval authors reviewed in this work are of three main types, and it is an essential preliminary to the attribution study carried out in this work that their purpose and the evidence on which they rely are considered. The studies of Bede and Aldhelm identify features of interest to the investigator and stylistic variations over time or within the genre in which the author has written. In addition, the frequencies of occurrence of stylistic features of Aldhelm's work are compared with those of other Anglo-Latin poets, but the study does not extend to the attribution of any poems of doubtful authorship. The studies of *Ad Fidolium* and other quantitative poems, and of the *Libri Carolini*, which do not quantify the frequencies of occurrence of any particular feature, employ a combination of historical and philological evidence in order to decide which of two candidates is the author of the work in question. The investigations of the verse *corpora* of Theodulf of Orlèans and Alcuin each proceed from earlier editions of their poetic *corpora* which appear to descend from unique manuscript assemblages, and those studies employ a two-stage process for identifying the poems securely attributable to the putative author. The first stage is the 'authenticity criticism' (*Echtheitskritik*) in which the poems that satisfy any one of the authenticity criteria laid down in the study are identified. Those criteria are not identical in the two studies but, broadly speaking, are historical facts which identify the author with the subject-matter of the poem, self-ascription in the poem, and manuscript evidence such as superscriptions, subscriptions, rubrics and marginalia. The second stage requires the identification of lexical, metrical and other stylistic features common to that group of poems and comparison of the corresponding features of the remaining poems with those of that group. That is the approach to attribution adopted in the present study.

One problem encountered in this study which does not seem to have arisen in any of the studies referred to above is a direct conflict between indications of authorship obtained from different criteria. The thesis therefore discusses the nature of evidence on a technical level and the factors which potentially affect its reliability. However a study is carried out, the evidence consists either of statements about authorship or facts from which inferences about authorship may be drawn. The reliability of statements about authorship depends on the credibility of the

³⁷ R. Kipling, *The Seven Seas* (London: Methuen & Co., 1896), 124.

maker of the statement, the extent to which it has been accurately transmitted, and the length of time which has elapsed between the occurrence of the fact and the making of the statement. The reliability of statements of fact of course depends on whether there is any reason to doubt the truth of the fact relied upon, but the more serious problems for the investigator are the strength of the inference that may be drawn from it and the possibility that it may support more than one inference. The weight to be afforded to any item of evidence is for the investigator to decide and it may be that no firm conclusion as to authorship can be reached. As Chapter 4 of this thesis states, in the absence of convincing evidence, an anonymous work must remain anonymous.

Outline of the thesis

Chapter 1 surveys Paul's life and times, summarises the content of the major editions of his poetry and the conclusions reached by the most important studies, and identifies a 'provisional canon' of poems generally considered to be his authentic work. That material has never before been fully evaluated in this way. Chapter 2 surveys the studies of early mediaeval authors referred to above as a basis for constructing the method employed, and sets out the approach adopted in this work. Chapter 3 is concerned with the difficulties specific to the study of Paul's poetry and Chapters 4 and 5 (the latter of which is entirely concerned with the hymns attributed to him) set out and evaluate the evidence for and against Paul's authorship of each of the sixty-eight poems for which the possibility of his authorship had been considered before the commencement of this work. Chapters 6 and 7 are devoted to the statistical part of this study. Chapter 6 explains the principles of the statistical method employed, illustrates its application, and suggests an original simple test for deciding whether an analysis of metrical characteristics is likely to be of any value in an attribution study. Chapter 7 sets out the investigation of the tendency of the statistical test to throw up errors and the extent of its value in determining the authorship of selected *dubia*. The final chapter draws together the conclusions reached as a result of the investigations described in Chapters 3-7.

There are two broad conclusions. The first is that there are four credible candidates for addition to the twenty-eight that are generally agreed to constitute the canon of Paul the Deacon's verse and six more for which credible evidence may eventually appear. The second is that statistical analysis of metrical characteristics is, in principle, a useful component of an attribution study of verse *corpora*. The analysis of syllable counts which I devised for this study has the advantage of dividing the data into fewer categories than full metrical patterning, thus potentially increasing the reliability of the analysis, but at the cost of reducing its discriminatory power. The verse corpus studied here is small and of a varied nature. In any similar case, an

investigator must decide whether such analysis is likely to be of value and, if so, judge the appropriate balance between reliability and discriminatory power.

Chapter 1: Paul's life and times, and the poetic corpus considered in this study

This thesis sets out to resolve the long-standing scholarly problem of establishing the corpus of verse that can be securely attributed to Paul. It is appropriate to begin with a brief account of Paul's life and times before considering the current state of opinion on his corpus of verse. As we will see, the question has not been considered seriously or in detail since the early twentieth century. The standard surveys and reference books devoted to Paul's literary output pay scant attention to his poetry and provide little or no evidence for such attributions as they contain. The question treated here is, therefore, in urgent need of proper resolution.

1.1: Brief background to Paul

Paul is one of the most important and interesting figures in the cultural history of eighth-century Western Europe, and he has come down to us as a writer of great versatility and erudition. His best known work is the *Historia Langobardorum*, though he also composed grammatical, philological and homiletic works, as well as other histories. Bethmann, in his ground-breaking study of Paul's life and works,³⁸ credits Paul with knowledge of a formidable array of religious and secular sources, ranging from the Bible and the Fathers of the Church to the seventh-century works which include the history written by Secundus of Trent (d.612), the Edict of Rothari (promulgated in 643) and the life of St. Columbanus by Jonas (ca 640); he speaks of Paul's many-sided erudition, derived from industrious study of the classics and much practice.³⁹

Of Paul's verse compositions, Bethmann observes that Paul was not born to be a poet, but that some of his poems are not lacking in beauty, and that he moves with ease between different poetic forms of both an antique and a more modern nature, mentioning his use of the hexameter and the sapphic, alcaic, elegiac and Archilochian metres, and, in one of the rhythmical forms frequently found in Lombard poetry, a few instances of poems in strophes of three long lines of fifteen syllables.⁴⁰ He cites one of these, the acrostic poem to Adelperga, *A principio saeculorum* (ML 10), modelled after the manner of Ennodius and Fortunatus, as one of the few instances in which Paul failed to keep himself free from the verse artistry which came to prevail among later Christian poets; another is the epanaleptic poem in praise of S. Benedict, *ordiar unde tuos sacer* (ML 46), a form which had been employed by Martial and, among later poets, by Sedulius.⁴¹

38 L. Bethmann, 'Paulus Diaconus Leben und Schriften,' *Archiv der Gesellschaft für alte deutsche Geschichtskunde* 10, (1851), 247-334.

39 *Ibid.*, 276.

40 *Ibid.*, 277. It is in twelve three-line stanzas, the acrostic spelling out ADELPERGA PIA.

41 *Ibid.* 278.

How was it possible for Paul to acquire so many and varied attainments? This is a difficult question to address, since little of the literary culture of the time is visible to us. Fontaine⁴² considered that the Latin culturalisation of the Lombards was much slower in Italy than in post-Isidorian Spain, even if the arrival in Pavia of a Catholic dynasty, of which Perctarit (*661-2) was the first member, and Cunincpert (*679-700) the most prominent supporter of literary culture, hastened the process; but literary production only became perceptible from the next century onwards. For the composition of the *Historia Langobardorum*, Paul drew on the no longer extant *Historiola de gestis Langobardorum* by Secundus of Trent (d. 612), and the *Origo Gentis Langobardorum* which Fontaine dates to approximately 671.⁴³ Extant Lombard poetry of the seventh and early eighth century is largely represented by inscriptions⁴⁴ and epitaphs. There is no discernible tradition of any Lombard production of metrical poetry at that time; the surviving verses relating to events at around the turn of the century such as the epitaph to Cunincpert's mistress Theodote and the poem celebrating the conclusion of the Three Chapters controversy⁴⁵ are not metrical, but rhythmical.⁴⁶

Bethmann refers to several Lombard monarchs who ruled during the seventh and the first half of the eighth century as patrons and protectors of the learned. The first of these was Theudelinda, the wife of Agilulf (*590⁴⁷-616) and subsequently co-ruler with her son Adalaold (*616-626) until his death. He identifies Cunincpert (*679-700), Liutprand (*712-744) and his successor, Ratchis (*744-749) as continuing to exercise such patronage.⁴⁸ Riché, in discussing the role of both monastic⁴⁹ and court schools⁵⁰ in education in Lombardy and Northern Italy during the eighth century, expresses similar views, describing Theudelinda as a patron of both literary and artistic culture⁵¹ and Cunincpert as a cultivated prince who employed artists and poets to decorate the churches he built with metrical inscriptions.⁵² Paul recounts that

42 J. Fontaine, "Education and learning" in *The New Cambridge Mediaeval History*, vol. I, c. 500-c. 700, ed. P. Fouracre, (Cambridge: Cambridge University Press, 2005), 753.

43 *Ibid.*, 759.

44 F. de Rubeis, 'iscrizione dei re longobardi' in F. Stella (ed.), *Poesia dell'alto medioevo europeo, manoscritti, lingua e musica dei ritmi latini*, Atti della euroconferenze per il Corpus dei ritmi latini (IV-IX sec.) Arezzo 6-7 Novembre 1998 e Ravello 12-15 Settembre 1999 (Florence, 2000), 233-37.

45 P. Riche, *Education and Culture in the Barbarian West*, J. J. Contreni, trans., (Columbia: University of South Carolina Press, 1978). He states, at 409, that Cunincpert asked one Stephen of Pavia to compose a celebratory poem and that Stephen preferred to compose a rhythmical poem because of his admitted ignorance of classical metres.

46 *PLAC IV*, tom. 2.3, 718, under the title *rhythmii langobardici*; the poems mentioned are at 725 and 728 respectively.

47 Regnal years are taken from the list of rulers in N. Christie, *The Lombards*, (Oxford: Blackwell, 1998), xxv. The asterisked dates are those of the first year of rule.

48 Bethmann, 'Paulus Diaconus Leben und Schriften,' 275.

49 Riché, 'The Beginnings of Christian Culture in the Lombard Kingdom', in *Education and Culture in the Barbarian West*, 336-44.

50 *Ibid.*, 'Urban Schools in Northern Italy', 404-14.

51 *Ibid.*, 339.

52 *Ibid.*, 409.

Cunincpert employed a grammarian named Felix at his court and held him in high regard. This Felix, the uncle of Paul's tutor, Flavianus, was a deacon,⁵³ and Riché states that Liutprand (*712-744), who had been raised with Cunincpert's son, continued to welcome lettered clergymen.⁵⁴

Another aspect of the Lombard culture is the production of illuminated manuscripts. Nees has carried out an extensive comparison of features of the Godescalc Evangelistary, composed at the court of Charlemagne and dated to 781-83, and the Egino Codex, which he describes as 'a large collection of homilies made, according to the dedication page, for Egino, bishop of Verona (796-99)'⁵⁵. None of its content is later than the sixth century.⁵⁶ Nees refers to an Italian tradition reflected in the Godescalc Evangelistary and to the argument of Mitchell that:

Lombard Italy was the creative centre for the new art, the level of culture at the Frankish court was much lower than that of the sophisticated Lombards whose kingdom was conquered by Charlemagne in 774, and that the Egino Codex should be seen as one of the tragically few remaining examples of the lost Lombard production of luxury manuscripts, seen and appreciated by Charlemagne and his counsellors, who adopted and elaborated upon this fundamentally Lombard art⁵⁷.

Nees, however, sees the similarities between the two volumes as being 'too specific and systematic to be the product of a mere general affinity or broad tradition, and arguably too specific for the role of a model or "influence" working in either direction'.⁵⁸ Whether or not that view is sustainable, the Lombard production of luxury manuscripts is an interesting aspect of a sophisticated literary culture patronised by royalty.

Aside from these arguments, the Lombard influence on Frankish literary culture is incontestable. The arrival at the court of Charlemagne of the foremost Lombard exponents of Latin literary culture in the eighth century, Fardulf, Peter of Pisa, Paulinus of Aquileia and last of all, some five years after the suppression of the Lombard revolt, Paul, did much to enhance the level of literary culture there. As Garrison observes,⁵⁹ Paul, unlike the other

members of that court

53 *Historia Langobardorum*, MGH SS rer. Lang. 170.

54 Riché, *Education and Culture in the Barbarian West*, 411.

55 L. Nees, 'Godescalc's career and the problems of "influence"', in *Under the Influence; The Concept of Influence and the study of Illuminated Manuscripts*, ed. J. Lowden and A. Bailey. (Turnhout: Brepols, 2007), 21-43.

56 The entry for the Egino Codex in *Manuscriptorium*,

http://www.manuscriptorium.com/apps/main/mns_direct.php?docId=rec1341954867 (accessed 22 August 2014) is entitled 'St Gallen, Stiftsbibliothek, Codex Sang. 110: *Commentarius in Ecclesiastes; Explanatio canticum canticorum; Excerpta varia*'. The *commentarius* is by S. Jerome, the *explanatio* is by Bishop Justus of Urgell, and the *excerpta* are from Jerome, Benedict, Eucherius and Augustine.

57 J. Mitchell, 'L'arte nell' Italia longobarda e nell' Europa carolingia' in *Il future dei longobardi e la costruzione dell' Europa di Carlo magno*, ed. C. Bertelli and G.P. Brogiolo, (Milan: Skira, 2000), 171-87.

58 Nees, 'Godescalc's career and the problems of "influence"', 24.

59 M. Garrison, 'Carolingian Latin literature,' in *Carolingian Culture-Emulation and Innovation*, ed. R. McKitterick (Cambridge: Cambridge University Press, 1994), 117.

circle, had produced a significant number of prose and verse works before he joined it, so there is no doubt that he influenced the culture of the court rather than being affected by its culture, which in any case already had a Lombard element. The next section of this chapter sets out to provide a chronological account of his verse and major prose works.

1.2 : *Biography and writings*

1.2.1 : Introduction

Post-mediaeval studies of Paul began in the late seventeenth century with the work of the Benedictine monk and scholar, Dom Jean Mabillon, O.S.B.,⁶⁰ and his studies of the Chronicles of Salerno and other south Italian sources were extended and affirmed by the Abbé Jean Lebeuf,⁶¹ whose studies drew heavily on the late ninth-century manuscript Paris, BnFr lat. 528. Sacred writings, from the late fourth century onwards, dominate its content,⁶² but its substantial secular content includes a number of grammatical works, Bede's *De Arte Metrica*, and poetry by Alcuin, Peter of Pisa, S. Eugenius of Toledo and Paul the Deacon, of whose poetry it is the single most important manuscript witness.

The two most complete studies of Paul's life are those of Bethmann in 1851 (who surveys the contributions of the contemporaries and successors of Mabillon and Lebeuf in some detail, but concludes that they add relatively little)⁶³ and Dahn (1876).⁶⁴ Neff's edition and study of Paul's poems⁶⁵ contains a considerable amount of biographical material, and Manitius⁶⁶ devotes a chapter to him in his history of mediaeval Latin literature. He is one of the four historians who are the subjects of Goffart's controversial study of early mediaeval historical writings,⁶⁷ and three recent biographies of Charlemagne^{68, 69, 70} refer in some detail to his literary output and his role at Charlemagne's court.

From these studies we collect that Paul was born into a high-ranking family at Forum Julii (the modern Cividale) in the border duchy of Friuli at some date between 720 and 730. His

60 J. Mabillon, *Acta sanctorum ordinis S. Benedicti* (Paris, vol. I, 1668) 28, 44, 271, 397; *Analecta vetera* (Paris: Montalant, 2nd edition 1723), 19; *Annales ordinis S. Benedicti*, vol.II, (Paris, 1703), 328, 716.

61 J. Lebeuf, *Dissertations sur l'histoire ecclésiastique et civile de Paris*, vol I, (Paris, 1739), 404-423.

62 The manuscript contains works by, among others, S. Damasus (Pope Damasus I, 368*-86), SS. Augustine, Jerome and Isidore of Seville.

63 Bethmann, 'Paulus Diaconus Leben und Schriften,' 252.

64 J.S.F. Dahn, *Paulus Diaconus*, (Leipzig: Breitkopf and Hartel, 1876).

65 K. Neff, *Die Gedichte des Paulus Diaconus: Kritische und erklärende Ausgabe* (Munich, C.H.Beck, 1908).

66 M. Manitius, 'Die Universalen Schriftsteller; 41, Paulus Diaconus' in *Geschichte der Lateinischen Literatur des Mittelalters* (Munich: C.H.Beck, 1911), 257-72.

67 W. Goffart, 'Paul the Deacon's Interpretation of Lombard History' in *The Narrators of Barbarian History*, 1988, rpt revised edn. (Indiana, Notre Dame University Press, 2005), 329-421.

68 R. McKitterick, *Charlemagne: The Formation of a European Identity* (Cambridge, Cambridge University Press, 2008).

69 J. Fried, *Charlemagne*, trans. P. Lewis, (Munich: C.H. Beck, 2013).

70 J.L. Nelson, *King and Emperor: A New Life of Charlemagne*, (London: Allen Lane, 2019).

parents, Warnefried and Theudelinda, belonged to the Friulian aristocracy. Paul had two siblings, a sister who entered into the monastic life at an early age and a brother, Arichis,⁷¹ (not to be confused with Paul's patron, Arichis II of Benevento (*758-787)); that brother was later to be the cause of a dramatic change in Paul's life and fortunes. Paul was educated in the Lombard royal court at Pavia during the reign of Ratchis, (*744-49) who, on his abdication and retreat to Monte Cassino, was succeeded by Aistulf (*749-56). We know nothing of Paul's life between Ratchis' abdication in 749 and the accession to the throne of Desiderius (*757-774), and indeed there is no clear and consistent chronology of his life and works thereafter. Manitius⁷² recognises three periods of literary activity, namely, at the court of the independent duchy of Benevento, at Charlemagne's court, and in the final years of Paul's life, at Monte Cassino, with an interruption between the first and second periods at, and for some time after, the time of Charlemagne's overthrow of the Lombard kingdom (though the duchy retained its independence until the death of Duke Arichis). The discussion of Paul's life and works which follows is organised, broadly in accordance with Manitius' scheme (though without adopting his dates), into four sections designated Benevento and before, interim, Francia and Monte Cassino.

1.2.2 : Benevento and before

This period commences with Desiderius' accession in 757 to the Lombard kingship, which was the precursor of, and occasion for, Paul's intimate connexion with the Beneventan ducal court. Desiderius had enlisted Paul as tutor to his daughter, Adelperga. She married Arichis II, himself a Friulian, whom Desiderius elevated to the dukedom of Benevento in 758, and, soon after Desiderius' succession to the Lombard kingship, Paul managed, as Bullough⁷³ puts it, 'successfully [to] negotiate a change of dynasty'. This accords with the reference in Dahn's chronology to the establishment and blossoming of Paul's relationship with Arichis and Adelperga over the period *ca.* 755-774,⁷⁴ and it does seem clear that for a substantial part of that period, Paul enjoyed the patronage of the ducal house of Benevento.

The only poem thought to pre-date the 'change of dynasty' is the Lake Como poem, *ordiar unde tuas laudes* (ML 45). Neff⁷⁵, in his discussion of the Lake Como poem, argues that such an enthusiastic description must be the work of an author who has seen and experienced the

71 Bethmann, 'Paulus Diaconus Leben und Schriften', 254.

72 Manitius, 'Die Universalen Schriftsteller'; 41, Paulus Diaconus', 257-59.

73 D. Bullough, 'Ethnic History and the Carolingians: An alternative reading of Paul the Deacon's *Historia Langobardorum*,' in C. Holdsworth, and T.P. Wiseman, (ed.) *The Inheritance of Historiography 350-900*, (Liverpool: Liverpool University Press, 1986): 85-101.

74 Dahn, *Paulus Diaconus: 'Anknüpfung und Blüthe der Beziehungen zu Arichis und Adelperga'*, 74.

75 Neff, *Gedichte, carm. i*, 1-6. I translate the quoted verse (v.6) as 'You bear great gifts to royal tables'.

charm of the region, that Paul spent some time in that region while at the court of Desiderius, and that in v.6, which reads *Regificis mensis munera magna vehis*, the table cannot be that of Charlemagne, because Charlemagne would have been far distant from the lake, but must be the table of a Lombard king; thus the poem must have been composed not only before the overthrow of the Lombard kingdom in 774, but in all probability before 763, by which time Paul is known to have been at the Beneventan court. Both Bullough⁷⁶ and Goffart⁷⁷ suggest that the Lake Como poem is Paul's earliest poetic composition and imply that it was composed at the Lombard court. Pucci, in his analysis of the deeper meaning of the poem,⁷⁸ was not concerned with its date.

One of the few firm dates that we have in this period is that of the acrostic poem to Adelperga, *A principio saeculorum* (ML 11) which is unequivocally dated to 763 by the third line of stanza 8.⁷⁹ It was composed under the shadow of the approaching Apocalypse, of which Paul warns in the final two stanzas. In that year, the Lombard kingdom and the Duchy of Benevento were still enjoying peaceful times, but Paul had calculated that the sixth millennium from the creation of the world would occur in thirty-eight years' time. On that event, so the rabbinical scholars and Church fathers believed, the world would come to an end.⁸⁰

The poems firmly (though, as we shall see, not unanimously) attributed to Paul and datable with reasonable certainty to this period, are the poem to Adelperga (*A principio saeculorum*, ML 11) and three verse *tituli*, *aemula Romuleis consurgunt* (ML 6), *Christe salus utriusque* (ML 17), and *haec domus est domini* (ML 28) associated with buildings erected in Benevento and Salerno at the behest of Arichis. Three other *tituli*, *multicolor quali* (ML 43), *O una ante omnes* (ML 47) and *Adam per lignum* (ML 1, I-IV)⁸¹ are thought by Neff to be associated with the Lombard, rather than the Beneventan court.⁸² If the two compositions (*martir Mercuri*, ML 41 and *salve, miles egregie*, ML 57) relating to the translation of the relics of S. Mercurius to Arichis and Adelperga's newly built church of S. Sophia in Benevento are by Paul,⁸³ they also belong to this period, since that event took place in 768.

76 Bullough, 'Ethnic History and the Carolingians', 86.

77 Goffart, *The Narrators of Barbarian History*, 335-36.

78 J. Pucci, 'Pied Beauty: Paul the Deacon's poem to Lake Como,' *Latomus* 58, no.4, (1999), 872-84. He cites the biographical details given by Goffart.

79 Neff, *Gedichte*, *carm. ii*; stanza 8 reads '*septingenti sexaginta tresque simul anni sunt*' (reckoning from the birth of Christ), 7-10.

80 Fried, *Charlemagne, 376-77*. In accordance with the calculations of S. Jerome, the monks of Lorsch Abbey had calculated the exact day as being Christmas Day 800, which according to Carolingian calendrical practice, was the first day of the year 801.

81 *Multicolor quali* (ML 43), *O una ante omnes* (ML 47) and *Adam per lignum* (ML 1, I-IV) are considered authentic by Neff, but Dümmler includes them in his *Appendix carminum dubiorum*.

82 Neff, *Gedichte*, *carm. v*, I-III, under the collective title 'Andere Inschriften', 17-20.

83 Bethmann, 'Paulus Diaconus Leben und Schriften,' 278, 291; these compositions are reproduced in Bethmann's appendix, 332.

In contrast to the studies primarily devoted to Paul's literary output, Belting⁸⁴, in his study of the eighth-century Beneventan court, has emphasised Paul's wider role in the development of the centre of learning at the court.⁸⁵ He paints a picture of a cultural flowering in Benevento driven by Paul's manifold literary skills as grammarian, historian and poet, nurtured by his own education in Pavia and the patronage of the ducal couple, and leading to the foundation of an enduring literary tradition. He also discusses Paul's authorship of the verse *tituli* of the frescos in the palace at Salerno and in the palatine church of SS Peter and Paul,⁸⁶ but his account of the consecration of the church of S. Sophia on 26 August 768⁸⁷ makes no reference to Paul.

84 H. Belting, 'Studien zum Beneventanischen Hof in 8. Jahrhundert', *Dumbarton Oaks Papers* 16, (1962), 141- 93.

85 *Ibid.*, section IV, Hofschule und Kunst unter Arichis; 1, Das Bildungszentrum am Hof und Paulus Diaconus, 164-68.

86 *Ibid.*, section IV.2, Die Kunst unter Arichis, Bauten und Inschriften, 170-72.

87 *Ibid.*, section V, Die Sophiakirche; .2, Das Weihedatum, 175-79.

Fried states that:

The vibrant culture of Benevento supplied models and *stimuli* to the Frankish Empire and Charlemagne's court in particular. Paul the Deacon may be regarded as one of its principal exponents.⁸⁸

Fried attributes the design of Charlemagne's church foundation at Aachen to his knowledge, gleaned from Paul's experience, of the design of Arichis' foundation of S. Sophia. In similar vein, Nelson comments that:

Italy had a distinctive culture [which] was grafted onto other 'barbarian' cultures by enthusiastic scholars like Paul the Deacon and Paulinus of Aquileia who believed themselves to be, and indeed were, Rome's heirs.⁸⁹

Goffart's speculation that 'the Friulian Arichis...may have had more to do than [Adelperga] with mobilizing the pen of his countryman in Monte Cassino and placing it at the service of his culturally ambitious reign'⁹⁰ gains support not only from Paul's verse inscriptions for Arichis' buildings, but also from the description of Paul by the seventeenth-century physician Petrus Pipernus⁹¹ as a monk of Monte Cassino, one time secretary to Prince Arichis of Benevento. In that capacity, Paul would have been well placed to engage, on Arichis' behalf, in the lengthy controversy about iconoclasm which raged in Italy during the mid-eighth century. Belting tells us that in the course of that long-running controversy, Paul wrote a denunciation of the doctrine, to which the otherwise generally pro-Byzantine Arichis was opposed, stigmatizing it as a crime.⁹²

Paul's first major historical work, the *Historia Romana*, belongs to this period; at Adelperga's request, he continued the original ten books of Roman history by Eutropius, *Breviarum Historiae Romanae*, with a further six concerned with the history of Christianity. Neff dates its composition to the period 766-69, while Dahn⁹³, Manitius⁹⁴ and Goffart⁹⁵ all place its completion at not later than 774. Only Bethmann⁹⁶ admits the possibility that it may have been completed as late as 782.

88 Fried, *Charlemagne*, 140.

89 Nelson, *King and Emperor*, 147.

90 Goffart, *Narrators of Barbarian History*, 339.

91 Petrus Pipernus, *De effectibus magis libri sex; ac De nuca maga Beneventana liber uncius* (Naples: Colligni, 1634); the text reads 'monachum montis Casini, quondam secretarium principis Arichis Beneventani'.

92 Belting, 'Studien zum Beneventanischen Hof,' 173 and n.256 thereto. The footnote refers, ultimately, to Paul's account in *HL*, book VI, c. xlix, of the emperor Leo's iconoclastic activities ca 725 and the resistance to them in Ravenna and the Veneto, but does not identify any written denunciation.

93 Dahn, *Paulus Diaconus*, 15.

94 Manitius, 'Die Universalen Schriftsteller: 41, Paulus Diaconus', 257.

95 Goffart, *The Narrators of Barbarian History*, 337.

96 Bethmann, 'Paulus Diaconus Leben und Schriften,' 297.

1.2.3 : The interim period

It is not clear when Paul ceased to be closely associated with the Beneventan ducal court, when and where he entered upon the monastic life, or was ordained. Those events are not necessarily connected with the overthrow of the Lombard kingdom in 774, since Charlemagne made no attempt to annex Benevento at that time, and indeed raised no objection to Arichis' assumption of the title '*princeps*' or other acts which were the prerogative of an independent ruler.⁹⁷ References either by Paul himself⁹⁸ or others styling him '*diaconus*'^{99, 100} and speculation about the superior facilities for literary composition and greater tranquillity afforded by a monastic establishment¹⁰¹ are quite insufficient to found any conclusion about these matters.

Bullough draws the more firmly based conclusion that:

three of his poems read together are good evidence that at some time in the 770s he left the secular world for the monastery, originally reluctantly and regretfully, and that that monastery was Monte Cassino, on the northern edge of the duchy and not-- as Traube thought¹⁰²-- northern Italian Civate.¹⁰³

Bullough does not identify these poems, but it is clear, from the commentaries by Dahn¹⁰⁴ and Neff,¹⁰⁵ in particular on the line *ex(s)ul, inops, tenuis poemata parva dedi*, that one of these is *ordiar unde tuos, sacer* (ML 46) and the two to be read together with it are its companion piece,¹⁰⁶ *fratres, alacri pectore* (ML 26) and the poem *angustae vitae fugiunt* (ML 9) which Neff describes as giving voice to the same contrast between the comfortable life he had led at the courts of Pavia and Benevento and the much stricter regime of the monastery.

Whether or not Bullough is correct, there is no conclusive evidence for any literary output attributable to Paul during the interim period, though there are eight other possible candidates. Two, the anonymous *Vita S. Gregorii Magni* and the securely attributed but not dated Epitome of Festus' *De Verborum Significatu*, are prose works. Bethmann and Dahn agree that the *Vita S. Gregorii Magni* was written in Rome by someone familiar with the city. Bethmann merely states that while we do not know when this residence in Rome may have been, it was at any rate

97 C. Wickham, *Early Mediaeval Italy* (London: Macmillan, 1981), 49.

98 In his prayer to S. Benedict "*ego Paulus diaconus extremus b. Benedicti servulus*"; see Bethmann, 'Paulus Diaconus Leben und Schriften,' 302.

99 In Charlemagne's *Rundschrift* on the homiliary; see Dahn, *Paulus Diaconus*, 21 and M. Glatthaar, 'Zur Datierung der Epistola generalis Karls des Grossen', *Deutsches Archiv für Erforschung des Mittelalters*, 66 (2010), 455.

100 In the acrostic epitaph composed by Hilderic (*perspicua clarum nimium*, Neff, *Gedichte, carm. xxxvii*) of which the initial letters of vv. 1-13 spell out PAULUS LAEVITA.

101 Goffart, *Narrators of Barbarian History*, 337-38.

102 Manitius, in 'Die Universalen Schriftsteller; 41, Paulus Diaconus,' 260, cites L. Traube, *Abhandlung der Bayerische Akademie* 21, (1891), 709, for this view, but it has not been possible to verify this citation, and Bullough does not cite any article by Traube expressing that view.

103 D. Bullough, 'Ethnic History and the Carolingians', 86-87.

104 Dahn, *Paulus Diaconus*, 25-6.

105 Neff, *Gedichte*, 33.

106 Paul included these two poems in *HL*, Book 1, c. 26.

before his entry into the monastery.¹⁰⁷ Goffart suggests an account of Paul's movements which would place him in Rome at Easter 781,¹⁰⁸ but Dahn¹⁰⁹ advances the bolder proposition that Paul, on his journey from Francia back to Monte Cassino, took the same route as Charlemagne had taken for the purpose of celebrating Easter 787 in Rome, and that this small biography could have been completed in a few weeks round about January 787.

Clare Woods' comprehensive study of Paul's Epitome of Festus' *De Verborum Significatu*¹¹⁰ includes, under the heading 'A contribution and a calling card?' a discussion of the time and place of its composition.¹¹¹ She refers to Goffart's account of Paul's and Charlemagne's movements with regard to Rome in the early 780s¹¹² and also draws on the dedicatory letter to suggest that the *munusculum* ("little gift") was what we might call a "taster" to get Charlemagne interested in commissioning more work from him. Goffart's proposed chronology of a meeting between the two in Rome in 781 before Paul's journey to Francia in 782 would be consistent with the emphasis on Roman content in the epitome; 'what better celebration of a king's Roman visit', Woods asks, 'could a grammarian concoct than words such as these?'¹¹³ The dating of this work to a period before Paul's arrival at the Carolingian court is novel, for she observes¹¹⁴ that scholarly opinion at the time of her own study continued to be divided between the views that Paul composed it while at Charlemagne's court, which Manitius,¹¹⁵ among others,^{116, 117} strongly favoured, and its ascription, by Neff¹¹⁸ and others¹¹⁹ to the period after Paul's return to Monte Cassino.

One poem addressed to Charlemagne, *verba tui famuli*, (ML 65), may date from this period. The poem stems from the involvement of Paul's brother Arichis in the rebellion led by Hrodgaud of Friuli, which was crushed when Hrodgaud was killed in battle in April 776,

107 Bethmann, 'Paulus Diaconus Leben und Schriften,' 304.

108 Goffart, *Narrators of Barbarian History*, 340.

109 Dahn, *Paulus Diaconus*, 56-7.

110 C. Woods, 'A contribution to the King's library: Paul the Deacon's epitome and its Carolingian context,' in Verrius, *Festus and Paul-lexicography, scholarship and society*, ed. F. Glinister and C. Woods, (London: Institute of Classical Studies, University of London, 2007), 109-37.

111 *Ibid.*, 122-24.

112 Goffart, *Narrators of Barbarian History*, 341.

113 Woods, 'A contribution to the King's library': "If he condescends to go and read the work, he will... encounter discussions of words relating to the Romulean city, its gates, streets, hills, palaces and tribes...", 123.

114 *Ibid.*, 116.

115 Manitius, *Geschichte der Lateinischen Literatur des Mittelalters*, 258.

116 M. Garrison, 'The emergence of Carolingian Latin literature and the court of Charlemagne (780-814)', 118.

117 In particular, R. Cervani, *L'epitome di Paolo del 'De verborum significatu' di Pompeo Festo: struttura e metodo*, (Rome: edizione dell' Ateneo e Bizzarri, 1978), 157, where she claims to have detected in the Epitome a certain *frettolosita* (hastiness) which would be inexplicable if it had been put together in the calm of Monte Cassino.; see Woods, 'A contribution to the King's library,' 122.

118 Neff, 'Paulus an Karl', *Gedichte, carm. xxx*, 123.

119 Woods, 'A contribution to the King's library,' 116, n.41.

resulting in Arichis' capture, exile, and the confiscation of his property, reducing his wife and children to destitution.¹²⁰ These misfortunes impelled Paul to compose that plea, and the words *septimus annus adest, ex quo nova causa dolores generat*, thus indicate May 782 as the earliest possible date of its composition.¹²¹ Nelson refers to this poem as one of two pieces of indirect evidence¹²² that, when Charlemagne left Italy for Francia (presumably, after the suppression of Hrodgaud's rebellion in 776), he 'took out an insurance policy for keeping control there' by choosing 'a select group of high-born hostages to take to Francia with him'¹²³. Of the poem itself, she says that it:

...evoked the wretched situation of Paul's brother, (a prisoner in your land, with a heart full of grief, stripped and needy)¹²⁴ and was a plea for his release. For this Lombard's (i.e., Paul's) point of view, 774 had not been the end of the disaster, and nor had 776. The brother's story did in fact have a happy ending but, as Paul wrote his plea, his brother's time of sorrows was ongoing.¹²⁵

Given that *verba tui famuli* is securely dated to 782 by its content, it is not easy to reconcile this with Nelson's earlier statement that:

Paul's own brother had been taken as a hostage to Francia and...thanks to a poignant plea addressed to Charles in 785, Paul's efforts to secure his brother's release finally succeeded.¹²⁶

or to identify the 'poignant plea' referred to.

1.2.4: Francia

We do not know exactly when Paul left the monastery and set out on his journey to Francia, or when he arrived at Charlemagne's court. The earliest date of arrival proposed is 781; Fried states that 'in 781, Charlemagne personally brought back with him from Italy the Lombard monk Paul the Deacon, who was likewise¹²⁷ an outstanding grammarian...[and] had already made a name for himself as a historian'.¹²⁸ Nelson, in her discussion of Paul's composition of the homiliary, places his arrival in 782.¹²⁹

120 Bethmann, 'Paulus Diaconus Leben und Schriften,' 260.

121 Neff, *Gedichte*, 52.

122 The other is a capitulary issued at Pavia in 787 for protecting the rights of wives of Lombard hostages held in Francia.

123 Nelson, *King and Emperor*, 161.

124 See vv. 7-8, '*Captivis vestris extunc germanus in oris/Est meus afflicto pectore, nudus, egenus*'.

125. Nelson, *King and Emperor*, 161.

126 *Ibid.*, 80.

127 The comparison is with Alcuin.

128 Fried, *Charlemagne*, 238-9.

129 Nelson, *King and Emperor*, 248-50.

From the court, Paul wrote a letter to Theudemar,¹³⁰ the abbot of Monte Cassino from 778 to 797, bewailing his unhappy situation; by comparison with the monastery, the palace was, to him, like a prison.¹³¹ Its brief verse conclusion, *iam fluebat decima* (ML 36) shows the date on which it was written to be the 10th of January, and the place of its composition to be on or near the banks of the Moselle, thus identifying it as Thionville. Although Bethmann cautiously states that the letter was composed in a year ‘after 781’,¹³² there is no reason to disagree with Neff’s dating of it to the year 783.¹³³

The verse and prose compositions firmly datable to this period comprise one historical work (the *Liber de Episcopis Mettensibus*),¹³⁴ the letter to Theudemar discussed above, the letter to Adalhard, and eleven poems. The *Liber* was commissioned by Angilram, whom Charlemagne had appointed as archchaplain in 784. Bethmann¹³⁵ and Dahn¹³⁶ agree that it was written after Charlemagne’s marriage to Fastrada, which took place in October 783, but before she had children. Neither Bethmann nor Dahn give any dates for the birth of Fastrada’s children, but the consensus is that her daughters Theodrada and Hiltrude were born c. 785 and c. 787 respectively.¹³⁷ The letter to Adalhard concludes with a brief verse, *ante suos refluxus* (ML 10) but, unlike the concluding verse in the letter to Theudemar, this verse gives no indication of the date of its composition. Neff discusses the evidence for its attribution to Paul at some length, and concludes both that Paul is the author and that it was composed during Paul’s stay at Charlemagne’s court.¹³⁸

Of the eleven poems, five are Paul’s contributions to the exchanges within the court circle. These are *sensi cuius verba* (ML 58) with its addendum, *trax puer adstricto* (ML 59),¹³⁹ *cynthius occiduas* (ML 21), *candidolum bifido* (ML 14), *iam puto nervosis* (ML 37) and *sic ego suscepi* (ML 60). The other six are epitaphs, of which *ingenio clarus sensu* (ML 38), composed at the request of Aper, the abbot of Poitiers, is for Venantius Fortunatus. The remaining five are for members of Charlemagne’s family; these are *hic ego qui iaceo*, (ML 32), for his sister Rothaid, *perpetualis amor*, (ML 50) for his sister Adelheid¹⁴⁰, *aurea quae fulvis*, (ML 13) for Queen Hildegard, *hoc tumultata*

130 Neff, *Gedichte*, ‘Brief an Theudemar’, 69; the text of the letter begins at 71.

131 ‘*Sed ad comparationem vestri coenobiti mihi palatium carcer est*’.

132 Bethmann, ‘Paulus Diaconus Leben und Schriften’, 260.

133 Neff, *Gedichte*, 69.

134 Often referred to as the *Gesta Episcoporum Mettensis*.

135 Bethmann, ‘Paulus Diaconus Leben und Schriften,’ 306.

136 Dahn, *Paulus Diaconus*, 49.

137 McKittrick, *Charlemagne*, 91; M. Costambeys, M. Innes and S. MacLean, *The Carolingian World* (Cambridge: Cambridge University Press, 2011), in which the page containing the family tree is unnumbered.

138 Neff, *Gedichte*, ‘Brief an Adalhard’, *carm. xxxi*, 125-27.

139 It is unclear whether Paul composed the addendum or (as the text of *sensi cuius verba* states) he remembered it from his schooldays.

140 Charlemagne was the oldest child of Pippin III and Bertrada; their other five children were Carloman (751- 771), Gisela (757-c. 810), who spent her adult life at the abbey of Chelles, and Pippin, Rothaid, and

iacet (ML 35) for their daughter Adelheid¹⁴¹, and *Hildegard, rapuit subito* (ML 33) for their infant daughter who died on 9 May 783, nine days after her mother. Nelson¹⁴² contrasts ‘the cold style of commissioned pieces’ of the epitaphs for Charlemagne’s sisters, which she finds unsurprising, given that Paul was writing a generation after the girls’ deaths and had not known their parents, with those for the infant daughters of Charlemagne and Hildegard, with their inclusion of female offshoots of the dynasty and the expressions of heartfelt emotion (which) made emphatic and unconventional points,¹⁴³ and gave Charlemagne ‘what he asked for, which was quite evidently a real expression of grief, albeit nine years after the event’.¹⁴⁴ Of the epitaphs to Queen Hildegarde (*aurea qui fulvis*, ML 13) and her baby daughter (*Hildegarde rapuit*, ML 33) composed much sooner after their deaths in the early summer of 783, the former singled out the queen’s ‘candour of soul and inner beauty’¹⁴⁵ and the latter conveyed a father’s anguish,¹⁴⁶.¹⁴⁷ This contrast between the two sets of epitaphs vividly illustrates Paul’s ability to suit his style to the circumstances surrounding the event which he memorialises. There is no obvious reason to doubt the dating of those epitaphs to 783,¹⁴⁸ by which time Paul had apparently achieved some rapprochement (*Annäherung*) with Charlemagne, notwithstanding that in that year, Paul’s plea on behalf of his brother had not borne fruit, his existence had been sufficiently miserable for him to compare life in the palace to a prison, and one of the deaths (that of Hildegarde’s daughter Adelheid) had occurred when the deceased infant’s father was in the very act of overthrowing the Lombard kingdom.

There are five other poems possibly datable to this period. They are the epitaphs to Desiderius’ wife, Queen Ansa¹⁴⁹ (*lactea splendifico*, ML 39) and the unidentified Sophia (*roscida de lacrimis*, ML 56), and the three verse *tituli multicolor quali* (ML 43), *O una ante omnes* (ML 47) and

Adelheid, all of whom appear to have died in infancy.

141 Adelheid (*hoc tumulata iacet pusilla puellula busto*), the ‘very little girl’ born ‘near the high walls of Pavia where her mighty father was taking control of the kingdoms of Italy’ (vv.5-6, *Sumpserrat haec ortum prope moenia celsa Paviae/Cum caperet genitor Itala regna potens*).

142 Nelson, *King and Emperor*, 80.

143 *Ibid.*, citing F. Hartmann, ‘Paulus Diaconus zwischen Langobarden und Franken’, *Frühmittelalterliche Studien* 43, (2009), 71-93, and D. Kempf, *Paul the Deacon, Liber de episcopis Mettensis* (Paris: Peeters, 2013), 1-6, 78-81, 82-6.

144 Nelson, *King and Emperor*, 133.

145 ‘*Simplicitasque animae interiorque decus*’, v.12.

146 ‘*Pectore nos maesto lacrimarum fundimus annes*’, v.9.

147 Nelson, *King and Emperor*, 203; which states the epitaphs of the two Hildegardes to have been composed probably in 784.

148 Neff, *Gedichte*, commentary to *hoc tumulata iacet*, *carm. xxvi*, 119 and its reference to *sic ego suscepi carm. xxii*, 101, which is full of honorific phrases bestowed on its addressee, Charlemagne, of which Neff states that Paul no longer sees in Charlemagne the enemy of his people (*Er sieht in Karl nicht mehr der Feind seines Volkes*) but as a heaven-sent ruler to whom he dedicates his service.

149 Goffart, *Narrators of Barbarian History*, states that Ansa was alive after Charlemagne’s marriage to Fastrada in the autumn of 783; see 343-44, n.53.

Adam per lignum (ML 1, I-IV).¹⁵⁰ They appear in sequence in the manuscript Leipzig Staatsbibliothek Rep. I, 74, ff. 36v-38, immediately following the Lake Como poem. Neff associates the *tituli* with the Lombard, rather than the Beneventan court, and *multicolor quali* specifically with Ansa's burial-place.

1.2.5 : Monte Cassino

The exact date of Paul's departure from Francia is not known. Nelson states that Paul had resettled into the monastic life in 784/5,¹⁵¹ whereas both Bethmann¹⁵² and Dahn¹⁵³ place his departure from the court a little before, or at the same time as, Charlemagne's journey to Florence and thence to Rome in December 786. Benevento yielded to Charlemagne without resistance in March 787 and Arichis died in Salerno on 26 August 787. His epitaph, *lugentum lacrimis* (ML 40) is the last of Paul's known verse compositions, and both Dahn¹⁵⁴ and Neff¹⁵⁵ place its composition in the period during which Arichis' son Grimoald was kept hostage in Francia.

As part of his commitment to introducing a uniform liturgy in the territories under his control, Charlemagne commissioned a homiliary or lectionary¹⁵⁶ from Paul. Nelson's account is that Paul composed it after his return to monastic life in 784/5 and presented it to Charlemagne on the occasion of his visit to Monte Cassino, two months before the surrender of Benevento, that is, in February 787. It is in the context of its composition that recent biographers of Charlemagne stress the closeness of the relationship between the monarch and the monk. 'Later in 787,' Nelson states, [Charlemagne] 'would commend, in the *Epistola Generalis*, the work of 'our friend and little client', (*familiaris clientulus noster*) Paul'¹⁵⁷.

Fried cites Charlemagne's announcement that he had:

instructed his confidant¹⁵⁸ Paul the Deacon to compile an anthology of sermons from the Dicta of the Catholic Fathers in two volumes which presented them 'error-free' (*absque*

150 Neff considers these to be authentic and they appear in his *Gedichte* under the collective title 'Andere Inschriften', *carm. v*, I-III, 17-20. He does not identify the buildings with which they are associated. Dümmler includes them in the *Appendix carminum dubiorum*, *PLAC I, carm. xlvi-xlviiii*, 77-78.

151 Nelson, *King and Emperor*, 248-50.

152 Bethmann, 'Paulus Diaconus Leben und Schriften,' 269.

153 Dahn, *Paulus Diaconus*, 55.

154 *Ibid.*, .55; Dahn places Grimoald's return to Italy in the spring of 788.

155 Neff, *Gedichte*, 'Auf das Grab des Arichis' (*carm. xxxv*), 143. Neff states that Charlemagne allowed him to return, in spite of the prayers of the Beneventaners, in May 788.

156 Consisting of readings, culled from the Fathers, for the night office.

157 Nelson, *King and Emperor*, 228, 249-50.

158 Similarly McKitterick, *Charlemagne*, 316, records his description of Paul as 'our client and a man close to us'.

vitis), endorsed them with the seal of his authority and presented them to the Christian churches for their use.¹⁵⁹

Charlemagne also addressed a circular letter¹⁶⁰ (which has been the subject of a recent study)¹⁶¹ to the religious lectors authorising it for general use on the grounds that existing texts of the kind were inappropriate and strewn with errors.¹⁶² Bethmann places the compilation of the homiliary in the period during which Paul composed the family epitaphs, and before he began the *Liber de Episcopis Mettensibus*¹⁶³, but later studies assign it, or at least, its completion, to the period following his return to Monte Cassino. Thus, Dahn finds no ground for assigning its completion to the years 782-84; rather, he argues that the dedicatory poem *ampla mihi vestro* (ML 7), which testifies to the completion of Paul's work with the help of the wonder-working Benedict, and his lord and abbot, '*abbatis dominisque*', which can mean only Theudemar, shows the work to have been completed in the monastery; it was only there, not at the court, that he could have received support from the abbot,¹⁶⁴ ¹⁶⁵ While Glatthaar's study is primarily concerned with the dating of Charlemagne's circular letter, he accepts Dahn's argument that the homiliary was completed in Monte Cassino.¹⁶⁶

The last work mentioned is the *Historia Langobardorum*, universally recognized as Paul's most important work, and it has not been seriously doubted that he composed it in Monte Cassino after his return from Francia. There are, however, conflicting views about whether he left it unfinished at his death, chiefly because it recounts no events after the death of King Liutprand in 744. Bethmann comments that, when Paul had come to the point where Liutprand dies, the death, so it seems, overtook (*überraschte*) him, but then quotes some words of the last chapter as evidence that Paul intended to write more, and that Erchempert was wrong to have said that Paul terminated the narrative at that point because he could not bear to speak of the last thirty years of the independent kingdom¹⁶⁷. Goffart, although remarking that 'other commentators down to our own times have endorsed various versions of this view'¹⁶⁸ adopts Bethmann's stance, and finds reasons to believe that Paul had planned the *Historia* to contain two more

159 Fried, *Charlemagne*, 256-7.

160 One of the only two extant copies of the letter was accompanied by the poetic dedication, *Ampla mihi vestro*, (ML 7); see Nelson, *King and Emperor*, 249.

161 M. Glatthaar, 'Zur Datierung der Epistola Karls des Grössen,' *Deutsches Archiv für Erforschung des Mittelalters* 66 (2010), 455.

162 G. Brown, 'The Carolingian Renaissance' in *Carolingian culture-emulation and innovation*, ed. R. McKitterick, (Cambridge: Cambridge University Press, 1994), 22.

163 Bethmann, 'Paulus Diaconus Leben und Schriften,' 302.

164 Dahn, *Paulus Diaconus*, 52-3.

165 Neff, *Gedichte*, 133, commenting on vv. 7-10, *En iutus patris Benedicti...o pietatis amor*, draws the same conclusion.

166 M. Glatthaar, 'Zur Datierung der Epistola Karls des Grössen', 458.

167 Bethmann, 'Paulus Diaconus Leben und Schriften,' 313; the words in question are *cuius nos aliquod miraculum, quod posteriori tempora est*.

168 Goffart, *The Narrators of Barbarian History*, 344 and nn. 34, 35.

books than he managed to complete.¹⁶⁹ In contrast, Bullough surmises that Paul 'might well have been tempted to conclude his *Historia* with the claim that the *gens Langobardorum* lived on in Benevento, as his lord and master Arichis had recently done' but his explanation of Paul's failure to do so is connected with the political state of affairs which obtained after the death of Arichis, when his successor, Grimoald, had first been obliged to accept, and later repudiated, Charlemagne's suzerainty,¹⁷⁰ rather than the effect on Paul of Liutprand's death in 744.

1.2.6 : Summary

This survey of Paul's life and writings has been confined (save for a passing reference to the two verse compositions relating to S. Mercurius) to works which have been firmly (though, in some cases, not unanimously) attributed to Paul. It identifies three periods of literary productivity, though none of them can be precisely dated. The first period (Benevento and before) probably spanned about a decade, from the early 760s to the early 770s, during which Paul enjoyed the patronage of the Beneventan ducal house. Except for the Lake Como poem *ordiar unde tuas laudes* (ML 45) and the three poems, *ordiar unde tuos, sacer* (ML 46), its companion piece, *fratres, alacri pectore* (ML 27) and *angustae vitae fugiunt* (ML 9), which are associated with Paul's reluctant transition from court to monastic life,¹⁷¹ his writings during that period reflect that patronage. Little is known about any aspect of the interim period of monastic life which followed, and nothing which Paul wrote can be firmly dated to that period. We have a clearer picture of the Francia period, extending from late 782 to somewhere between 784/5 and early 787, during which he took part in the poetic exchanges of the court circle and composed epitaphs for members of Charlemagne's family, as well as compiling the *Liber de Episcopis Mettensibus*. The major achievement of his final years at Monte Cassino, from 787 until his death in the second half of the next decade was the *Historia Langobardorum*, though the homiliary is also generally thought to have been compiled after Paul's return to Monte Cassino. The last of his poems, and the only one datable to that period, is his epitaph for his patron, Arichis of Benevento, who died on 26 August 787.

In this study, the discussion of the life and times of Paul is particularly important. Attribution studies may involve a wide variety of evidence, as chapter 2, which is concerned with the methods employed in other studies, and chapters 4-7, which expound the methods used in this study of the corpus of Paul's verse, will show. But in this study, the scope for any form of stylistic analysis is limited by the relatively small amount of Paul's poetic output; even including all the *dubia*, it amounts to little more than 2000 verses. This obstacle to reliance on

169 *Ibid.*, 378-82.

170 Bullough, 'Ethnic History and the Carolingians,' 100.

171 *Ibid.*, 86.

quantitative stylistic evidence brings the historical context of Paul's life into greater prominence in assessing the probability that he is the author of any particular work, because the likelihood of his having been acquainted with the persons or events described or narrated is obviously relevant to that assessment. Nevertheless, no previous studies have applied stylometric methods to the question of Paul's authorship, and it is essential to do so and to consider their result together with all the other evidence.

1.3 : Editions of poems

1.3.1 : Introduction

Two editions of Paul's poems, by Dümmler (1881)¹⁷² and Neff (1908)¹⁷³, contain the great majority of the verse compositions attributed to him, but the recent edition by Citelli¹⁷⁴ includes a further three compositions, as well as a number which are mentioned only in the biographical studies by Bethmann (1851)¹⁷⁵ and Dahn (1876).¹⁷⁶

1.3.2 : Dümmler's edition (1881)

Dümmler's edition of the poems occupies pages 27-86 of *PLAC I* and consists of a *proemium*¹⁷⁷ and fifty-six poems, arranged under two headings, *Pauli et Petri Diaconorum carmina*¹⁷⁸ and *Appendix carminum dubiorum*.¹⁷⁹ There is also a separate *Appendix ad Paulum* containing two grammatical poems.¹⁸⁰ The *proemium* contains a brief biographical sketch with footnote references to the studies by Bethmann and Dahn, and identifies the manuscript sources of the poems included. Unfortunately, the headings under which the poems are arranged do not accurately reflect the separation of the authentic poems from the *dubia*, because, although the *Appendix carmina dubiorum* does not begin until page 77, page 65, which contains Dümmler's *carmina* xxx and xxxi,¹⁸¹ which have never otherwise been attributed to Paul, is headed *carmina dubia*.

The arrangement of the poems in Dümmler's edition is chronological to the extent that the first nine of the forty-four items in *Pauli et Petri Diaconorum carmina* reflect Paul's Lombard or Beneventan allegiances, while the remainder, except for the three fables¹⁸² and the epitaph for Arichis, are all in some way connected with his time in Francia. It is not possible to classify the miscellaneous collection of items in the *Appendix carminum dubiorum* chronologically, thematically or in any other meaningful way.

172 E. Dümmler, ed. *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini, I* (Weidmann: Berlin, 1881), 27-86, supplemented by the *Appendix ad Paulum, ibid.*, 625-28.

173 K. Neff, *Die Gedichte des Paulus Diaconus: Kritische und erklärende Ausgabe* (München: C.H.Beck, 1908).

174 L. Citelli, (ed.), *Paolo Diacono Opere/2, Corpus Scriptorum Ecclesiae Aquilensis vol. IX/II*, (Rome: Citta Nuovo Editrice 2014), 357-451.

175 L. Bethmann, 'Paulus Diaconus Leben und Schriften', *Archiv der Gesellschaft für Ältere Deutsche Geschichtskunde* 10 (1851): 247-334.

176 J.S.F. Dahn, *Paulus Diaconus*, (Leipzig: Breitkopf and Hartel, 1876).

177 Dümmler, *PLAC I*, 27-35.

178 The poems begin at page 35.

179 This Appendix occupies pages 77-86.

180 *PLAC I*, 625-28. The poems are *adsunt quattuor in prima* (ML 4), in which the verses are arranged alphabetically, and the acrostic poem *post has nectit subsequentes* (ML 51) whose initial letters spell out PAULUS FECI.

181 The poems are *dulcis amice, veni* (ML 23) and *dulcis amice bibe, gratanter* (ML 22).

182 Dümmler, *PLAC I, carm. xxvii-xxix*, 62-64. Neff rejects Paul's authorship of these poems; see *Gedichte, Anhang, carm. vi*, 190-198.

1.3.3 : Neff's edition (1908)

Neff explains¹⁸³ that, in order to provide a complete picture of Paul's life and surroundings, he has found it necessary to include some of his letters, the poems of Peter of Pisa, and those addressed to Peter and Paul,¹⁸⁴ and that the *Anhang* contains some poems which, until now,¹⁸⁵ had had a place among those of Paul, some of which were of uncertain authorship, but whose investigation would allow the proof of important connections. Neff's *Anhang*, therefore, does not fulfil the same function as Dümmler's *Appendix carminum dubiorum*; Dümmler's title implies some possibility of Paul being their author. Neff's *Anhang*, by contrast, is not a collection of verses which he sees as doubtfully attributable to Paul, but an analysis of the matters (including Paul's personal relationships and the historical context) which lead him to conclude that Paul is not, or is extremely unlikely to have been, the author of any of the items in it.

Neff's edition contains a substantial amount of biographical material, and the fifty-one items comprised in the main text include five letters, one each to Adelperga, Theudemar, Adalhard and two to Charlemagne, these being the dedicatory letters accompanying Paul's epitome of Festus' *de verborum significatu* and the homiliary. All, except the letter to Adelperga, include a poem. Neff's discussions of authorship and dating rely, to a significant extent, on the content of the items themselves, and on the appearance of the item under discussion in the same manuscript as a poem securely attributable to Paul; I describe such an occurrence as 'manuscript association'. His arrangement of the items contained in his edition largely follows his perception of their chronological order.

1.3.4 : Citelli's edition (2014).

This edition differs in its content and organisation from its two predecessors. It contains seventy-three items arranged in alphabetical order by incipit, which include all the poems mentioned in Bethmann's study, whether or not they are included in the previous editions, but it omits the poems which appear in those editions and were written by Peter of Pisa and other members of the court circle¹⁸⁶. Three of the poems included are not mentioned by Bethmann or included in the previous editions. It contains commentary, in Italian, on all seventy-three items, but in many cases only the incipit is printed. The edition includes translations into Italian of those which have been reproduced. There is no critical apparatus and there are very few references to manuscript sources.

183 Neff, *Gedichte*, Vorwort, viii.

184 That is, those by (or in the name of) Charlemagne and by other members of the court circle.

185 That is, the time at which Neff was writing.

186 Those poems are referred to as 'context poems' in this study and are listed in Table A2 of the Appendix.

1.3.5 : Comparison of the editions

The master list, Table A1 in the Appendix, provides a concordance for the three editions and identifies the twenty-eight poems which Dümmler and Neff both attribute to Paul (referred to hereafter as ‘the provisional canon’). In his foreword, Neff remarked that the opinions of Bethmann and Dahn on the solution of authorship questions had already diverged widely from one another¹⁸⁷ and that Dümmler had not always arrived at the right decisions.¹⁸⁸ Table A1 also identifies the ten poems on which they disagree.¹⁸⁹ Of those ten, Neff regards four poems as authentic¹⁹⁰ which Dümmler does not accept, and Dümmler originally considered six to be authentic which Neff does not accept.¹⁹¹ Citelli’s edition is not arranged in a manner designed to distinguish between authentic works of Paul and *dubia*; his commentaries report the conclusions which have been reached in doubtful cases but do not express any independent view of authorship in such cases.

1.4 : Prior studies of Paul’s life and works

1.4.1 : Introduction

The two major biographical studies by Bethmann (1851)¹⁹² and Dahn (1876)¹⁹³ each devote considerable space to the verse output attributed to Paul. There is a significant measure of disagreement between them, and neither of them attributes as many as the twenty-eight poems of the ‘provisional canon’ identified in Table A1¹⁹⁴ to Paul. The two studies are rather differently organised. Bethmann’s study is divided into two parts, *Leben* which occupies the first forty pages, of which only the first six are concerned with Paul’s works, and *Schriften* which takes up the remaining forty-six and does not deal with Paul’s life at all. Dahn does not make an explicit separation between his account of Paul’s life and his attributions of the verses on which he comments. Each of his five chapters is devoted to a particular phase of Paul’s life; his ancestry, upbringing and education (I); his relationship with the Beneventan ducal house and the overthrow of the Lombard kingdom (II); his entry into the monastic life (III); his stay at

187 This divergence is discussed in the next section of this chapter.

188 Neff, *Gedichte*, Vorwort, vii.

189 By a solid black square in the ML column.

190 Neff *carm. v*, I-III (‘Andere Inschriften’, consisting of *multicolor quali* (ML 43), *O una ante omnes* (ML 47) and *Adam per lignum* (ML 1, I-IV)), which Dümmler includes in the *Appendix carminum dubiorum*, and *carm. xvi*, *pulchrior me nullus* (ML 52), which he excludes from his edition.

191 Dümmler, *PLAC I*, *carm. xxv*, *qui sacra vivaci* (ML 54); *carm. xxvi*, *multa legit paucis*, (ML 42); the three fables, *carm. xxvii-xxix*, *aegrum fama fuit* (ML 5), *quaerebat maerentes* (ML 53) and *temporibus priscis* (ML 62); and *carm. xxxix*, *hoc satus in viridi*, (ML 34).

192 Bethmann, ‘Paulus Diaconus Leben und Schriften’, 247-334.

193 Dahn, *Paulus Diaconus*.

194 By entries in bold type.

Charlemagne's court (IV) and his return to Monte Cassino (V). Each of them includes comment on one or more poems which Dahn associates in some way with the phase of Paul's life to which the chapter is devoted.

1.4.2 : Bethmann's study and discussion of the verse compositions

Leben opens with a section¹⁹⁵ identifying its source materials, among which are Paul's own works. One ninth-century manuscript,¹⁹⁶ which was extensively studied by Lebeuf,¹⁹⁷ is the most prolific source of poems undoubtedly attributable to Paul. In *Schriften*, Bethmann's discussion of Paul's works is not chronologically based, as it was in *Leben*, but is organised according to their nature and content. In each of the three sections of *Schriften*, he comments first on the poems, then the letters, and lastly the theological and historical prose works. The first and longest part is devoted to the works which, impliedly, he treats as authentic; that implication follows from his statement¹⁹⁸ that he concludes by giving a picture of the doubtful (*Zweifelhaft, ob von Paulus, sind*) works¹⁹⁹ and those which have been wrongly (*mit Unrecht*) attributed to Paul.²⁰⁰ *Schriften* ends with two appendices, the first of which contains the text of *ordiar unde tuos sacer* (ML 46); this is the first of the poems discussed by Bethmann.²⁰¹ The second gives the text of the two compositions associated with the translation of S. Mercurius,²⁰² namely, the verse prayer *salve, miles egregie* (ML 57), followed by a brief prose invocation, and the hymn *Martir Mercuri* (ML 41).

In the first section of *Schriften*, Bethmann identifies twenty-three extant verse compositions as attributable to Paul, and also the letters to Theudemar and Adalhard, though without mentioning the verses which conclude them. Dümmler and Neff both accept the majority of these as Paul's work. Of those which they do not accept, three are hymns or poems in praise of saints, namely *sponsa decora Dei* (ML 62) in praise of S. Scholastica, which neither of them mention, and the hymns for the feast-day of S. John the Baptist (*ut queant laxis*, ML 64) and the Annunciation (*quis possit amplo*, ML 55), which appear in Dümmler's *Appendix carminum dubiorum*²⁰³. One other, which Dümmler accepts but Neff does not, is the verse history of the bishops of Metz (*qui sacra vivaci*, ML 54).²⁰⁴

195 Bethmann, 'Paulus Diaconus Leben und Schriften,' 248-54.

196 Paris, BnFr lat. 528.

197 J. Lebeuf, *Dissertations sur l'histoire ecclésiastique et civile de Paris*, vol I, (Paris: Lambert and Durand, 1739), 404-423.

198 Bethmann, 'Paulus Diaconus Leben und Schriften,' 288.

199 *Ibid.*, 319-20.

200 *Ibid.*, 320-25.

201 *Ibid.*, 288. The appendix, at 325-31, is entitled 'Anhang zu Seite 288'.

202 *Ibid.*, 290-91, where the appendix, at 332-34, entitled 'Anhang zu Seite 291', is discussed.

203 Dümmler, *PLAC I, carm. liv, lv*, 83-4.

204 *Ibid, carm. xxv*, 60; Neff, *Gedichte, Anhang, carm. v*, 186.

The eight poems listed by Bethmann as doubtfully attributable to Paul include one, *roscida de lacrimis*, ML 56) which both Dümmler and Neff accept as authentic, and two (the alphabetic poems *ad perennis vitae fontem*, ML 3, and *aquarum meis quis det*, ML 12) which appear in Dümmler's *Appendix carminum dubiorum*. The collection of writings considered by Bethmann as wrongly attributed to Paul includes three poems. One, *O Benedicta soror* (ML 44), is again in praise of S. Scholastica; the other two, *dux, vix, vita, tuis*, (ML 24) and *clare beati agnoscere*, (ML 18) both appear among the fifteen poems attributed to Paul in Migné's *Patrologia Latina*.²⁰⁵ Bethmann also considered the Epitome of Festus *De verborum significatu* to have been wrongly attributed to Paul,²⁰⁶ and therefore rejected the attribution to Paul of the verse *multa legit paucis* (ML 42) which appears in some manuscript sources.

1.4.3 : Dahn's study and discussion of the verse compositions

Since the historical context of Paul's life is so important to this study, it is worth noting both that a recurring theme in Dahn's work is his conviction that the epitaph for Paul, *perspicua clarum nimium*, composed by Hilderic, a monk of Monte Cassino, gives an erroneous account of his life history,²⁰⁷ and that that conviction is not shared by any other editor or biographer mentioned in this study. At the end of chapter V, Dahn summarises his conclusions about Paul's authorship of the verse and prose works discussed²⁰⁸ and presents a brief chronology of his life. Dahn's work ends with an *Anhang*²⁰⁹ containing the text of thirty-one works. Of these, six are contributions from Charlemagne and Peter of Pisa to the court exchanges, one is Hilderic's epitaph for Paul, three are letters undoubtedly by Paul,²¹⁰ and one is an extract, beginning with the words '*idque opus Paulo diacono, familiaris clientulo nostro*', from Charlemagne's circular letter approving the use of the homiliary compiled by Paul.²¹¹ The other twenty works are poems and, in the text, Dahn identifies sixteen as undoubtedly attributable to Paul, and four (including the letter to Adalhard, with its end verse *ante suos refluus*, ML 10) as very probably attributable to him. However, the content of the *Anhang* does not correspond to the analysis in the text at pages 70-71. It omits the two securely attributed S. Benedict poems, *ordiar unde tuos sacer* (ML 46) and *fratres alacri pectore* (ML 26), as well as *qui sacra vivaci* (ML 54) which Dahn considers to be very probably (*sehr wahrscheinlich*) by Paul, but includes the

205 J.-P. Migne, *PL* 95, clm. 1584-1606.

206 Bethmann, 'Paulus Diaconus Leben und Schriften,' 320-22.

207 Dahn, *Paulus Diaconus*, 5, 9, 11, 21, 74; his view is also expressed by the title which he gives it in the *Anhang*, 'Hildriks angebliche (alleged) Grabschrift für Paulus', *car. xxxi*, 103.

208 *Ibid.*, 70-73.

209 *Ibid.*, 76-104.

210 Including the letter to Theudemar, *Anhang*, *car. v*, 81, but without the end verse *iam fluebat decima*.

211 Also quoted by Neff, *Gedichte*, *car. xxxii*, 131; the circular letter is the subject of a recent study by Glatthaar, 'Zur Datierung der Epistola Karls des Grössen,' 455.

insufficiently evidenced (*ungenügend beglaubigt*) *ut queant laxis* (ML 64),²¹² and three of the wholly unevidenced poems of which Paul's authorship is to be denied (*ganz unbeglaubigt und abzusprechen*). These are the *titulus, multicolor quali* (ML 43), the Lake Como poem *ordiar unde tuas laudes* (ML 45), and the epitaph for Queen Ansa, *lactea splendifico* (ML 39).²¹³

1.4.4 : The conclusions reached by Bethmann and Dahn

Table 1.1, below, lists all the verse compositions discussed by either Bethmann or Dahn, with their estimates of the likelihood of Paul's authorship. Those estimates are expressed in terms of the classification in Table 1.2, which is adapted from the scheme devised by Dahn.²¹⁴ This emphasises the divergence, remarked on by Neff, between their views. For convenience, Table 1.1 also indicates those compositions which are considered authentic by Manitius (1911)²¹⁵ and by Worstbrock (2004)²¹⁶ and those included in *Poetria Nova*,²¹⁷ with their reference numbers. The reference numbers in the compilation edited by Schaller and Köngsen (1977)²¹⁸ are given in the Master List, Table A1.

1.4.5 : The account by Manitius

In 1911, three years after the publication of Neff's edition, the first volume of Manitius' comprehensive study of early mediaeval Latin literature²¹⁹ appeared. The chapter devoted to Paul occupies sixteen pages and traces a sequence of literary activity in which the commentary on his prose works predominates. The majority of the twenty-one poems which Manitius accepts as undoubtedly by Paul are those datable to the Francia period and contained in the editions by Dümmler and Neff, namely the plea to Charlemagne, *verba tui famuli* (ML 64), the five poems contributed by Paul to the exchanges at the court, the five epitaphs for members of Charlemagne's family, the epitaph to Venantius Fortunatus,²²⁰ and *iam fluebat decima* (ML 36),

212 Dahn, *Paulus Diaconus, Anhang, carm. xxvii*, 98.

213 *Ibid.*; for *multicolor quali*, see *Anhang, carm. ii*, 77, where it is entitled 'versus in tribunali'; for *ordiar unde tuas sacer* (*Anhang, carm. xxvi*, 97), see the main text at 65-67, and for the epitaph for Queen Ansa (*Anhang, carm. xxvii*, 97), see the main text, 67-68.

214 *Ibid.*, 70-72.

215 M. Manitius, 'Die Universalen Schriftsteller; 41, Paulus Diaconus,' 257-72.

216 F.J. Worstbrock., 'Paulus Diaconus OSB' in *Deutsches Litteratur des Mittelalters Verfasserlexikon, Band 11, Nachträge und Korrekturen*, ed. K. Ruh, (Berlin: Walter de Gruyter, 2004), clm. 1172-86.

217 P. Mastandrea and L. Tassarola, eds., *Poetria Nova--a CD-ROM of Latin mediaeval poetry, 650-1250 AD* (Florence: SISMEL, Edizione Galluzzo, 2001).

218 D. Schaller and E. Köngsen, eds., *Initia carminorum Latinorum saeculi undecimo antiquorum* (Göttingen: 1977).

219 M. Manitius, 'Die Universalen Schriftsteller; 41, Paulus Diaconus,' 257-72.

220 See also M. Manitius, *Geschichte der Christlich-Lateinischen Poesie bis zur Mitte den 8. Jahrhunderts*, (Stuttgart: J.G.Cotta, 1891), 443, 468.

the verse ending to the letter to Theudemar. Like Dümmler, he also accepts the verse history of the bishops of Metz, *qui sacra vivaci* (ML 45), as Paul's work. In addition, there are seven others from outside the Francia period, namely the poem to Adelperga, *A principio saeculorum* (ML 10), the Lake Como poem *ordiar unde tuas laudes*, (ML 45), the acrostic *pulchrior me nullus*, (ML 52), the three inscriptions *aemula Romuleis consurgunt*, (ML 6), *Christe salus utriusque*, (ML 17) and *haec domus est domini* (ML 28) and, in all probability, though he does not say so in terms, the epitaph to Arichis, *lugentum lacrimae* (ML 40).

1.4.6 : Brunhölzl and the *Verfasserlexikon*

The brief account by Brunhölzl (1996)²²¹ in the French translation of his history of mediaeval Latin literature is largely directed towards Paul's life and his prose works. The short section devoted to his poetic heritage²²² begins with the statement that, quantitatively, it is not very important. Brunhölzl speaks of the 'good thirty of the small pieces which he composed', and the fact that they are composed for particular occasions, referring to the inscriptions, in hexameters, for the buildings of Arichis, and the epitaphs. He does not identify many of the 'good thirty'; the poems firmly attributed to Paul are the Lake Como poem, the two S. Benedict poems, the plea to Charlemagne and one of the court poems, *sensi cuius verba*, (ML 58) which is referred to for the light that it throws on Paul's character. Brunhölzl also refers to *ut queant laxis* (ML 64) as having in a more recent age been attributed to Paul without sufficient reason; the *Verfasserlexikon* expresses a similar view.²²³ Brunhölzl also mentions two poems in the passages devoted to Paul's life and prose works, *A principio saeculorum* (ML 11)²²⁴ and *qui sacra vivaci*, (ML 54), regarding the latter as more resembling the work of Angilram.²²⁵

The article by Worstbrock (2004) in the *Deutsche Verfasserlexikon des Mittelalters*²²⁶ does not give such a detailed exposition of Paul's literary history as does Manitius. It identifies the composition in praise of Lake Como as his first work and suggests that it could have already come into existence in the Pavia years. It recognizes two creative phases thereafter, one while Paul was closely connected with the Beneventan court in the 760s, and the second and most important in the service of Charlemagne and subsequently in Monte Cassino. In section VI of

221 F. Brunholzl, 'Le Renouveau de Charlemagne, Paul Diacre,' in *Histoire de la littérature latine du moyen age*, (Turnhout: Brepols, 1996), 20-29.

222 *Ibid.*, 27-29.

223 Worstbrock, *Verfasserlexikon*, clm. 1183, which refers to its attribution to Paul by Drevés in *AH*, vol. 50 (1907), 120.

224 Brunhölzl, *Histoire et la littérature latine du moyen age*, 22.

225 *Ibid.*, 24.

226 Worstbrock, *Verfasserlexikon*, clm. 1172-86.

the article, entitled *Carmina*,²²⁷ there is a brief discussion of the 'good thirty' poems²²⁸, but only twenty are mentioned in that section; *A principio saeculorum* (ML 11) is also attributed to Paul in the historical section of the article. Worstbrock's selection is very similar to that of Manitius; the differences are that he includes the two poems to S. Benedict, *ordiar unde tuos, sacer* (ML 46) and *fratres alacri pectore* (ML 26), and the epitaphs for Queen Ansa, *lactea splendifico*, (ML 39) and Sophia, *roscida de lacrimis* (ML 56); he does not include the epitaphs for Venantius Fortunatus or for Arichis and, like Neff, does not accept *qui sacra vivaci* (ML 45) as being by Paul.

Tables 1.1 and 1.2, which identify the poems considered authentic by Manitius and by Worstbrock, are followed by discussion of the manuscript study by Stella²²⁹.

227 *Ibid*, clms. 1182-86.

228 Although Brunhölzl uses the same phrase, Worstbrock does not appear to have taken it from Brunhölzl's study, which is not mentioned in the bibliography of section VI (*Carmina*) in his own article.

229 At section 1.4.7, below.

Table 1.1: Paul's verse compositions according to Bethmann, Dahn and other studies

Note: As with the master list, the entries for the poems of the 'provisional canon' are in bold type and the poems as to which Dümmler and Neff disagree are indicated by the symbol ■ in the ML column and are marked D or N to identify the edition in which they are accepted. For the key to the classification of the likelihood of Paul's authorship, see Table 1.2.

ML	Incipit	Biographer				Other study or collection ²³⁰		
		Bethmann		Dahn		Man.	Vfl	PN
		Class	Page	Class	Ref. ²³¹			
1 I	Adam per lignum							48
1 II	Crux tua Christe potens							48
1 III	Crux tua lux lucis							48
1 IV	Crux tua rex regum							48
(all ■ N)								
2	Ad flendos tuos, Aquilegia	C	320	BB	72			
3	Ad perennis vitae fontem	C	248,320	BB	72			51
4	Adsunt quattuor in prima							App.1, 1.1
5 ■,D	Aegrum fama fuit							27
6	Aemula Romuleis consurgunt					A	A	6
7	Ampla mihi vestro	A	296	B	XXI			
8	Uttere felix munere Christi	A	296	B	XXII 54			
9	Angustae vitae fugiunt							5
10	Ante suos refluus	A	297²³²	B	VI			26A
11	A principio saeculorum	A	293	A	I	A	A	1
12	Aquarum meis quis det	C	248,320	BB	72			52
13	Aurea quae fulvis	A	291	A	XVIII	A	A	22
14	Candidolum bifido	A	248,295	A	XII	A	A	18
15	Carmina ferte mea							44
16	Christe deus mundi							49
17	Christe salus utriusque	A	293		16	A	A	7
18	Clare beati agnoscere	D	334					
19	Clauditur hoc tumulo	D	248					
20	Crederere si velles							45

230 Respectively, Manitius, the *Verfasserlexikon* and *Poetria Nova*.

231 Either the reference number in the *Anhang* (in Roman numerals) or the page of the main text where its attribution is discussed (in Arabic numerals), or, where appropriate, both.

232 Bethmann here discusses the 'Epistola ad Adalardum', of which it is the end verse.

21	Cynthias occiduas	A	248,295	A	VII	A	A	16
22	Dulcis amice bibe gratanter							31
23	Dulcis amice veni							30
24	Dux, vix, vita, tuis	D	324					
25	Filius ille dei							
26	Fratres alacri pectore	A	289		63		A	3
27	Funereo textu scribuntur							
28	Haec domus est domini					A	A	32
29	Hausimus altifluam							
30	Hausimus altifluo							
31	Hic decus Italiae	C	247,320	BB	72			50
32	Hic ego quae iaceo	A	291	A	XVI	A	A	20
33	Hildegard rapuit	A	292	A	XX	A	A	24
34 _■ D	Hoc satus in viridi	C	248,319	BB	72			39
35	Hoc tumulata iacet	A	291	A	XIX	A	A	23
36	Iam fluebat decima	A	248,297 ²³³			A	A	26
37	Iam puto nervosis			A	XI	A	A	14
38	Ingenio clarus sensu	A	292			A	A	19
39	Lactea splendifico			D	XXVII; 67		A	8
40	Lugentum lacrimis	A	292	A	XXV	A		33
41	Martir Mercuri	A?	291 ²³⁴	D	17,20, 71			
42 _■ D	Multa legit paucis	D	321					26B
43 _■ N	Multicolor quali			D	II; 16			46
44	O Benedicta soror	D	323	D	63,71			
45	Ordiam unde tuas laudes			D	XXVI; 65, 71	A	A	4
46	Ordiam unde tuos sacer	A	248,288		63		A	2
47 _■ N	O una ante omnes							47
48	Pallida sub parvo							
49	Perge, libelle meus							
50	Perpetualis amor	A	291	A	XVII	A	A	10

233 Bethmann here discusses the 'Epistola ad Theudemarum', of which it is the end verse.

234 The classification as A? in the Table reflects Bethmann's ambivalence about the authorship of this hymn; he thought it very probable that it was composed by Paul, since Arichis was Paul's patron, the translation took place in 768 and Arichis commissioned a hymn to be written for the occasion; however, he acknowledges that the use of so many rhymes in the hymn makes the attribution doubtful.

51	Post has nectit subsequentes							App. 1, 1.2
52	N Pulchrior me nullus					A		
53	D Quaerebat maerens							28
54	D Qui sacra vivaci	A	294		49,71	A		25
55	Quis possit amplo	A	290	D	17,71			55
56	Roscida de lacrimis	C	248.319	BB	72		A	9
57	Salve, miles egregie	A?	292 ²³⁵	D	17,20,71			
58	Sensi cuius verba	A	247	A	XV	A	A	12
59	Trax puer adstricto	D	247,296		45 ²³⁶			12A
60	Sic ego suscepi			A	IX	A	A	14
61	Sit tibi sancta phalanx							53
62	Sponsa decora Dei	A	289	B	XXX; 63			
63	D Temporibus priscis							29
64	Ut queant laxis	A	258,289	C	XXVIII			54
65	Verba tui famuli	A	248,294	A	IV	A	A	10

Table 1.2: Classification of the probability of Paul's authorship according to Bethmann and Dahn

Designation	Bethmann description	Dahn description
A	Undoubted	Undoubted
B		Very probably by Paul
BB		Doubted by Bethmann, but at least as likely to be by Paul as some of those which Bethmann does not doubt ²³⁷
C	Doubtful	Inadequately evidenced
D	Wrongly attributed to Paul	Totally without evidence; Paul's authorship is denied

²³⁵ See n.156; the same arguments apply.

²³⁶ Printed in Dahn, *Paulus Diaconus* as an appendix to *Anhang, carm. xv*, 91.

²³⁷ Hence the designation BB (better than Bethmann).

1.4.7. The manuscript study by Francesco Stella

This study, published in 2000, is of a different nature to the others discussed in this chapter.²³⁸ It does not attempt to identify a corpus of poetic works attributable to Paul and is confined to an incomplete selection of the manuscript sources of the twenty-seven poems listed in Table 1.3, below. Thirteen of those poems are considered authentic by both Dümmler and Neff. Of the remaining fourteen, Dümmler accepts one (*qui sacra vivaci*, ML 54) which Neff rejects. Neff admits *O una ante omnes* (ML 47) as the work of Paul, whereas Dümmler places it among the *dubia*. Stella has identified additional manuscript witnesses for seven other poems regarded by Dümmler as *dubia*; Neff mentions only one of these (*dulcis amice bibe, gratanter*, ML 22), including it in his *Anhang*, together with two others (*funereo textu scribuntur*, ML 27 and *pallida sub parvo*, ML 48) not included in Dümmler's edition. Neff's inclusion of a poem in the *Anhang* is an expression of his view that Paul is not, or is extremely unlikely to have been, the author of the poem in question. Finally, Stella has identified further manuscript witnesses for the two poems to S. Scholastica and the epigram *trax puer adstricto* (ML 59) which is appended to *sensi cuius verba* (ML 58) in both editions.

238 F. Stella, La poesia di Paolo Diacono: nuovi manoscritti e attribuzioni incerte, in *Atti del Convegno Internazionale di studi, Cividale del Friuli-Udine, 6-9 maggio 1999*, cur. Paolo Chiesa (Udine: Forum Editrice universitaria udinese, 2000): 551-74.

Table 1.3: Poems for which Stella lists newly identified manuscript witnesses

ML	Incipit	Edition			ICI ²³⁹
		Dümmler	Neff	Citelli	
3	Ad perennis vitae fontem	<i>LI</i>		3	195
6	Aemula Romuleis consurgunt	VI	IV I	7	356
7	Ampla mihi vestro	XXXIV	XXXI	8	744
9	Angustae vitae fugiunt	V	VIII	9	801
10	Ante suos refluus	XXVI	XXXI	31	881
11	A principio saeculorum	I	II	1	23
12	Aquarum meis quis det	<i>LII</i>		11	955
17	Christe salus utriusque	VII	IV II	16	2237
22	Dulcis amice bibe gratanter	XXXI	VII (A)	23	3976
23	Dulcis amice veni ²⁴⁰	XXX		24	3979
26	Fratres alacri pectore	III	VII	27	5356
27	Funereo textu scribuntur		III (A)		
28	Haec domus est domini	XXXII	IV III	28	5869
33	Hildegard rapuit	XXIV	XXVIII	32	6818
38	Ingenio clarus sensu	XIX	XXIX	37	8086
40	Lugentum lacrimis	XXXIII	XXXV	39	9070
46	Ordiam unde tuos sacer	II	VI	49	11423
47	O una ante omnes	<i>XLVII</i>	V II	46	11066
48	Pallida sub parvo ²⁴¹		II (A)		11542
54	Qui sacra vivaci	XXV	V(A)	57	13872
55	Quis possit amplo	<i>LV</i>		58	13693
59	Trax puer adstricto (appended to sensi cuius verba in D & N editions)	XII	XIII	69 63	16361 14894
61	Sit tibi sancta phalanx	<i>LIII</i>		65	15447
64	Ut queant laxis	<i>LIV</i>		71	16894
65	Verba tui famuli	X	XI	73	17090
62, 44	Sponsa decora Dei and O Benedicta soror (the S.Scholastica poems)			66 45	15635 10817

The following discussion addresses three aspects of Stella's article, which are the method employed, the content of the article and the conclusions which may be legitimately drawn from it. The article is entitled "The poetry of Paul the Deacon; new manuscripts and uncertain attributions". While that title suggests that study of the new manuscripts is, or can be, an aid to attribution, Stella recognises at p.552 that one cannot apply the stemmatic approach (which may be of value in reconstructing the original text of a manuscript) to questions of attribution. He is

²³⁹ That is, the reference number in D. Schaller and E. Köngsen, eds., *Initia carminorum Latinorum saeculi undecimo antiquorum* (Göttingen: Vandenhoeck and Rupprecht, 1977).

²⁴⁰ Migne, *PL*, vol.95, clms. 1594-97. Bethmann, 'Paulus Diaconus Leben und Schriften,' 325, denies Paul's authorship.

²⁴¹ Printed in *PLAC I*, 109 as *carm vi* in a group of verses collected under the title *Tituli saeculi VIII*, 101-15.

right to do so because it is apparent, both in principle and in practice, that manuscript history and transmission is likely to be of limited value as an aid to attribution, though it may play a useful role in circumstances where the transmission history reflects the biography of the candidate author to a significant extent.

However, that is not so in Paul's case. The survey of his life and works in section 1.2 of this chapter identifies only two periods of Paul's life during which he produced a significant quantity of now extant verse. The first was his stay at the ducal court of Benevento which began in 760 or shortly afterwards and continued until at least 769 and possibly until 774. The second was the period spent at the peripatetic court of Charlemagne which began in 782 and ended at some time between 785 and early 787, that being the only period which Paul is known to have spent outside Italy. The six principal manuscript witnesses for his poems discussed by Stella²⁴² do not reflect that biography. It is also particularly striking that the only extant manuscripts of Paul's poem to Adelperga, *A principio saeculorum*, composed in 763 during his stay at the Beneventan court, are the twelfth-century copy in Madrid Biblioteca Nacional, A.16 and the fourteenth-century Florentine copy identified by Stella as Firenze Strozzi 46.

But, if one examines the value of transmission studies on a more general level, their potential limitations are immediately apparent. In the first place, there is no defined geographical path along which the works of a particular author are bound to travel; the process of dissemination may apparently result from the operation of chance or have been driven by the nature, content and repute of the work in question and the location of those who either desire or are required to possess or become acquainted with it. The substantial number of manuscripts containing one or more of the three hymns (*fratres alacri pectore, quis possit amplo* and *ut queant laxis*) exemplifies dissemination driven by demand. Thus, volume 50 of *Analecta Hymnica* cites seven sources for *fratres alacri pectore*, twelve for *quis possit amplo* and twenty-three for *ut queant laxis*, and it is unsurprising that that hymn to S. John the Baptist, patron saint of the Lombards (as attested by the *Historia Langobardorum*) and dedicatee of Queen Theudelinda's early seventh-century religious foundation at Monza, is the most popular of the three. Similarly the widespread dissemination of the homiliary was the product of Charlemagne's drive to establish uniformity of religious practice.

Second, it is clear from the discussion of manuscript association in Chapter 4 of this work that the mere occurrence of a poem of doubtful authorship (X) in a sequence of authentic works of a particular author (A) is by no means conclusive evidence that X was the work of A; this was clearly recognised by Neff and is also acknowledged by Stella. Third, it is highly relevant that

242 In chronological order, they are Berlin, Staatsbibliothek Diez. B 66, s. viii^{ex}; Paris, BnFr, lat.528, s.ix^{ex}; St Gallen, Stiftsbibliothek, 899, s.ix-x; Leipzig Staatsbibliothek Rep. I, 74, s. ix or x; St Gallen, Stiftsbibliothek, 573 s.x; and London, BL, Harley 3685 s.xv.

neither of the two major attribution studies of poets of the Carolingian era (that is, Schaller on Theodulf and Burghardt on Alcuin, discussed in Chapter 2) resort to this approach. It is of course true that both studies were based on early modern printings of then extant collections, namely the Sirmund corpus of the works of Theodulf and the Quercetanus edition of those of Alcuin, each based on a lost manuscript which transmitted a more extensive collection than any other manuscript witness, but it was open to them to have incorporated manuscript association and transmission studies into their own work. In so far as their attributions are based on studies of manuscripts, they derive from the content of the work inscribed and the information provided by the scribe, and then from metrical, lexical and stylistic features of those works in the corpus examined which are not authenticated by manuscript content or historical context. They also rely on attributions by other scholars, more to exclude than include works of doubtful origin; thus, for example, in eliminating poems by other authors from those included in the Quercetanus edition, Burghardt relied on Ehwald's identification of some poems as the work of Aldhelm²⁴³ and on Corsaro²⁴⁴ for those attributed to Rusticus Helpidius.

In any case, the tenor of Stella's article clearly shows that the real value of the new witnesses is in providing a foundation for a new edition of the works of Paul with better readings; this appears particularly from his discussion of the variant versions of *ordiar unde tuos, sacer* (ML 46). However, this leads to the second area of comment, that is, the content of his article. Since the content centres on the information revealed by, and the conclusions drawn from, his study of the new witnesses, it is appropriate at this point to list the manuscript witnesses identified in the appendix to his article at pp.572-74. In Table 1.4, that appendix has been reorganised so as to list the sources in chronological order, but Stella's designations have been retained. Where these codices have been used by Dümmler or Neff in their editions, their sigla are given in columns D and N. Asterisks indicate that the editor has cited the manuscript or used it in a limited way but has not allocated a siglum to it. If an entry in either the D or the N column has neither a siglum nor an asterisk, that indicates that the editor does not mention the manuscript in question. Poems contained in the sources are identified in the "content" column by their master list numbers²⁴⁵, not, as in the table in Stella's article, by title. Witnesses noted in *Analecta Hymnica* or in the study by Chailley²⁴⁶ are indicated by ■ in the columns headed AH and C. Chailley's study is concerned only with *ut queant laxis* (ML 64), while *Analecta Hymnica* gives sources of this and the two other hymns, *fratres alacri pectore* (ML 26) and *quis possit amplo* (ML 55).

243 R. Ehwald, *Aldhelmi Opera, Monumenta Germaniae Historica, Scriptores Auctores Antiquissimi*, IV, 15 (Berlin: Weidmann, 1919).

244 F. Corsaro, *Elpidio Rustico* (Catania: Centro di studi Cristiani Paolo Ubaldi, 1955).

245 In the Appendix, Table A1.

246 J. Chailley, 'Ut queant laxis et les Origines de la Gamme,' *Acta Musicologica* 56, (1984), 48-64.

Table 1.4: Stella's manuscript witnesses in chronological order

Note: The table designates the witnesses in the form in which they appear in Stella's paper. Where, instead of listing the content, Stella indicates it as "vari", I have inserted the master-list numbers of the "vari" for all such manuscripts.

Source and century or date	D	N	AH	C	Content (ML numbers)
VIII					
Monza 159					7 ²⁴⁷
Paris 7530		Q			3,55
Petroburg S. Germani 169.858		O			10
Berlin Diez B.66 (viii ^{ex.})	B	D			vari [15, 20, 37]
IX					
Paris 9428 (ix ^{in.})	M	N			54
Verona Capit. LXXXVIII					22
Paris 4841		E			48
Leiden Voss. Q 15		Λ			46
Roma Casanat. B IV 18		Σ			46
Bern 363 f.196	B1		■	■	64
Karlsruhe Aug. 173	K	P			7
Leipzig Rep. I. 74	L	L			vari [16, 39, 43, 45, 47, 52, 56]
Paris 528	P	P ²⁴⁸			vari [3, 10, 12, 14, 19, 21, 31, 34, 46, 56, 58, 65]
Paris 14143	Q				46
Paris 2832 f. 118	R				38
St Gallen 899 (+ Reg. 421) ²⁴⁹ (ix or x)	G	G			vari [5, 21, 31, 34, 37, 43, 45, 53, 60, 63]
X					
Vat. Reg. 421 (cfr. Sang. 899)	G	G			vari (see St Gallen 899)
Bamberg Misc. Bibl. 44 (d. 909)					64
Basel UB A X 40					64
Rome Ross. Moiss.	*			■	64
Vat. Urb. 532	*			■	64
Reg. Lat 801	*	*			Glosses on 46
Bern 455	B2		■	■	64

247 Stella lists this as *summo apici (rerum)* but the incipit is *ampla mihi vestro*.

248 Stella gives this siglum incorrectly as Q, which Neff uses to designate Paris 7530 and Stella has omitted that designation from his list. It is included in the Table (see n.164).

249 So dated by Dümmler; Stella gives it as x. and lists it twice.

Vat Palat. Lat 1753		R			27
S. Gallen 573	S	I			3, 12, 22, 23, 47
Leiden Voss. Lat Fol. 4	V	Q			7
XI					
Leiden Voss. Lat Oct. 15					46
Roma Casanat. 713					46
Roma Casanat. 718					46
St Gallen 387 p. 266	*				64
Montecassino 175		M			26, 38, 46
Paris 5294		S ²⁵⁰			33
St Gallen 184		V			22
Farfa (Archive XII 379)	*				55, 64
Farfa (Archive XII 493)	*				55, 64
Vat. Ottobon 477	*				46
Vat. 623	*				46
Montecassino 55	*	Γ			46
Montecassino 453	*	Π			46
Oxford Bodleian Add. C 144	*	B			38 ²⁵¹ [14, 30, 49]
München 4533	D	R			7
Vat. Urb. 585	U1		■	■	55, 64
Vat. Lat. 1202	U1e Ur				62,44
London BM Add. 11983 (xi-xii)					59
Roma Vallicell. C9	*				46
XII					
Cambridge, Peterhouse 130 (XII ^{inc})					7
Vat. Lat 4928 (sic) ²⁵² (d.1113)	*		■		55, 64
Dijon 159 (126)					46
Douai BM 825					46
Douai BM 842					46
Leiden Voss. Lat F.10					7
Wien 2521					59

250 Very confusingly, Stella also gives this siglum to two other sources; an undated lost Bellovacensis (Beauvais) manuscript and a printing of a 1585 edition (Dousa, ed.) of the poems of Petronius, both containing *Trax puer adstricto* (ML 59).

251 This is an error by Stella; that MS does not contain *ingenio clarus sensu* (ML 38) as his table states; the correct content is shown by the master list numbers in square brackets, see Neff, *Gedichte, carm. xix* and is also given by Stella at p.556 of his article.

252 Stella's own annotation.

Paris 1720	*				46
Madrid A 16	A	A			11
XIII Cambrai, BM 536 (495)					46
Metz dep.					64
Paris 6630					59
Roma Vallicell. C 93, 431	*				55
Vat. Lat 5001 (xiii-xiv)	C	C			40
XIV Firenze Strozzi 46 (copy of A)	A1				11
Vat. Urb. Lat. 533					65
Metz Stadtb.64 (xiv-xv)	*	M			24-26 epitafi ²⁵³
Padova UB 524 (xiv-xvi)					46
XV Milan Ambr. G 64					59
Lond. Harl. 3685	H	H			vari; 6, 9, 61 ²⁵⁴ [29, 34, 56, 65]
Escorial b. I.12	*				46
Leiden Voss. Misc. 21 (xv-xvi)					21, 22, 34 (vv.1-4), 37, 45, 53, 60, 63 ²⁵⁵
XVI Wolfenbüttel 4028 (d. 1514)					59
Wolfenbüttel 4639 (Gud. Lat. 332)					59
Undated by Stella Bruxelles 9742 (Archive VIII, p.531)	*				46
Bruxelles 6842	*	*			Epitaphs, not identified
Vat. Lat. 7172	Va				55

Stella also refers to six printed editions which are not easy to identify from his extremely cursory references; the earliest dates from 1590 and the latest from an unspecified date in the eighteenth century. They are omitted from Table 1.3 as their inclusion would add nothing to this analysis of Stella's article, particularly since none of them contain anything not found in the

253 By reference to Neff's edition, these are *Hic ego quae iaceo* (to Rothaid, ML 32), *perpetualis amor* (to Adelheid, ML 50) and *aurea qui fulvis* (to Queen Hildegarde, ML 13).

254 Stella correctly identifies these three poems as appearing in Harley 3685 but he does not mention the four whose numbers are in brackets.

255 This manuscript also contains two of Peter's poems (*Pauli sub umbroso* and *lumine purpureo*). Stella identifies the poems by their numbers in Dümmler's edition, and the other poems, all in the master list, are *cyntias occiduas* (21), *dulcis amice, bibe* (22), *hoc satis in viridi* (34), *iam puto nervosis* (37), *ordiar unde tuas laudes* (45), *quaerebat maerens* (53), *sic ego suscepi* (60) and *temporibus priscis* (63).

manuscript sources listed in Table 1.4, above, and he does not discuss any of them in the section of his article (pp.563-570) relating to the new witnesses nor indicate that they are based on sources which are now lost. Those new witnesses contain the following identified poems; incipits in bold type are those of poems of doubtful origin.

a) *Ordinar unde tuos* (ML 46)

b) *Fratres alacri pectore* (ML 27) and ***ut queant laxis*** (ML 64)

c) relates to a prose work, the homiliary, and to its introductory poem, *ampla mihi vestro* (ML 7)

d) ***Dulcis amice bibi*** (ML 22)

e) ***Dulcis amice veni*** (ML 23)

f) The works contained in the manuscript referred to as Misc. 21 (p.567); see the entry in Table 1.4 for Leiden Voss. Misc. 21 (XV-XVI). In addition, Stella refers to the rhythmic grammatical poems (that is, ***adsunt quattuor in prima*** (ML 4) and *post has nectit subsequentes* (ML 51)) at p.569.

In the section of his article which relates to the new witnesses, Stella acknowledges that his collection of sources is incomplete by referring to it, at p.563, as a preliminary census.²⁵⁶ To take the most obvious example, it is clear that, for the two hymns of doubtful authorship, *ut queant laxis* and *quis possit amplo*, Stella has identified only a small fraction of the manuscripts containing them, though it is also right to acknowledge that he has brought to light a number which had so far escaped attention. Table 1.4, above, identifies seven sources of *quis possit amplo* (ML 55) but these include only two of the twelve listed in *Analecta Hymnica*; five are new discoveries. Similarly with *ut queant laxis* (ML 64) he has identified twelve witnesses, seven of which were previously unknown, but he includes only five of the forty-five tabulated in Chailley's article (which include those listed in *Analecta Hymnica*).²⁵⁷ It is surprising that, in a manuscript study where the manuscript sources of *ut queant laxis* form a significant part, the most comprehensive study of those sources is not cited.

The newly adduced witnesses are identifiable from Table 1.4 by the absence of any entries in the four columns headed D, N, AH and C.²⁵⁸ These absences may be partly accounted for by assuming that Stella has deliberately omitted versions contained in hymnaries. Nevertheless, this does give cause to doubt whether his investigations have included all witnesses of the other poems where new witnesses have been brought to light, and indeed this is acknowledged by the statement at p.571 that 'the panorama is not yet complete, but I think those which I have tried to summarise here are the main data'.²⁵⁹ Stella does not comment on the basis for, or the

256 "censimento preliminaire."

257 Chailley, 'Ut queant laxis et les Origines de la Gamme,' 48-64.

258 See, for example, the very first manuscript listed in the Table, the eighth-century Monza 159.

259 "Il panorama non è ancora completo, ma credo che quelli che ho cercato di sintetizzare qui siano i dati principali"

aim of, his tabulation, but it begins with a list of the new witnesses in alphabetical order of manuscript sources and ends with a list of the poems included in Dümmler's edition arranged in alphabetical order of the sigla allocated to them by Dümmler. There is certainly no attempt at arrangement which would in any way relate to the transmission history of the works contained in the new witnesses.

The title of Stella's article might, at first sight, give the impression that the discovery of further manuscript sources of poems of doubtful authorship assists in the process of attribution. However, the text clearly shows that Stella is not making any such claim. The poems of doubtful authorship for which he has assembled the greatest numbers of hitherto unknown witnesses are *ut queant laxis* (ML 64, twelve), *quis possit amplo* (ML 55, seven), *dulcis amice, bibe* (ML 22, four) and *trax puer adstricto* (ML 59, six). The article does not base any attributions on those newly discovered witnesses and does not attempt to resolve the question whether *trax puer* was Paul's own translation from the Greek or his remembrance of his schoolboy learning. Interestingly, Stella seems to suggest at 566, by his comment on *dulcis amice, bibe* as 'probably due to the composition not as single text but as the assembly of homogeneous distichs elaborated by different authors'²⁶⁰ that the poem is a *cento*. In fact, the poem for which he has discovered the greatest number of witnesses is the undeniably authentic *ordiar unde tuos* (ML 46, twenty-two) and his discussion of these witnesses plainly shows that he considers their value to lie in establishing the best text of the poem. It is fair to conclude that, valuable as the article may be to the production of a new critical edition of the poetic corpus of Paul, it remains doubtful whether its assembly of new witnesses can throw any light on questions of attribution. Indeed, the only example given in the article of the possible value of manuscript studies as an aid to attribution is the discussion of the work of Holtz on the two grammatical rhythmical poems *adsunt quattuor in prima* (ML 4) and *post has nectit subsequentes* (ML 51) and the two abecedarian rhythmical poems *adsunt quattuor in prima* (ML 3) and *aquarum meis quis det* (ML 12)²⁶¹. Of those four poems, only *post has nectit subsequentes*, an acrostic poem whose initial letters spell out *Paulus feci* is accepted by both Dümmler and Neff as authentically Pauline. Although including it in his *Appendix ad Paulum*, Dümmler admits the possibility that Peter of Pisa is the author of *adsunt quattuor in prima*, and includes the two abecedarian poems among the *dubia*. Neff rejects the attribution of *adsunt quattuor in prima* to Paul, partly on the ground that it was composed before Paul's arrival at the court of Charlemagne. Neff does not mention the abecedarian poems at all.

260 "...probabilmente dovuta alla composizione non come unico testo ma come assemblaggio di distichi omogenei elaborate da autori diversi"

261 L. Holtz, 'Le Parisinus Latinus 7530, synthèse cassiniene des arts liberaux,' *Studi Medievali* 16 (1975): 97-152.

1.4.8: Summary

This chapter has explored the cultural ambiance in which Paul wrote and the successive phases of his literary activities. The prior studies discussed in section 1.4 provide a starting-point for this study, the purpose of which is to establish, so far as possible, the corpus of Paul's verse compositions. The study will involve consideration of manuscript evidence, content, transmission history and association in manuscripts, historical context, and aspects of style. Examination of stylistic evidence, for example, the metres employed, identifiable metrical and rhythmic patterns, hiatus and elision, verbal usages, and the use of or avoidance of rhyme, requires a basis of comparison consisting of works attributable to Paul with a high degree of probability, on other than stylistic grounds; for, if the selection of a comparison sample itself depends heavily on stylistic evidence, the stylistic arguments for attribution to him of works outside that sample become circular. The comparison samples selected for the purpose of examining stylistic evidence are drawn from the 'provisional canon' identified in Table 1.2 and in the Master List²⁶².

To summarise the present state of the question in numerical terms, the above examination of the two major editions of Paul's verse compositions and the two major biographical and critical studies has identified sixty-five poems associated with Paul (i.e, poems for which his authorship has been considered, whether or not they have been attributed to him), with probabilities of his authorship ranging from certain beyond reasonable doubt to almost, if not entirely, unbelievable. Citelli's edition includes three poems not included in Dümmler's or Neff's edition and not previously considered in the context of Paul's possible authorship.²⁶³ The elegiac couplet *Vale, salus patriae* (ML 68) is a strong candidate for inclusion as it is contained in a letter by Paul, also printed in Citelli's edition. The other two are very unlikely to be the work of Paul.²⁶⁴ The study by Manitius suggests that at least twenty poems are firmly attributable to Paul, while Brunhölzl and Worstbrock, who did not pursue any independent or systematic investigations, see his authentic corpus as containing thirty 'good poems'. The 'provisional canon' contains twenty-eight, and the non-stylistic evidence which supports their attribution to Paul is discussed in chapters 4 and 5, where some further candidates for inclusion in the canon are identified. In all, it is clear that the matter is unresolved and demands systematic study.

261 Appendix, Table A1.

262 See the Master List, Table A1, entries 66-68.

263 Citelli, *Opere*/2.

264 See Tables A3-A5 of the Appendix and the discussion of individual *dubia* in Chapter 4, section 4.7.

Chapter 2: Early mediaeval Latin literature: nine studies of authorship

Part 1: The selected studies and the methods employed in them

2.1: Introduction

The previous chapter depicted the cultural landscape in which Paul lived and wrote, and summarised the material, consisting of two major biographical studies and the three subsequent editions of Paul's poetic compositions, on which the current received opinion as to the authentic content of Paul's verse corpus is mainly based. This chapter examines the ways in which the authorship of a particular work or body of work has been investigated.

The chapter consists of two parts. The first part is an examination of some studies of Latin literature of a period extending from the early or mid-seventh to the early ninth century, which takes in the whole of Paul's life span (*ca.* 725 to, at latest, 799). Table 2.1 lists the chosen studies, identifying the subject author, with his dates, so far as they are known, and the question addressed in the study. There are four types of study, which range from the general (what are the characteristics of the author's verse style) to the highly specific (which of two candidates is the author of the work being investigated). Table 2.2 identifies the types of evidence employed in each of the studies. The second part of the chapter is concerned with evaluating the contribution of the various types of evidence employed in each study towards the conclusion at which the study arrives.

2.2: The identification of style and the process of attribution

The presence of an individual at the scene of an event can be established with almost complete certainty from the characteristics of his fingerprint. An attribution study may be likened to the characterisation of the author's literary fingerprint. As Dr. Johnson put it,

Why, Sir, I think every man whatever has a peculiar style, which may be discovered by nice examination and comparison with others: but a man must write a great deal to make his style obviously discernible.²⁶⁵

A study of the author's style provides, by means of that 'nice examination and comparison with others' which constitutes the investigative process, an image of the authorial fingerprint. The clarity of the image will depend on the nature, amount and quality of the available evidence. The development of ever more powerful methods of literary computing makes it possible to carry the 'nice examination' of the characteristics of the material under investigation to whatever length the investigator considers appropriate. It is the 'comparison with others' that presents the greater problem; how can an investigator identify a body of work, attributable with

²⁶⁵ G.B. Hill, ed., *Boswell's Life of Johnson*, revised by L.F.Powell, vol.III. (Oxford: Clarendon Press, 1934), 280.

a high degree of probability to the putative author (A), sufficient to establish the characteristics of A's fingerprint for the desired purpose of the investigation?

As the selected studies²⁶⁶ show, their desired purpose is not necessarily the attribution of a particular work or body of work to A. The investigator's aim may be to identify a range of characteristics of A's style either as an end in itself or for the purpose of comparing them with those of other authors contemporary with A or who wrote in similar genres to A. To use the fingerprint analogy, he may be simply identifying A's fingerprint or, as Orchard does in his study of Aldhelm²⁶⁷, going on to compare it with those of B, C, D and so on. Such a study may, as in Lapidge's study of Bede²⁶⁸, be extended to ascertaining whether a particular work or body of work bears A's fingerprint. It is only when that is the aim, or one of the aims, of the investigation that it can properly be described as an attribution study.

The attribution studies discussed in this chapter are not all directed towards the same purpose. In those by Schaller on Theodulf²⁶⁹ and Burghardt on Alcuin,²⁷⁰ the purpose is to establish the authentic corpus of the author's verse compositions, and the investigation does not aim to identify the authors of any poems not considered to belong to the authentic corpus²⁷¹. In Freeman's study of the prose *Libri Carolini*, the purpose is to establish whether the author is Theodulf or Alcuin,²⁷² while the three studies, two by Lapidge^{273 274} and one by Herren,²⁷⁵ present differing views on the question whether the author of some metrical poems (including the adonic poem *Ad Fidolium*) is S. Columbanus of Bobbio, Columbanus of Saint-Trond or some other Columbanus. The discussion of the studies demonstrates the different types of evidence on which the investigations are based.

Love²⁷⁶ states that attribution studies conventionally distinguish between internal and external evidence, though he acknowledges that these categories overlap. His formulation is that internal evidence is that which is contained in the work itself, while external evidence

266 See Table 2.1.

267 A. Orchard, *The Poetic Art of Aldhelm*, (Cambridge: Cambridge University Press, 1994).

268 M. Lapidge, 'Bede the Poet', in *Anglo-Latin Literature 600-899*, (London: Hambledon Press, 1996), 313-31.

269 D. Schaller, 'Philologische Untersuchungen zu den Gedichten Theodulf von Orléans', *Deutsches Archiv für Erforschung des Mittelalters* 18, no. 1, (1962): 13-91.

270 H.-D. Burghardt, *Philologische Untersuchungen zu den Gedichten Alcuins*, (Diss. Phil., Heidelberg, 1960).

271 Burghardt does refer to the work of other scholars to identify poems by Aldhelm, Helpidius Rusticus and Paul the Deacon.

272 A. Freeman, 'Theodulf of Orléans and the *Libri Carolini*', *Speculum* 32, no.4, (1957): 663-705.

273 M. Lapidge, 'The authorship of the adonic verses "*Ad Fidolium*" attributed to Columbanus', *Studi mediaevali ser 3*, 18, no.2, (1977): 249-314.

274 M. Lapidge, 'Epilogue: did Columbanus compose metrical verse?' in *Columbanus: Studies on the Latin writings*, ed. M. Lapidge (Woodbridge: Boydell Press, 1997), 274-87.

275 M. W. Herren 'Quantitative Poems attributed to Columbanus of Bobbio', in *Poetry and Philosophy in the Middle Ages*, ed. J. Marenbon, (Leiden: Brill, 2001): 99-112.

276 H. Love, *Attributing Authorship: an introduction* (Cambridge: Cambridge University Press, 2002): 51.

comes from the world within which the work was created, transmitted and read. The present study (and, in particular, Part 2 of this chapter) makes another distinction, that is, between testimonial and circumstantial evidence. The formulation is that testimonial evidence consists of statements, whether by A or another, that A is the author of the work in question, while circumstantial evidence consists of those facts from which inferences may properly be drawn about the likelihood that A is the author of the work in question. This study adopts that formulation because it concentrates attention on the weight to be accorded to each item of the available evidence, whereas the conventional distinction between internal and external evidence does not. Testimonial evidence raises issues about the reliability of the witness who asserts that A is the author; such issues include his proximity, in time or place, to A, and his motives for making that assertion. Circumstantial evidence raises issues about the strength of inferences from observed facts, in particular, whether the facts point unequivocally to A as author or whether they are merely consistent with A's authorship but do not exclude other candidates.

2.3 : *The selected studies*

Table 2.1: The studies reviewed in this chapter

Type ²⁷⁷	Author	Subject/dates	Purpose
1:-1.1 1:-1.2	Lapidge Orchard	Aldhelm d.709	Identification of characteristic features of various genres of Aldhelm's verse
2:-2.1	Lapidge	Bede 672/73-735	To establish characteristic features of Bede's verse and whether he is the author of the verses in the <i>Liber Hymnorum</i>
3:-3.1	Schaller	Theodulf ca 750-821	Identification of verses within and outside the Sirmond corpus attributable to Theodulf
3:-3.2	Burghardt	Alcuin ca 735-804	Identification of the verses in Duchesne's edition attributable to Alcuin, and of the authorship of some of those which are not
4:-4.1	Freeman	Libri Carolini ca 790	To determine whether the author is Theodulf or Alcuin.
5:- 5.1a 5.1.b 5.2	Lapidge Lapidge Herren	Columbanus (1), 543-615 (2) fl ca 780-815	To determine whether the author of the adonic poem <i>Ad Fidolium</i> and other metrical poems is (1) Columbanus of Bobbio, (2) Columbanus of St Trond, or some other unidentified Columbanus ?

In Table 2.2, the types of evidence relied on in each of the studies reviewed are arranged in two main divisions, manuscript evidence and contextual evidence. The manuscript evidence is sub-divided into three categories. In relation to any individual work (q), the first category is evidence contained in the actual text of q, that is to say, stylistic characteristics and verbal content. The second category is evidence in the manuscript as distinct from the text; for example, a declaration by the scribe that A is the author of q, and the third is evidence derived from the history of the manuscript containing q, for instance, its transmission history and the presence in, or absence from the manuscript of works other than q which are attributable to A.

277 The 'type' designations are 1 (study of characteristics, without attribution); 2 (study of characteristics, with attribution); 3 (attribution using authenticity criteria defined in the study); 4 (attribution to one of two authors, based on historical evidence, content and lexical peculiarities); 5 (attribution to one of two or more authors based on historical evidence, availability of source material and the perceived ability of the author to compose metrical verse).

Table 2.2: Evidence relied on in the studies examined in Chapter 2

Note:-An asterisk indicates reliance on a type of evidence. A double asterisk indicates that the study includes some numerical or statistical analysis.

Study	1.1	1.2	2.1	3.1	3.2	4	5.1	5.2
Author (initials)	ML	AO	ML	DS	H-DB	AF	ML	MWH
Subject	Aldhelm		Bede	Theodulf	Alcuin	Libri Carolini	Columbanus	
MANUSCRIPT EVIDENCE CONTAINED IN THE TEXT								
Style and non-attributive content								
Metrical pattern	*	**	*				*	*
Stress pattern	*						*	*
Caesura pattern		**						
Prosody		**	*	*	*		*	*
Elision/hiatus	*	**	*	*	*			
Alliteration	*	**			*			
Rhyme		*						*
Vocabulary		*		*	*			
Grammar and syntax			*	*	*			
Formulas	*	*						
Parallels with or borrowings from other material		*		*			*	*
Attributive content								
Self-attribution				*			*	*
Identification of addressee or subject-matter				*			*	
MANUSCRIPT EVIDENCE NOT CONTAINED IN THE TEXT								
Inscriptions and subscriptions			*	*				
Rubrics and marginalia						*	*	
MANUSCRIPT HISTORY								
Associations								*
Transmission history								
Identity of scribe						*		
CONTEXTUAL EVIDENCE-Author								
life history			*			*	*	*
knowledge of content sources			*	*		*	*	*
knowledge of subject-matter			*	*				
Ability to compose in the given style			*			*	*	*
CONTEXTUAL EVIDENCE- Other than author								
Contemporary attributions				*				

2.3.1 : Study 1.1, Lapidge on Aldhelm

The study examines the metrical peculiarities of Aldhelm's Latin poetry, the discussion of Aldhelm's metrical practice being preceded by a summary²⁷⁸ of his treatise, *De metris*. Although Aldhelm composed in other metres than the hexameter, Lapidge's study is confined to that metre,²⁷⁹ and its starting-point is the range of metrical patterns permitted in a hexameter. The final foot (F6) of a hexameter must be disyllabic, but each of the preceding five may be a dactyl (D) or a spondee (S). There are, therefore, thirty-two possible metrical patterns for feet 1-5 (F1-F5), but spondees in F5 are very rare generally and Aldhelm made it a rule to avoid them, thus reducing the possible patterns to 16. In practice, Aldhelm almost invariably preferred to have spondees in F3 and F4; consequently, those of the sixteen metrical patterns which included dactyls in F1-F4 were virtually reduced to three, namely DSSS, SDSS and DDSS. Classical poets developed techniques to avoid the resulting monotony, but Aldhelm employed those techniques very sparingly. Other features contributing to the monotony of his verse are the use of a limited range of accentual patterns at the end of lines and (contrary to classical practice) the infrequent use of elision²⁸⁰ to regulate and vary the flow of syllables within the hexameter, and the prevalence of end-stopped lines.

Lapidge argues that Aldhelm's metrical practices reflect the difficulty experienced by a pioneer in the art of writing extensive quantitative verse in near ignorance of classical techniques of composition which were not discussed from a practical standpoint in the treatises available to him, and that he addressed the problems which he encountered by resorting to poetic techniques familiar to him from his native English. The two techniques which Lapidge considers are alliteration²⁸¹ and the use of formulas²⁸². He observes that, while alliteration is frequently used in Germanic and Old English verse, classical poets used alliteration sparingly, and then only for special effects.²⁸³ He identifies patterns of alliteration in Aldhelm's verse, illustrated by selected verses from *Carmen de Virginitate*, and his comparison of the occurrence of these patterns in the first hundred lines of *Carmen de Virginitate* and in the first hundred lines of poems by four Christian Latin poets whom Aldhelm had studied most attentively²⁸⁴ shows

278 M. Lapidge, 'Aldhelm's Latin Poetry and Old English Verse', in *Anglo-Latin Literature 600-899*, ed. M. Lapidge, (London: Hambledon Press, 1996), 250-51.

279 Save for a brief reference to alliteration in rhythmical octosyllabic verses arguably attributable to Aldhelm; *Ibid.*, 256.

280 This is discussed in more detail in section 2.3.2, Orchard on Aldhelm, sub-section (b). 'Prosody'.

281 281 Lapidge, 'Aldhelm's Latin Poetry and Old English Verse', 256-61.

282 *Ibid.*, 261-69.

283 E.g., '...caoum conversa cuspide montem/impulit in latus ac venti, velut agmine facto/quo data porta, ruant et terras turbine perflant', describing the raging winds of the cave of Aeolus: *Aeneid*, 1. 81-83.

284 Lapidge, 'Aldhelm's Latin Poetry and Old English Verse', 261, n.31; the comparators are Iuuenius, Caelius Sedulius, Arator and Venantius Fortunatus.

that Aldhelm employed alliteration between twice and four times as frequently as any of the comparators.

Lapidge discerns in Aldhelm's poetry certain repeated features which are 'formulas', that is to say, 'groups of words which are regularly employed under the same metrical conditions to express a given essential idea'.²⁸⁵ He gives two examples of their use in *Carmen de Virginitate*, designating the 'given essential ideas' as the 'sceptres of power' (*sceptra polorum*) and the 'summits of heaven' (*culmina caeli*), illustrating the variants of those unmutated forms in *Carmen de Virginitate*, and showing how a formula (*culmina caeli*) had been adapted to express similar essential ideas such as 'stars of heaven' (*sidera caeli*) and 'thresholds of heaven' (*limina caeli*).

Finally, Lapidge concludes that Aldhelm was not only a pioneer but a model, in that his technique of composing hexameters from variable but predetermined metrical formulas was used by Anglo-Latin and Carolingian poets of subsequent generations and may have been taught in Anglo-Saxon schools. Thus his study, although identifying distinctive features of Aldhelm's style, leaves open the question (which, of course, it was not designed to answer) whether, and with what degree of confidence, a poem may be attributed to Aldhelm purely on stylistic evidence. This conforms with his approach to Aldhelmian *dubia* in his edition of Aldhelm's poetic works,²⁸⁶ in which he identifies 'the imprint of Aldhelm's diction' by discerning several 'distinctively Aldhelmian phrases'²⁸⁷ in the thirty-four verse metrical epitaph to Archbishop Theodore, *Hic sacer in tumba pausat cum corpore praesul*, but concludes that, on the available evidence, 'it is not possible to press Aldhelm's claim for authorship of the epitaph'.

285 *Ibid.*, 263. The definition is that of Milman Parry, 'Studies in the Epic Technique of Oral Verse-Making I: Homer and the Homeric Style', *Harvard Studies in Classical Philology* 41, (1930) 73-147, at 80.

286 M. Lapidge and J.L. Rosier, eds. and trans., *Aldhelm: The Poetic Works* (Cambridge: D.S. Brewer, 1985), 15- 18.

287 *Ibid.*, 17; e.g., *consortia vitae* which occurs four times in *Carmen de Virginitate*, and *arce poli* (reminiscent of *sceptra polorum*, above) which occurs twice in the *Enigmata*.

2.3.2 : Study 1.2, Orchard on Aldhelm

(a) Overview

Orchard's study of Aldhelm's extant works²⁸⁸ is based on the comprehensive edition of Ehwald²⁸⁹. The poems contained in that edition are all in hexameters, except for the octosyllabic *Carmina Rhythmicum*. They comprise the *Carmina Ecclesiastica*, a group of poems written to celebrate the dedication of various churches, the poetic version of the *Carmen de Virginitate*, and the *Enigmata*, a collection of riddles. Aldhelm also composed two metrical treatises, *De Metris* (the principles of which are illustrated in the *Enigmata*) on the Latin hexameter, and a practical treatise, *De pedum regulis*. So as to correspond with the scope of Lapidge's study, this discussion of Orchard's work on Aldhelm is primarily concerned with the chapter devoted to Aldhelm's hexameter verse style.²⁹⁰ That chapter addresses, in turn, prosody, elision and hiatus, metrical patterning, caesura-patterning, lexical localisation, formulaic repetition, oral tradition and the techniques of Old English vernacular verse. Orchard states that its clearest result is '...to confirm how remarkable Aldhelm was in his hexameter style: there never was another like him'²⁹¹. Certainly, the statistical tables in the text of that chapter²⁹² and in Appendix 5.2²⁹³ show several distinctive aspects of Aldhelm's style.

(b) Prosody

Orchard makes two general observations on Aldhelm's prosody. The first is that he 'seems to have aimed at a level of consistency to which most late antique and mediaeval Latin authors did not aspire';²⁹⁴ the second, that he 'demonstrates comparative consistency in the application of his own idiosyncratic rules of prosody, being in this sense more regular than his peers.'²⁹⁵ Orchard discusses two such idiosyncrasies. The first is his scansion of *communes* (that is, vowels which can be scanned short or long), which displays a very strong preference for scanning *communes* vowels short where, classically, they would have been scanned long. The other is correption, that is, the shortening of a metrically long final vowel before the appropriate consonant combinations.

288 Orchard, *Aldhelm*, 14.

289 R. Ehwald, ed. *Monumenta Germaniae Historica, Scriptores Auctores Antiquissimi IV* (Berlin: Weidmann, 1919).

290 Orchard, 'Aldhelm's hexameter verse style and its origins', *Aldhelm*, 73-125.

291 Orchard, *Aldhelm*, 73.

292 *Ibid.*, 85, 87, 93.

293 *Ibid.*, 'A statistical survey of Anglo-Latin verse', Appendix 5.2, 293-98.

294 *Ibid.*, 74.

295 *Ibid.*, 78.

Elision occurs about once in every twenty-five lines,²⁹⁶ which is rare, compared with classical poets.²⁹⁷ No other Anglo-Latin composer of hexameters used elision less often than Aldhelm. Orchard also observes that Aldhelm's use of elision is not evenly distributed over the whole corpus. Much of it occurs in passages which must have formed part of his remembered reading; he does not employ it for descriptive or artistic effect, and Orchard describes its occurrence as haphazard and baffling. Aldhelm's preferred form of elision is ecthipsis, that is, the elision of vowel + terminal *m*, and this form accounts for over half of the elisions found by Orchard. He states that Aldhelm's use of elision is difficult to parallel in Latin poetry of any period. His discussion of hiatus is brief²⁹⁸. He counts twenty-two examples (5.28% of the lines) in Aldhelm's entire hexameter corpus. This is a higher frequency than is found in classical poetry from Ovid onwards.²⁹⁹ Orchard gives no figures for the use of hiatus by Aldhelm's contemporaries, though he observes that both Aediluulf and Bede avoided its use. It is clear that Aldhelm's use of elision and hiatus could have little, if any, relevance to an investigation of the question whether a particular poem was the work of Aldhelm or some other Anglo-Latin poet.

(c) Metrical patterning

Orchard addresses two aspects of metrical patterning; these are the patterns most favoured by Aldhelm³⁰⁰ and the homogeneity of his metrical patterning.³⁰¹ In this part of the study, he has separately considered the *Carmina Ecclesiastica*, (*CE*) the *Enigmata* (*E*) and *Carmen de Virginitate* (*CdV*). In each case the most popular pattern is DSSS and the second most popular, DDSS. SDSS is the third most popular in *CE* and *E*, with SSSS next; in *CdV*, those positions are reversed. However, in *CE* and *CdV*, those four metrical patterns occur, in total, in over 70% of the verses and in *E*, in over 60%.

Although Virgil and Juvencus (to whose styles that of Aldhelm shows striking similarities)³⁰² also favour DSSS, they employ that pattern about half as often as Aldhelm. Both the classical poets and the Anglo-Latin composers of hexameters studied by Orchard show greater variation

296 *Ibid.*, Table A4, 'Elision in some Anglo-Latin Hexameters', at Appendix 5.2, 295, gives the exact figure as 160 elisions in 4,170 lines, which is 3.84%. The frequencies of occurrence in the classical Latin poets ranged from near 50% (Virgil) to 10% (Arator).

297 *Ibid.*, 79-82.

298 *Ibid.*, 83-84.

299 *Ibid.*, 83, quoting the observation of S. Winbolt, *Latin Hexameter Verse*, (London: Methuen, 1903), 195, that 'the later epic poets from Ovid onwards studiously avoid hiatus, while the older poets from Ennius to Virgil admitted it as a conscious imitation of Homer'.

300 *Ibid.*, 84-86, 89-90, and Table A7, 'Distribution of metrical verse-types in some Anglo-Latin hexameters', Appendix 5.2, 296-98.

301 *Ibid.*, 86-89.

302 *Ibid.*, 130-135 (Virgil) and 161-62 (Juvencus and Cyprianus Gallus) in the chapter 'Aldhelm's remembered reading in verse'.

in their use of metrical patterns than Aldhelm, and his characteristic metrical monotony is shown by passages of substantial length which contain very few of the available metrical patterns,³⁰³ and passages of four or more verses which repeat the same verse type throughout.³⁰⁴

(d) Caesura patterning

Orchard's analysis of this feature of Aldhelm's metrical practice is elaborate³⁰⁵, and he finds Aldhelm's most prominent idiosyncrasy to be the almost total exclusion of the so-called 'weak' caesura, which occurs between the two short syllables of a dactyl. This is the result of his decided preference for metrical patterns with spondees in F3 and F4, and explains why his poetry differs in that respect from the usage of Sedulius and Arator, whom he copies in other respects.

(e) Lexical localisation

Orchard observes that, in contrast to the practice of Virgil and other classical Latin poets, Aldhelm made very little use of the choice of metrical positions in which a word can be placed.³⁰⁶ One illustration of this aspect of Aldhelm's practice is the placing of the word *Deus*, which can be scanned as an iamb or a pyrrhic, depending on whether or not the following word begins with a consonant. Orchard explains that in theory, *Deus* could be placed in any one of ten positions in a hexameter line, but finds that in thirty-three of the thirty-six lines in which the word occurs in Aldhelm's poetry, it is placed before a vowel, diphthong or *h*, scanned as a pyrrhic and placed at the end of F1. Other examples of lexical localisation include the dactyls *aurea* and *frivola*, whose placings illustrate, respectively, Aldhelm's preference for metrical patterns with a dactyl in F1 and his self-imposed rule of not using a spondee in F5. He views this highly idiosyncratic localisation of forms as a conscious aspect of Aldhelm's work, and one which on occasion leads him into metrical error.

(f) Formulaic repetition and oral tradition

In investigating formulaic repetition in Aldhelm's poetry, Orchard has modelled his study on Parry's analysis of repeated metrical formulae in the hexameters of Homer³⁰⁷. He has identified repeated phraseology in extracts from two of the classical Latin poets from whom Aldhelm has

303 *Ibid.*, 87, where Orchard quotes lines 732-47 of *CdV* containing three patterns altogether, DSSS (10 times), SDSS (4 times) and SSSS (twice).

304 *Ibid.*, 89; three more passages from *CdV*, the longest of which is six consecutive lines of DSSS (976-81).

305 *Ibid.*, 92-97, citing B. Peabody, *The Winged Word: a Study in the Technique of Ancient Greek Oral Composition as Seen Principally through Hesiod's 'Works and Days'* (Albany: SUNY Press, 1975), 67.

306 Orchard, *Aldhelm*, 98-102.

307 M. Parry, 'Homer and the Homeric Style', *Harvard Studies in Classical Philology* 41, (1930): 73-147, at 118-21.

borrowed most extensively,³⁰⁸ Virgil³⁰⁹ and Juvenecus,³¹⁰ from two of Aldhelm's own works,³¹¹ and an extract from Alcuin's poem on York.³¹² Orchard finds that Aldhelm 'repeats more phrases more times than any other Latin poet'.³¹³ He concludes that a great proportion of Aldhelm's verses can be shown to be composed of a combination of repeated and remembered metrical sections, stating this to be 'exactly the putative technique of oral poets'.³¹⁴ He demonstrates this by the application of Peabody's five tests for orality,³¹⁵ which appear to be accepted as comprehensive and objective indications of orality.³¹⁶

(g) Numerical analysis of metrical and stylistic features

In the final chapter of his study,³¹⁷ Orchard draws some general conclusions. Aldhelm was both the most imitated and the most idiosyncratic Anglo-Latin poet, and, highly influential though he was, that influence was more profound over his Southumbrian near-contemporaries than over Bede and the other eighth- and ninth-century Northumbrian Anglo-Latin poets.

308 Orchard, 'Parallel diction in Aldhelm's sources', in *Aldhelm*, Appendix 4.1, 225-38. This Appendix clearly demonstrates that, within the wide range of Aldhelm's remembered reading, he most frequently borrowed from Virgil, Juvenecus and Caelius Sedulius.

309 *Virgil: Aeneid I-VI, P. Vergili Maronis Opera*, ed. R.A.B. Mynors (Oxford, 1891): Book I, v. 1-25.

310 *Juvenecus: Libri evangeliorum libri quattuor*, ed. J. Huemer, *Corpus Scriptorum Ecclesiasticorum Latinorum* 24, (Vienna, 1891): vol I, v. 1-25.

311 The first twenty-five lines of *CdV*, and *CE IV*, viii (an eighteen-verse poem beginning *Hic quoque commemorat metrorum comma Philippum*). Orchard also draws attention to the substantial number of phrases in this which are borrowed from earlier poets; 111-12.

312 Dümmler, *PLAC I, Alcuini Carmina, carm.i (Versus de patribus regibus et sanctis Euboricensis ecclesiae)*, 169.

313 Orchard, *Aldhelm*, 108.

314 *Ibid.*, 112.

315 Peabody, *The Winged Word*, the tests being the *phonemic* test (30-65), the *formulaic* test (66-117), the *enjambment* test (118-67), the *thematic* test, (168-215) and the *song* test (216-65).

316 Orchard, *Aldhelm*, 112, referring to the approving comments of A. Renoir, *A Key to Old Poems; the Oral-Formulaic Approach to the Interpretation of West-Germanic Verse*, (University Park, Pennsylvania State University, 1988), 53.

317 Orchard, 'After Aldhelm: the Anglo-Latin legacy', *Aldhelm*, 239-283.

Table 2.3: Frequency of occurrence of some metrical features in Anglo-Latin verses

Note:- Figures in brackets are percentages of the verses studied in which the feature occurs.

Feature		**SS patterns in F1-4 ³¹⁸	Most common pattern	2 nd most common pattern	Dactyls per 100 verses	Elision	Alliterative cadences	Finite medial verbs (molossi)
Author	Verses							
Aldhelm	4170 ³¹⁹	3102 (74.39)	DSSS (29.54)	DDSS (19.02)	136.98	160 (3.84)		
Aldhelm	500 ³²⁰						47 (9.40)	83 (16.6)
Southumbrians (8th century)								
Tatwine	213	102 (47.89)	DSSS (17.37)	SSSS (11.74)	149.30	94 (44.13)	11 (5.16)	2 (0.94)
Boniface	388	234 (60.31)	DSSS (23.20)	DDSS (15.46)	145.10	88 (22.68)	32 (8.25)	29 (7.47)
Northumbrians (8th-9th century)								
Bede	500	176 (35.20)	DDSS (15.20)	DSSS (11.00)	207.00	209(21.35)	16 (3.2)	11 (2.2)
Eusebius	282	131 (46.45)	DDSS (21.28)	DSSS (14.54)	197.16	46 (16.31)	11 (3.9)	10 (3.55)
Alcuin	500	242 (48.40)	DSSS (18.00)	DDSS (16.40)	186.20	223(13.25)	16 (3.2)	9 (1.8)
MNE ³²¹	504	257 (51.00)	DDSS (19.84)	DSSS (15.08)	178.97	73 (14.48)	15 (2.97)	32 (6.34)
Aediluulf	796 ³²²	420 (52.76)	DDSS (21.23)	DSSS (18.02)	181.66	111(15.94)		
	500 ³²³						15 (3.0)	25 (5.0)
Wessex (10th century)								
Wulfstan	500	147 (29.40)	DSDS (12.60)	DDSS (10.60)	206.00	248 (15.3)	8 (1.6)	4 (0.80)

Table 2.3, compiled from the tables at Appendix 5.2 in Orchard's study, shows the differences between some of the features of the practices of the Southumbrian and Northumbrian groups and of the tenth-century Wessex poet Wulfstan. Among the ways in which the metrical practices of Bede³²⁴ and the other Northumbrian poets differ from those of Aldhelm are the far more frequent occurrences of dactyls and the greater degree of variety of metrical patterning.

318 **SS patterns are patterns with either spondees or dactyls in F1 and F2, but only spondees in F3 and F4.

319 That is, the number of verses in the complete hexameter corpus.

320 Data based on vv. 1-500 of *CdV*.

321 The anonymous 8th century poem on St Ninian known as *Miracula Nynie Episcopi*.

322 The number of verses of *De Abbatibus*, in A. Campbell (ed.) *Aethelwulf: De Abbatibus* (Oxford: Clarendon Press, 1967).

323 Data based on vv. 1-500 of *De Abbatibus*.

324 Orchard, *Aldhelm*, 254-59.

The collected data for Wulfstan (c. 960-1023) show how faint the Aldhelmian influence eventually became.³²⁵

Aldhelm's work can be distinguished from that of his imitators (of whom Boniface is considered in some detail)³²⁶ by their failure to match his precision in prosody and the commission of solecisms which would have been foreign to Aldhelm's practices. For example, although Bugga's epitaph³²⁷ is verbally similar to Aldhelm's writing in many ways and its author's metrical methods are close to Aldhelm's, the structure, says Orchard 'is overlaid with a distinctly un-Aldhelmian disregard for the niceties of scansion'³²⁸. Orchard sees this, together with the profusion of grammatical solecisms, as amply sufficient to discount any possibility of Aldhelm's authorship. Conversely, he considers the case for Aldhelm's authorship of the metrical epitaph (*Hic sacer in tumba pausat cum corpore praesul*) to Archbishop Theodore, in which Lapidge discerned the imprint of Aldhelmian diction to be far stronger than supposed³²⁹. He bases that view on the remarkable similarity between its vocabulary and that of the Aldhelmian corpus, the metrical placing of the words, the absence of errors of scansion to which Boniface and other imitators are prone, and the occurrence of a metrical licence favoured by Aldhelm, that is, the lengthening of the vowel *a-* before *sp*, as in *claustrā spiritus* (compare Aldhelm, *ambrosiā spirabunt*).³³⁰ The poem also displays two other Aldhelmian characteristics; absence of elision and a fondness for alliteration.³³¹ These features certainly make an attribution to Aldhelm plausible, but Orchard is surely correct to refrain from making a firm attribution, purely on stylistic evidence, of a poem of only thirty-four verses.

2.3.3 : Study 2.1, Lapidge on Bede

Lapidge studied three poetic works included by Bede in his catalogue of writings, namely the *Liber Epigrammaticum* (*LE*), the *Liber Hymnorum* (*LH*) and the *Vita Metrica S. Cuthberti* (*VSC*).³³² *LE* exists only in scattered fragments and includes verse *tituli* modelled to some extent on those composed by Pope Damasus (*366-84), metrical psalms which demonstrate his acquaintance with similar works by Prosper of Aquitaine (*ca.* 390-455), and a lengthy poem entitled *De die*

325 *Ibid.*, 271-74.

326 *Ibid.*, 248-53, particularly 252 where it is noted that Boniface used elision about eight times as often as Aldhelm and also used hiatus to an extent difficult to match in classical Latin poetry.

327 *Ibid.*, 243-48. She was the daughter of Centwine, king of Wessex in the late seventh century and was responsible for building an unidentified church to St Mary in Wessex during the reign of Ine (688-726).

328 *Ibid.*, 248.

329 See section 2.3.1, above, which is devoted to Lapidge's study of Aldhelm.

330 *Ibid.*, 280, where Orchard gives five more examples of Aldhelm's use of this licence.

331 *Ibid.*, 280, where Orchard mentions five alliterative phrases, two of which contain three words (*discipulis dogmata disseruit* and *cum carnis claustra*).

332 Lapidge, 'Bede the Poet', 313-31.

iudicii in which Bede elaborates on the themes of some of the psalms which he has paraphrased. However, Lapidge views the heightened rhetorical treatment which these themes receive as uncharacteristic of the other poetic works mentioned. These variations in genre and register render it impossible to discern any stylistic characteristics in *LE* that might be of value in attributing a work of unknown or disputed authorship to Bede.

Like *LE*, *LH* has not survived intact, but the material available for its reconstruction is more coherent. Bede himself described it as 'a book of hymns in various metres and rhythms' but, as appears from Lapidge's study, there is no rhythmic verse that can be firmly attributed to Bede. The characteristic form of the Latin hymn was the iambic dimeter, the second and fourth feet being necessarily iambs, though the first and third could be anapaests or spondees. Four verses made up a stanza and, where the liturgical practice involved singing antiphonally (as appears to have been the case in Anglo-Saxon England), the hymn normally consisted of an even number of stanzas. The contents of the hymnal which was used in Italy and Gaul in the sixth century have been reconstructed, and this reconstruction is known as the 'Old Hymnal' (*OH*). Lapidge adopts the view of Gneuss³³³ that a copy of *OH* was in use at Canterbury from the earliest times; and, since a copy of *OH* as used at Canterbury (*COH*) had been brought to Wearmouth-Jarrow by the late seventh century, he concludes that, when Bede speaks of the metrical or rhythmical form of hymns, it is characteristically to the content of *COH* that he refers, and that that content was the model and inspiration for Bede's own hymns. *COH* consists of sixteen hymns composed in iambic dimeters, eleven being metrical and five, rhythmical. Nine of these (all metrical) are certainly or very probably by Ambrose, the remainder being anonymous³³⁴, leading Lapidge to conclude that the determinative influence on Bede as hymnodist was that of Ambrose, not his successors³³⁵.

Liturgically, eleven were for use at the daily office and, of the remaining five, only two were for saints' days³³⁶. This small collection, together with one hymn for each of Christmas and Easter³³⁷, became inadequate as liturgical observance developed in the sixth and seventh centuries so as to accord veneration to a much greater number of saints and to the Virgin Mary. Clearly, a much more extensive *sanctorale* was required; but Lapidge identifies two obstacles to assembling evidence that Bede added to it. The first is the relatively small amount of information obtainable from manuscript witnesses, due largely to the fact that hymnals, in common with other liturgical books, preserve their texts anonymously; the second is that the

333 H. Gneuss, *Hymnar und Hymnen im englischen Mittelalter* (Tübingen: Max Niemeyer Verlag, 1968): 33.

334 Lapidge, 'Bede the Poet', 323, 328; the hymns are listed at 323, n.47.

335 For example, Prudentius, Paulinus of Nola, Ennodius, Caelius Secundus and Venantius Fortunatus.

336 These were 'Apostolorum passio' for SS Peter and Paul (29 June) and 'Amore Christum nobilis' for S John the Evangelist (27 December). There was also one ('Aeterna Christi munera') for martyrs generally.

337 'Intende qui regis Israel' and 'Hic est dies verus dei', respectively.

ascriptions in other manuscript collections or in printed sources may, for various reasons, be unreliable.

The more important of the two sources of evidence considered by Lapidge is the collection printed by Cassander³³⁸ in 1556. It includes a transcript of a now lost manuscript supplied to Cassander by his colleague, Caspar von Niederpruck, who is known to have examined manuscript collections in Trier and in Fulda (which had been an Anglo-Saxon foundation). It is not known where he found the manuscript, but it evidently contained eleven hymns attributed by name to Bede. In Cassander's collection these are not printed together in a group, but arranged in conformity with the liturgical year. Since nothing is known about the original manuscript, it may be that the ascriptions are untrustworthy because it was compiled long after Bede's time, or even that the hymns themselves are later compositions falsely ascribed to Bede. As Lapidge later observes, the distinction of Bede's name attracted to it many hymns which, on stylistic grounds, could not possibly be his. This 'passing off' of the works of an inferior hand as those of a master is, of course, common in other cultural fields.

A second source of confirmation of Bede's probable authorship is the content of one of two extant manuscripts³³⁹ of an anthology of devotional reading, entitled *De laude Dei*, compiled by Alcuin in York, and known to be in existence in Northumbria by 790 at the latest. It includes a selection of poetic extracts from the works of Christian Latin poets such as Caelius Sedulius, Juvencus and Arator. Immediately preceding that selection in the Bamberg manuscript is a section entitled *De hymnis* which includes extracts from nineteen hymns including, in uninterrupted sequence, eight of the eleven ascribed to Bede in the Cassander collection. It is therefore highly probable, in the light of the correspondence between the Bamberg manuscript and the Cassander collection, that these hymns, known to have existed in the region where Bede lived and worked, not more than half a century after his death, were correctly ascribed to him in von Niederpruck's manuscript. It is therefore reasonable to accept that the manuscript correctly ascribes the other three hymns to Bede.

Lapidge next considers context and style. Bede was a noted hagiographer and the author of the *Martyrologium*, which became the text underpinning the cult of saints from his time onwards; adding to the *sanctorale* would have been entirely in keeping with such authorship. All but one of the eleven hymns ascribed to him relate to feasts of the liturgical year; six pertain to saints, one to the Virgin Mary and one is for Holy Innocents' Day. The influence of Ambrose

338 G. Cassander, *Hymni ecclesiastici, praesertim qui Ambrosiani dicuntur, multis in locis recogniti et multorum hymnorum accessione locupletati* (Cologne, 1556).

339 Bamberg, Staatsbibliothek Misc. Patr. 17 (B. II.10), s.x^{ex}, f.133v-161v; Escorial, Real Biblioteca b.IV, 17, s.ix^{med}, f. 93-108.

on Bede's style as hymnographer is apparent from their structure, which is modelled on that of Ambrose, albeit they are characteristically sixteen stanzas long³⁴⁰ compared with the eight favoured by Ambrose. Like Ambrose, Bede is metrically flawless, admitting elision but avoiding hiatus altogether, and his diction is simple and concise. Metaphors are sparse and contrasts simply expressed; all of this is entirely different from the extravagances of the metrical psalms in *LE*.

Finally, Lapidge addresses the question whether Bede wrote any hymns other than the eleven in the Cassander collection. He mentions a ninth-century library catalogue from Lorsch which refers to a volume containing seventy-seven poems by Bede, bound as a single manuscript,³⁴¹ but the manuscript has perished, so the entry cannot be verified. Apparently, at some time in the ninth century, one or more Frankish compilers³⁴² assembled an expanded *sanctorale* (the so-called 'New Hymnal'³⁴³ (*NH*)), in keeping with the liturgical developments of the Carolingian age. *NH* contained hymns not only by Late Latin authors³⁴⁴ but hymns attributed to Alcuin, Paulus Diaconus³⁴⁵ and Hrabanus Maurus, not exclusively on the Ambrosian model, but in a variety of metres and rhythms³⁴⁶. Lapidge concludes that *NH* which, in keeping with normal practice, bears no indications of authorship, contains nothing by Bede other than the one hymn which is in Cassander's collection,³⁴⁷ and that the rest of the hymns in *NH* which fit the Ambrosian or Bedan profile are known on other grounds to be by Ambrose.

340 The hymn for Ascension Day has thirty-two.

341 *Eiusdem hymni LXXVII in uno codice*; see G. Becker, *Catalogi Bibliothecarum Antiqui* (Bonn: Fr. Cohen, 1885), 111 (no. 37.455); B. Bischoff, *Lorsch im Spiegel seiner Handschriften* (Munich: Arben-Gesellschaft, 1974), 69.

342 The Frankish reformer Benedict of Aniane (c. 747-821) is said to have been associated with this activity; see Gneuss, *Hymnar und Hymnen*, 51.

343 The earliest English MS, the so-called 'Bosworth Psalter' (London, British Library, BL Add.37517), s.x,² contains 105 items. There is a contemporary edition by G.R. Wieland, *The Canterbury Hymnal*, (Toronto: Pontifical Institute for Medieval Studies, 1982).

344 Ambrose, Prudentius, Sedulius and Venantius Fortunatus.

345 *Ut queant laxis* is the only hymn in *NH* that has been attributed to Paul.

346 Including sapphics, asclepiads, iambic and trochaic trimeters and trochaic tetrameters.

347 The Ascension Day hymn, '*Hymnus canamus Domino*,' which adheres to the Ambrosian iambic dimeter model.

2.3.4 : Study 3.1, Schaller on Theodulf

Schaller's study,³⁴⁸ based on his doctoral dissertation of 1956,³⁴⁹ was published in 1961. It is organised into four parts, and this discussion is concerned mainly with the first of those parts, which is the research report (*Forschungsbericht*).³⁵⁰ This consists of three sections devoted, respectively, to textual criticism,³⁵¹ traditional history and authenticity criticism (*Echtheitskritik*),³⁵² and commentary and interpretation.³⁵³ The second part,³⁵⁴ on which this discussion also touches, is a critical investigation of the spiritual-didactic poems (*geistliche Lehrgedichte*), entitled *Fragmentum de vitiis capitalibus* and *Ad episcopos*.³⁵⁵ The remainder of Schaller's study³⁵⁶ is not concerned with authenticity and is not discussed here.

The first published edition of Theodulf's verse was that of the Jesuit scholar Jacques Sirmond who used a manuscript, now lost, which was the one witness to a larger collection.³⁵⁷ Of the sixty-three poems which it contains, fifty-one make up the Sirmond corpus, to which Schaller devotes the longest section of the *Forschungsbericht*,³⁵⁸ and twelve, which are from other manuscript sources, are examined more briefly.³⁵⁹ Schaller also discusses the further twelve poems attributed to Theodulf by Mabillon in his collection published in 1675.³⁶⁰ Dümmler's edition³⁶¹ contains all seventy-five of these poems and four which he regards as *carmina dubia*. Andersson's recent edition³⁶² does not give the Latin text; it consists of translations into English of all seventy-nine poems. It contains a useful introduction which provides a chronology of Theodulf's literary activities, and the poems are arranged thematically, with commentary. There is also an appendix containing translations of the eight poems in the Sirmond edition which are quatrains, one devoted to Wisdom and each of the other seven to one of the liberal arts. These were included in Dümmler's edition as *Appendix ad Theodulfum*.³⁶³

348 D. Schaller, 'Philologische Untersuchungen zu den Gedichten Theodulf von Orléans', *Deutsches Archiv für Erforschung des Mittelalters* 18, no. 1 (1962), 13-91.

349 Diss. Phil. Masch. Heidelberg 1956.

350 Schaller, 'Theodulf,' 14-33.

351 *Ibid.*, 14-15.

352 *Ibid.*, 15-31.

353 *Ibid.*, 31-33.

354 *Ibid.*, 33-40.

355 Dümmler, *PLAC I, carm. i (contriti et cordis) and ii (quarte libelle)*, 445, 452.

356 Part III (41-67) is concerned with Theodulf's verse letter to Modoin and Part IV with emendation of and commentary on the text of the majority of the poems contained in Dümmler's edition, *Theodulfi Carmini, PLAC I*, 437-576. Schaller does not discuss the *carmina dubia* printed at 577-81 of Dümmler's edition.

357 J. Sirmond, *Theodulfi Aurelianensis Episcopi Opera* (Paris, 1646).

358 Schaller, 'Theodulf,' 16-27.

359 *Ibid.*, 27-28

360 J. Mabillon, *Veterum Analectorum*, (Paris: L. Billaine, 1675) tom. 1, 383.

361 Dümmler, *PLAC I, Theodulfi carmina, i-lxxv, 445-576; carmina dubia, lxxvi-lxxix, 577-79.*

362 T.M. Andersson, ed. and trans., in collaboration with A. Ommundsen and L.S.B. MacCoull, *Theodulf of Orléans : The Verse* (Tempe, Arizona: Arizona Centre for Mediaeval and Renaissance Studies, 2014).

363 Dümmler, *PLAC I*, 629-30.

From Schaller's exposition it appears to be unknown whether anyone other than Sirmond himself ever saw the manuscript of the Sirmond corpus, but Mabillon's work shows, without a doubt, that in the seventeenth century there were two larger manuscript sources of Theodulf's verse, the other being the *Codex Vitonianus*, which is now lost³⁶⁴. Dümmler comments in the *proemium* to his edition that Mabillon supplemented Sirmond's edition by adding twelve poems from that ancient codex 'written in a possibly eighth century hand'.³⁶⁵

Schaller's first step in the authenticity criticism was to identify the poems for which he considers Theodulf's authorship to be securely established, on non-stylistic grounds; these form the basis for identifying diagnostic features of style. Schaller divides his criteria of authenticity into four main groups, which are (I) identification, in the poem, of Theodulf as its author, or, in the case of epigraphic poems, that Theodulf is named as originator of the subject-matter and it is difficult to believe that anyone but him could have been the author; (II) credible inscriptions or superscriptions in the manuscript of the poem; (III) testimony of other authors and (IV) cogent content-related criteria.³⁶⁶

Table 2.4 shows the results of that stage of his investigation. The twenty-four poems, amounting in total to 2454 verses, which meet the respective criteria listed in that Table, are identified by their numbers or other references to them in Dümmler's edition. Those twenty-four poems are referred to, in what follows, as the 'comparison sample'. Nineteen are within the Sirmond corpus; two of the five which are outside it are not in the main text of Dümmler's edition but are appended as footnotes to a poem in that edition entitled *In altare sancti Aniane*.³⁶⁷

364 Schaller, 'Theodulf,' 16 and n.13 thereto, citing J. Mabillon, *Veterum Analectorum* t.1 (1675), 384 f.

365 Dümmler, *PLAC I*, 443. 'Post Sirmondum Ioh. Mabillon a 1675 inter vetera sua analcta supplementa quaedam poematum Theodulfi ex pervetusto codice Vitoniano "ab annis fere octingentis manu scripto" dedit...Ex hoc codice igitur Mabillon duodecim carmina a Theodulfi composite edidit...'

366 Schaller, 'Theodulf,' 19-21, where the poems within and outside the Sirmond corpus which satisfy the criteria are tabulated.

367 The poem in the main text is *Hanc tibi, celsitonans*; Dümmler, *PLAC I*, *carm. lxxv*, 556-7. The *altare sancti Aniane* is a church dedicated to the fifth-century bishop Anianus of Orléans. The two poems in the footnotes are asterisked in Table 2.4. They are both epigraphic poems in which Theodulf's name is associated with the subject of the poem.

Table 2.4: Poems satisfying Schaller's criteria of authenticity

Criterion		Poems meeting criterion	
Symbol	Description	<i>PLAC I</i>	Incipit
Ia	Direct mention of Theodulf		
	Poems within the Sirmond corpus	XXX XXXVI XLI, I LXXI LXXII	I. mea charta Perge, libelle, celer Caroli Quicquid ab Hebraeo Hoc, Aiulfe, tibi Hoc, MODOINE, tibi Teodulfus dirigit exul
	Poems outside the Sirmond corpus	XXIII	Omnipotens domine, pacis donator
Ib	Indirect mention of Theodulf	XXV	Te totus laudesque tuas, rex
Ic	Epigraphic poems naming Theodulf as originator of the underlying subject		
	Poems within the Sirmond corpus	XLI, II XLI, III XLII XLIII XLVII LXII LXV	Codicis huius opus struxit Vive deo felix Qui sim nosse volens Gisla, favente Deo Quo terrae in speciam Sessio Teodulfi placeat Hanc tibi, celsitonans, aram Teodulfi adorno
	Poems outside the Sirmond corpus	LVIII LIX p.556, n.2 p.557, n.1	Hoc altare tibi En patet ista domus Haec in honore dei Teodulfus* Oraculum sanctum et cherubim*
II	Credible MS inscriptions or subscriptions	XXVIII XXXIX LXIX	Iudicii callem censores Qui regit arva Gloria, laus et honor tibi sit
III	Testimony of other authors	XXXIII, III LXIX	Grande habet initium Gloria, laus et honor tibi sit
IV	Cogent content-related criteria	XXVII XXXII XXXIII, I	Quid cycni faciunt Rex benedicte vale Sumito quae misi laetus

By reference to those criteria Schaller concludes³⁶⁸ that of the remaining forty-four poems contained in the Sirmond corpus, twenty-nine can be securely,³⁶⁹ and thirteen others highly

³⁶⁸ Schaller, 'Theodulf', 22.

³⁶⁹ Dümmler, *PLAC I, carm. i, ii, iv, v, vii, viii, xi-xvii, xix, xxi, xxii, xvi, xxxi, xxxiii (III), xxxiv, xxxv, xxxviii, lx, xlv, xlvi, l, li, lx*. The first two are the spiritual-didactic poems which are analysed in more detail by Schaller in Part II of his study, at 33-40.

probably,³⁷⁰ attributed to Theodulf. Of the remaining two, he questions Theodulf's authorship of the epitaph to Charlemagne's wife Fastrada,³⁷¹ and concludes that the epitaph to Pope Damasus³⁷² demonstrably stems from another author.

He also summarises the results of his study of eleven poems transmitted in other manuscripts³⁷³. The earliest of these is St Gallen Stiftsbibliothek 899, s.ix, which contains three poems included in Dümmler's edition.³⁷⁴ Schaller attributes *En adest Caesar*, a poem for the arrival of the Emperor Louis at Orleans, to Jonas, Theodulf's successor as bishop of Orléans and this view appears to be generally accepted.³⁷⁵ Although the other two poems appear in the manuscript immediately after the undoubtedly authentic *Gloria laus et honor tibi sit*,³⁷⁶ Schaller considers that they cannot be securely attributed to Theodulf on stylistic grounds.³⁷⁷

The manuscript Bern, Burgerbibliothek 212, s. ix-x contains one poem, *Omnipotens domine et pacis*,³⁷⁸ and Schaller firmly attributes this to Theodulf by reference to the 'Mesostichon' which contains the line *Quas ego Teudulfus cecini sub nomine regis*. The most recent of the three manuscripts is London, BL, Harley 3685, s. xv in which seven poems appear.³⁷⁹ The sequence in Harley 3685 is broken by the inclusion of poems by other authors before and after the third poem,³⁸⁰ but the last four appear in unbroken sequence. The first of those four³⁸¹ is thought to be the work of an unidentified author, written after Theodulf's death.³⁸² Schaller does not challenge Dümmler's attribution of the other three³⁸³ to Theodulf, but he observes that the corrupt state of the text of these poems renders stylistic analysis questionable, and that

370 *Ibid.*, *carm.* iii, vi, ix, x, xviii, xx, xviii, xlix, lxi, lxiii, lxiv, lxvii, lxviii.

371 *Ibid.*, *carm.* xxiv (*Inclitae Fastradae reginae*), 483. She was married to Charlemagne in 783 and died in 794.

372 *Ibid.*, *carm.* lxvi (*Qui gradiens pelagi fluctus*), 557.

373 Schaller, 'Theodulf', 27-29. The full treatment may be found in his doctoral dissertation at 145-55.

374 Dümmler, *PLAC I*, *carm.* xxxvii (*En adest Caesar*); lxxvi (*Inclite Caesar ave*) and lxxviii (*Albinus precibus postulet*).

375 See Andersson, *Theodulf of Orléans-The Verse*, 122, referring to the similar view expressed by Theodulf's earlier translator, Nikolai Alexandrenko.

376 Dümmler, *PLAC I*, *carm.* lxix, the Palm Sunday hymn. The other two poems are *Inclite Caesar ave* and *Albinus precibus postulet*.

377 Schaller, 'Theodulf,' 27.

378 *Ibid.*, 28; Dümmler, *PLAC I*, *carm.* xxiii, vv.39-44, 481. The quoted verse is v.40.

379 Dümmler, *PLAC I*, *carm.* lxxii, xxxix, xxviii, lxxix, lxxv, xxix and lxxiv. The first three are found in the Sirmond corpus.

380 Dümmler, *PLAC I*, *carm.* xxviii, *iudicii callem*, entitled *Versus Teudulfi Episcopi Contra Iudices*.

381 Dümmler, *PLAC I*, *carm.* lxxix (*carior in cunctis*, entitled *Ad Prudentium* in that edition), in the *Appendix Theodulfi Carmina*, 577-79, at 579. This Appendix (which is referred to in the Table of Contents simply as *carmina dubia*, is not to be confused with the *Appendix ad Theodulfum* at 629-30 which consists of the eight quatrains from the Sirmond corpus.

382 Schaller, 'Theodulf,' 28; Andersson, *Theodulf of Orléans-The Verse*, 190.

383 Dümmler, *PLAC I*, *carm.* lxxv (*cum variis maneat*), xxix (*lege tonantis eri*) and lxxiv (*primus amoena tenens*, entitled *De Paradiso*).

Dümmler's own completion of v.33 of *carm. xxix*,³⁸⁴ (*Iura poli reboant: Animae sublato humanae*)³⁸⁵ is inconsistent with his attribution of the poem to Theodulf, who would have written *hūmanus*. Schaller regards all four poems as *dubia*.

The final part of Schaller's study of poems outside the Sirmond corpus³⁸⁶ is concerned with a manuscript, identified as the *Codex Vitonianus* and arguably from the ninth century³⁸⁷ in which Mabillon found, in addition to the poems of Theodulf already known through Sirmond, a further series of poems by various authors, ten of which impressed him as possibly the work of Theodulf. Schaller's concludes that only two³⁸⁸ are unquestionably by Theodulf, and his authorship of the other eight is questionable³⁸⁹ in three cases and improbable in five.

Schaller's view of the authorship of the poems in the sapphic metre in Dümmler's edition is inconsistent. It is unclear why he is willing to admit the possibility that *O pater cleri*³⁹⁰ is by Theodulf when he rejects Theodulf's authorship of *En adest Caesar*,³⁹¹ both of which are associated with visits by Louis to Theodulf's own city of Orléans. If Dümmler's dates are correct, Theodulf is more likely to be the author of the earlier poem, since he had not yet, in 814, fallen out of favour with Louis. Schaller does not comment on *Terra marique victor honorandi*³⁹² which commemorates Louis' visit to Alcuin's city of Tours; however, Andersson observes that Theodulf would be an unlikely author of a poem on that subject.³⁹³

For the critical investigation of the two long spiritual didactic poems,³⁹⁴ Schaller took an arbitrarily chosen passage (vv. 165-280 of *Ad episcopos*, which he considers to be a representative sample of that genre) and examined it against the comparison sample (that is, the twenty-four poems or parts of poems in the main text of Dümmler's edition listed in Table 2.4) with reference to five features in which the sample resembles the comparison sample. The features are (A) parallels and reminiscences (*Anklänge*); (B) syntactic-stylistic features; (C) vocabulary; (D) prosody (in particular, the use of hiatus); and (E) content (*Inhalt*). Schaller concludes that

384 Dümmler, *PLAC I, carm. xxix, lege tonantis eri*, 517.

385 The critical apparatus to *carm. xxix* indicates by the entry 'humanae addidi' relating to v.33 that 'humanae' is not found in the Harley manuscript but is Dümmler's own completion of v.33; *PLAC I*, 518.

386 Schaller, 'Theodulf,' 28-29.

387 Dümmler, *PLAC I, proemium to Theodulfi Carmina*, 443.

388 *Ibid.*, *carm. lviii (hoc altare tibi)* and *lix (en patet ista)*, 554; see Table 2.4 which lists these two poems as epigraphic poems naming Theodulf as originator of the underlying subject (Schaller's authenticity criterion Ic).

389 *Ibid.*, *carm. lv (eia Camena libens)*, *lvi (Parva bravos gemino)* and *lxx (O pater cleri)* which is written in the Sapphic metre.

390 Schaller, 'Theodulf,' 28; *PLAC I, carm. lxx*, 560. Dümmler dates this poem to 818.

391 Schaller, 'Theodulf,' 28; *PLAC I, carm. xxix*, 523. Dümmler dates this poem to 814.

392 Dümmler, *PLAC I, carm. lxxvii*, 578. He dates this poem to 818.

393 Andersson, *Theodulf of Orléans-The Verse*, 187.

394 Dümmler, *PLAC I, carm. i (contriti et cordis sacra parae deo)*, 445-52, (314 verses), entitled *Fragmentum de vitiis capitalibus* (Fragment on the Mortal Sins) and *carm. ii, (Quarte libelle, tribus iam nunc)*, entitled *Ad episcopos*, 452-58, (280 verses).

the similarities in these five respects leave no doubt that Theodulf is the author of the spiritual-didactic poems. Table A2.1, in the Appendix, indicates the features in which the sample from *ad episcopos* resembles each of the poems of the comparison sample, and shows that it resembles his lengthy polemic against the judges³⁹⁵ in all five respects.

Schaller's specific conclusions in relation to the first three features³⁹⁶ are that the yield of parallels and reminiscences is so rich that one cannot believe it is by chance, and that if the author is not Theodulf himself, it is someone who knew his verses very well; that the noteworthy examples of stylistic and syntactic content discovered all occur in the comparison sample; and that in so far as he employs vocabulary not found in the verses of the comparison sample, the words (with only five exceptions) appear in the works of Prudentius, Ovid or Virgil, or in the Vulgate. All in all, the lexical findings show, at least, a close relationship between *Ad episcopos* and the poems certainly by Theodulf.³⁹⁷

Schaller observes that the author of the 'present (*vorliegenden*)³⁹⁸ verses' was, just like Theodulf, exact in his prosody, and also that the deviations from strict classical verse technique that he finds in *ad iudices* were also identified by Hagen³⁹⁹ in the two spiritual-didactic poems. However, they are not peculiar to Theodulf, as most of them are also found in a sample of some 600 verses by Alcuin.⁴⁰⁰ Schaller also comments on Theodulf's love for the distich⁴⁰¹ 'almost to the point of exhaustion' (*bis zu Ermüdung*) and that, unlike other authors who employ rhyme, he resorts to it more frequently in the hexameter than in the pentameter.⁴⁰²

Finally, Schaller briefly considers content (*Inhalt*), in the sense of theme or purpose. For the purpose of comparison with the spiritual-didactic poems he finds *Ad iudices*, with its paraenetic character, to be the most suitable. *Ad episcopos* and *Ad iudices* both address particularly prominent failings of the followers of those vocations; moral depravity and pride of bishops, avarice and pride of judges. These similarities in content actually extend to stylistic detail; Schaller cites, as an example, the mode of expression of the states of mind brought about by over-indulgence (in *ad iudices*) and the burden of sorrow (in *ad episcopos*), with an accumulation of verbal and nominal predicates, so as to make their description especially dramatic.⁴⁰³

395 Dümmler, *PLAC I., carm. xxviii, Versus Teudulfi Episcopi Contra Iudices*, 493-517 (956 verses).

396 Namely, parallels and reminiscences, syntactic-stylistic similarities and lexical similarities.

397 Schaller, 'Theodulf,' 38.

398 That is, the two spiritual-didactic poems whose authenticity is the subject of his critical investigation (*Echtheitskritische Untersuchung der geistlichen Lehrgedichte*).

399 H. Hagen, 'Theodulfi...de iudicibus versus ad Hermanno Hagen recogniti', in *Ein Berner Universitätsprogramm von 1882*, S. IX; see Schaller, *Theodulf*, 38, at n.58.

400 Schaller, 'Theodulf,' 39.

401 That is, the elegiac couplet. Of the seventy-nine poems attributed to Theodulf, all but seven (four in hexameters and three in sapphics) are in elegiac couplets.

402 Schaller, 'Theodulf,' 39.

403 *Ibid.*, 40, comparing *carm. i*, vv.29-34 (*PLAC I*, 445-46) with *carm. xxxviii*, vv.407-10 (*PLAC I*, 504).

Table A2.2, in the appendix, presents Schaller's conclusions in relation to all the poems included in Dümmler's edition. Schaller's procedure of identifying a group of poems (the comparison sample) displaying one or more non-stylistic authenticity criteria, and basing the conclusion as to authorship of each of the remainder on stylistic similarities to the poems of the comparison sample has the great virtue of avoiding circular reasoning in the attribution process; this aspect of attribution studies is discussed in more detail in Chapter 4. However, Schaller's comparison sample contains less than one-third of the total number of poems attributed to Theodulf and does not indicate the nature or extent of the resemblances in style and content which enables him to conclude that any one of the remaining poems is safely attributable to Theodulf, is highly probably his work, is of questionable authorship, or is certainly the work of another author.

2.3.5 : Study 3.2, Burghardt on Alcuin⁴⁰⁴

Burghardt's 1960 study of Alcuin follows the general approach adopted by Schaller in his 1956 study of Theodulf.⁴⁰⁵ Both were presented as doctoral dissertations at Heidelberg, and this thesis adopts the term 'Heidelberg method' to designate that approach. Both studies were based on two major editions, one compiled in the seventeenth century and the other in the nineteenth. Schaller studied the Sirmond edition⁴⁰⁶ and Dümmler's edition,⁴⁰⁷ identified the poems which could be securely attributed to Theodulf on other than stylistic grounds, and then examined the remainder with reference to the stylistic features displayed by the securely attributed poems. Burghardt adopted the same procedure, his starting-point being the edition (QU) of Alcuin's poems produced by Quercetanus (Duchesne),⁴⁰⁸ which he, too, compared with Dümmler's edition (DÜ).⁴⁰⁹ Like Schaller, Burghardt found substantial differences between the content of the two editions studied. Burghardt's study is treated here in somewhat more detail than Schaller's, as the review is based on the entire dissertation rather than, as in Schaller's case, an article (albeit of substantial length) summarising his dissertation.

404 Burghardt, *Gedichten Alcuins*.

405 Schaller, 'Theodulf'. The dissertation, which is referred to in Burghardt's bibliography, was presented in 1956.

406 J. Sirmond, *Theodulfi Aurelianensis Episcopi Opera* (Paris: Cramoisy, 1646).

407 Dümmler, *PLAC I, Theodulfi carmina*, (including *Modoini episcopi rescriptum* and *carmina dubia*), 437-581.

408 Andreas Quercetanus (André Duchesne) Turoniensis, *Flacci Albini, sive Alcuini Abbatis Caroli magni, Opera Omnia*, vol. III, (Paris : Cramoisy, 1617): clms. 1673-1760.

409 Dümmler, *PLAC I, Alcuini (Albini) carmina*, 160-351.

After a brief evaluation of DÜ,⁴¹⁰ Burghardt examines QU (which he regards as the most important source of Alcuin's poems) in much greater detail. His comparison of the content of the two editions shows that QU contains over half of those subsequently published in DÜ.⁴¹¹ In the course of that comparison he identifies forty-seven attributions of the poems included in QU to other authors⁴¹² three of whom (Angilbert, Fardulf and Paul) are contemporary with Alcuin. The larger part of QU is extracted from a ninth-century manuscript formerly belonging to the monastery of St Bertin and subsequently lost; the remainder is appended from earlier editions.⁴¹³ Burghardt does not find any principle underlying the ordering of the poems in QU.⁴¹⁴ He concludes that they are not arranged chronologically, by genre, by addressee and/or destination, or by author (although the sixteen poems by Aldhelm are in an unbroken, and the nineteen by Rusticus Helpidius in an almost unbroken sequence).

The second section of chapter II⁴¹⁵ specifies the criteria by which Burghardt attributes poems (*die gesicherten Gedichte*) to Alcuin independently of stylistic considerations, and the poems attributed on the basis of each criterion are listed after the statement of the criterion. Each such poem is identified by its opening line, its number and page in Dümmler's edition, and its length is stated. Table A2.3, in the Appendix, identifies the poems in that edition which meet the various criteria. Many of these poems do not appear in QU; for those which do, the QU number is in brackets after the number in Dümmler's edition. Of the forty-nine poems satisfying Burghardt's criterion V (preservation of the poem together with the letters of Alcuin), only twenty-two appear in that edition, seven of those being printed not as poems in the main text, but as footnotes to those which are. The other twenty-seven, almost all of which consist of two verses (either two hexameter verses or an elegiac couplet) are printed only in Dümmler's edition of the *Epistolae*.⁴¹⁶

Burghardt's criteria I and II correspond to Schaller's Ia and Ib, and there is some resemblance between Burghardt's III and Schaller's Ic, though Schaller's criterion also requires the absence of

410 Burghardt, *Gedichten Alcuins*, 1-3.

411 *Ibid.*, 8-11.

412 In chronological order, these are Rusticus Helpidius (d. ca 533), Laurentius Scottus (early 7th century), Eugenius Toletanus (bishop of Toledo ca 657), Aldhelm (ca 639-709), Bede (672/3-735), Fardulf (d. 806), and Angilbert (ca. 760-814). Three of the poems are included in Neff, *Die Gedichte des Paulus Diaconus*, but they are all ostensibly by Charlemagne and Burghardt considers one certainly, and two possibly, to be by Alcuin.

413 Burghardt notes the reliance of QU on Hendricus Canisius, *Antiquae lectionis in quo...antiqua monumenta nunquam edita* (6 vols.) (Ingoldstadt: Andreas Angemarius), 1601-04.

414 Burghardt, *Gedichten Alcuins*, 11-12.

415 *Ibid.*, 13-30. The text is followed by a numbered list of the poems printed in Dümmler's edition (with cross-references to QU where appropriate) and the criterion by reference to which the authenticity of each poem is established.

416 E. Dümmler, ed., *Monumenta Germaniae Historica, Epistolarum, tom. IV, Karolini aevi II*, 1-481.

any other credible candidate.⁴¹⁷ Since, unlike Alcuin, Theodulf did not write any letters or other prose works in which poems or parts of poems were included, Burghardt's criteria IV and V, which account for well over half of his secure attributions, have no counterpart in Schaller. For four of the seven which are authenticated under category VI, Burghardt relies on relatively modern scholarship.⁴¹⁸ This category corresponds to Schaller's category III (testimony of other authors). The remaining three all contain allusions plausibly referable to Alcuin which might therefore be equated to Schaller's category IV (cogent content-related criteria).

Burghardt then discusses the features of the investigation to be carried out by comparison of the securely attributed poems ('the comparison sample') with those not securely attributed.⁴¹⁹ The specified features, which are similar to those relied upon by Schaller, are parallels and reminiscences, lexical and stylistic peculiarities (*Besonderheiten*), metrical characteristics (*Eigentümlichkeiten*) and content. As Burghardt rightly observes⁴²⁰, it cannot be disputed that individual characteristics occur here and there in the works of other Carolingian authors; but, in his view, they are characteristic of Alcuin's style in so far as they occur in his works in relatively greater number. However, while the securely attributed poems on which the remaining attributions are based consist of 3902 verses (that is, somewhat more than twenty thousand words) only one of the identified characteristics occurs more than one hundred times⁴²¹ and the majority of them (including all but one of his sixteen metrical characteristics) occur less than ten times.

The two lexical features are Alcuin's frequent use of composite (adjective + noun) words such as *altithronus* and *celsithronus*, (nine and eight occurrences, respectively) and his predilection for the use of diminutives⁴²², of which *cartula* (eight times) and *parvulus* (nine times) are the most frequently encountered. Burghardt also identifies ten stylistic features,⁴²³ of which the most frequently occurring are alliteration of three or more words in succession (nine occurrences, e.g., *Pauline pater pastor patriarcha*) and doubling of words (twelve occurrences, e.g. *vive deo felix, felix et vive per aevum*).

417 Schaller, 'Theodulf,' 20, where he explains his criteria, stating, in relation to Ic: 'ferner für Epigrafische Gedichte, in denen Theodulf als Urheber...genannt ist und die schwerlich ein anderer als er selbst verfasst haben kann'.

418 A. Ebert, *Zeitschrift für deutsche Altertum* 22 (1878), 332; L. Traube, *Karolingische Dichtungen* (Berlin: Weidmann, 1888) p.50, n.2; L. Wallach, *Alcuin and Charlemagne: Studies in Carolingian History and Literature* (Ithaca, N.Y.: Cornell University Press, 1959): 178, 255.

419 Burghardt, *Gedichten Alcuins*, 35-42, followed by a brief comment (43-44) on the arrangement of the investigation groups (*Untersuchungsgruppen*) and a table of the content of each group (44-46).

420 *Ibid.*, 35.

421 *Ibid.*, 35-36, where there is a list of 97 occurrences of the use of compound adjectives, but the list indicates that it does not include all the occurrences of *omnipotens*.

422 *Ibid.*, 36-37.

423 *Ibid.*, 37-39.

The metrical characteristics⁴²⁴ include three features (the effects of h in arsis, *productio in arsi*,⁴²⁵ and hiatus, occurring in pentameters mostly before the caesura) also observed by Schaller as features of the poems of Theodulf. Of the remainder, the most frequently observed is scansion differing from that found in classical Latin; Burghardt gives a list of thirteen words identifying, overall, some sixty divergences from classical prosody. Among the words most often displaying such divergence are *ergō*, *idcircō* and *quōmodo*.

The most substantial part of Burghardt's dissertation is devoted to the poems which could not be securely attributed by reference to his authenticity criteria I-VI. It begins with a summary explaining that these have been divided into thirty investigation groups, (*Untersuchungsgruppen* I-XXX) of varying sizes and that, as far as possible, poems of a particular genre or having similar content have been grouped together.⁴²⁶ The following summary of Burghardt's findings in the poems of *Untersuchungsgruppe X (U X)*⁴²⁷ illustrates his method of investigation.

The group consists of two poems,⁴²⁸ both of which are epitaphs consisting of six elegiac couplets. The first is for Fulrad, archchaplain and abbot of St. Denis (d. 784) and the second commemorates Maginarius (d. 793), a chaplain to Charlemagne and Fulrad's successor as abbot.⁴²⁹ In each case the first feature investigated is the occurrence of parallels and reminiscences. In the twelve lines of the epitaph to Fulrad, Burghardt finds five such occurrences. *Presbyter egregius* occurs in two poems of the comparison sample; *venerabilis abba* in one; *corpore...requiescit* in one; *decus ecclesiae* in six; and *promptus in omne bonum* in two.⁴³⁰ Burghardt also notes a parallel (the occurrence of the phrase *haec domus alma dei*) with a poem in *U VI*⁴³¹ of which he concludes that Alcuin was probably the author.⁴³² In the epitaph for Maginarius, Burghardt lists six parallels and reminiscences,⁴³³ one of which is found in two poems of the comparison sample, and the other five in one poem each.

424 *Ibid.*, 39-42; cf. Schaller, 'Theodulf,' 38.

425 That is, lengthening of the last syllable before the caesura.

426 Burghardt, *Gedichten Alcuins*, 43-46.

427 *Ibid.*, 119-121.

428 QU 123 = Dümmler, *PLAC I*, *carm. xcii*, II (*presbyter egregius valde*) and QU 124 = *PLAC I*, *carm. xcii*, III (*hic sit sub pedibus tibi*), 318-9.

429 Dümmler, *PLAC I*, 319, nn. 1, 2.; for Magnarius' year of death, see Burghardt, *Gedichten Alcuins*, 121.

430 See also Dümmler, *PLAC I*, *carm. ix* of the *Tituli sancti saeculi VIII (hic pater ecclesiae)*, v.4 of which reads *Pastor apostolicus, promptus ad omne bonum*, 113 and n.4, drawing attention to the occurrence of *promptus in omne bonum* in *PLAC I*, *Alcuini carm iii*, c.xxxiv, v.38 (at 219) and in the epitaph to Fulrad, *carm. xcii*, III, 318-9. *Alcuini carm iii*, *De vita sancti Willibrordi episcopi* is subdivided into thirty-four 'chapters' of varying lengths.

431 QU 59 = Dümmler, *PLAC I*, *carm. lxxxviii. IX (Martinus meritis domini)*, 307.

432 Burghardt, *Gedichten Alcuins*, 73.

433 *Ibid.*, 120.

Burghardt⁴³⁴ identifies the construction *credimus... ut* found in the Fulrad epitaph⁴³⁵ as a lexical/stylistic peculiarity; he notes that this is its only occurrence and in comparable verses Alcuin simply uses '*credo*' and, additionally, omits '*ut*'. He gives several examples of the inserted '*credo*'⁴³⁶ which is frequent in Alcuin. However, he does not regard the absence of the *credimus...ut* construction elsewhere in Alcuin as excluding his authorship of the poem. In the Magnarius epitaph Burghardt has classified the occurrence of the phrase *in arce poli* as a lexical/stylistic peculiarity⁴³⁷ (although it could also be regarded as a parallel, since it occurs in other poems) and noted its occurrence in the third poem of *U VI (haec est aula dei)*,⁴³⁸ which he attributes unequivocally to Alcuin.⁴³⁹ The stylistic peculiarity is that Alcuin frequently uses *in arce poli* to end a pentameter line. In regard to metrics, Burghardt finds *productio in arsi* in both poems, occurring before the strong caesura in a pentameter line once in the Fulrad epitaph⁴⁴⁰ and twice in the Magnarius epitaph,⁴⁴¹ and he also observes it in the Fulrad epitaph where the *h* of *haec* is treated as a consonant and thus makes the preceding vowel long by position.⁴⁴² These metrical features occur several times in the poems of Theodulf⁴⁴³ and are common in the verses of mediaeval Latin authors generally.⁴⁴⁴

On the basis of the evidence summarised above, Burghardt concludes that Alcuin is the author of the two poems. He states that they originated after⁴⁴⁵ the deaths of their subjects in 784 and 793 respectively and therefore belong among the oldest of the poems in the QU collection, but are preceded in it by newer verses,⁴⁴⁶ which shows that edition QU is not arranged in chronological order.

434 *Ibid.*, 119.

435 Dümmler, *PLAC I, carm. xcii*, III, v.11 reads in full *credimus idcirco caelo societur ut illis*.

436 E.g., Dümmler, *PLAC I, carm. i*, v.817, 187 (*libera, credo, foret, poenasque evaderet omnes*); *carm iii c.xvii*, v.5-6, 213 (...*benedictio Christi/ Sufficere in totios faciat largissima, credo*); *iii, c.xix*, v.11, 213 (*augebit vinum, credo, pietate, benigna*).

437 The line, in full, reads *post mortem melius vivit in arce poli*; Dümmler, *PLAC I, carm. xcii*, III 319.

438 Dümmler, *PLAC I, carm. lxxxviii*.III, v.10 (*qui domino adstitit semper in arce poli*), 305.

439 Burghardt, *Gedichten Alcuins*, 68. He gives eight other examples of the placing of *in arce poli* at the end of a pentameter line.

440 *Ibid.*, 120; Dümmler, *PLAC I carm. xcii*. II, v.2 (*strenuus actu, opera, | | pectore, mente pius*), 319.

441 Dümmler, *PLAC I carm. xcii*. III, vv. 4 and 12 (*tu quoque successor | | eius honoris eras; ut merear civis | | urbis adesse dei*), 319.

442 Dümmler, *PLAC I carm. xcii*. II, v. 10 (*reliquas quorum | | haec domus alma tenet*), 319.

443 Schaller, 'Theodulf,' 38.

444 N. Wright, ed. and trans., 'Prosody and Metrics,' in *The Histori Regum Britannie of Geoffrey of Monmouth, V, Gesta Regum Britannie* (Woodbridge: D.S. Brewer 1991), Introduction, lxxxvii.

445 Burghardt, *Gedichten Alcuins*, 123. His actual words are '*Sie entstanden nach dem Tod Fulradus bzw. Maginarus*' but the argument demands (certainly in the case of Maginarus) that 'after' should be understood to mean 'soon after'.

446 The two epitaphs are numbers 123 and 124 in QU, whereas the poems of *U VII* (QU 66-89) were composed between 796 and 804, and those of *U V* (QU 50, 1-22) were composed not before 800.

The investigation of the poems of the thirty *Untersuchungsgruppen* takes up over 200 pages of the dissertation,⁴⁴⁷ and is followed by a section on the origin of the QU collection (*Sammlung*).⁴⁴⁸ The manuscript from the library of the monastery of St Bertin (referred to by Burghardt as B) which Duchesne used as the basis for his edition of Alcuin's poems is a lost manuscript collection of poems by different authors with an assemblage of Alcuin's verse more extensive than that anywhere else. Burghardt does not base any conclusions on the authenticity of the poems on the manuscript history. Burghardt then summarises and tabulates the results of his investigation.⁴⁴⁹ His table lists the content of QU in numerical order and states his conclusions as to the authorship of each item. In the Appendix to this thesis, Table A2.3 lists the poems in Dümmler's edition which Burghardt securely attributes to Alcuin, and Table A2.4 lists his conclusions as to Alcuin's authorship of the poems in QU other than those which he securely attributes to Alcuin on the basis of his authenticity criteria I-VI. Many of the poems are subdivided in one or both editions, and in a substantial number of cases Dümmler has not followed the order in QU or divided poems in the same way as in QU. Burghardt considers that, in many cases, these rearrangements are not justified.⁴⁵⁰

Burghardt's table of *gesicherten Gedichte*⁴⁵¹ lists thirty-three poems, or parts of poems, in QU, which meet one or other of his criteria of authenticity. If we discount the poems definitely attributable to other authors, Table A2.4 shows that Burghardt considers about sixty per cent of the poems in the remainder of QU⁴⁵² to be definitely attributable to Alcuin by comparison of their stylistic features (parallels and reminiscences, lexical, stylistic and metrical peculiarities, and content) with those of the comparison sample of *gesicherten Gedichte*. Roughly a further twenty-five percent are classed as probably the work of Alcuin and most of the remainder are classed as perhaps attributable to him. He finds only eight items to be probably not by Alcuin and two to be definitely not.

The studies of Theodulf and Alcuin resemble each other strongly. The authenticity criteria are similar and serve to identify a relatively small proportion of the corpus studied as definitely the work of the candidate author. Apart from the poems in QU which Burghardt accepts to be the work of other identified authors, few poems are considered to be probably not the work of the candidate author, and even fewer are definitely rejected as his work. This reflects the fact, acknowledged by Burghardt, that stylistic characteristics which are prominent in the poetical

447 Burghardt, *Gedichten Alcuins*, 47-268.

448 *Ibid.*, 269-78.

449 *Ibid.*, 279-86.

450 *Ibid.*, 280.

451 *Ibid.*, 31-33.

452 QU contains 272 items (ignoring sub-division of poems), thirty-three of which Burghardt includes in the *gesicherten Gedichte*. Of the remaining 239, forty-seven have been attributed to other authors, leaving 192. Table A2.3, in the Appendix, lists 116 poems, or parts of poems, as definitely attributable to Alcuin.

works of Alcuin are also found in those of his contemporaries, who consequently cannot be eliminated as possible authors on stylistic grounds.

As Part 2 of this chapter will show, the Heidelberg method is well suited to this study as very similar authenticity criteria can be used to identify poems securely attributable to Paul, and the efficacy of the method is unaffected by the amount of the poetic material being studied.

2.3.6 : Study 4.1, Freeman on the *Libri Carolini*

The *Libri Carolini* (LC) state the Carolingian response to the Second Nicene Council of 787, and its restoration of images. In the introduction to her study,⁴⁵³ Freeman states that there is evidence that LC, although composed in Charlemagne's name, was passed upon and corrected by a conclave of Carolingian theologians, but that there is little doubt that the composition represents the labour of one man. After disposing of earlier speculations that LC was a forgery, the study addresses the question whether the author was Alcuin or Theodulf.

The traditional view, first propounded by the Flemish theologian George Cassander in a letter of 1560, was that Alcuin was the author.⁴⁵⁴ He based this attribution on Alcuin's great familiarity with Charlemagne and Charlemagne's high regard for him; his skill in writing on sacred subjects and the congruence of his style with that of LC; and an apparent similarity between a passage in LC and Alcuin's commentary on St John. Emphasis has also been placed on a letter composed by Alcuin on behalf of the English Church against the actions of the Nicene Council, the ultimate source of which is the Annals of Northumbria for 792.⁴⁵⁵ Later scholars, particularly Bastgen,⁴⁵⁶ who subsequently edited the Vatican MS⁴⁵⁷ of LC, adopted and sought to reinforce the traditional view. Freeman refers to the item in the Annals of Northumbria as the cornerstone of Bastgen's argument, but Bastgen also advanced stylistic arguments based on Alcuin's use of rhymed prose, and similarities of diction and opinion in topics treated both in LC and Alcuin's acknowledged works.

Freeman sees it as obvious that Alcuin's reputation was a dominant factor in these attributions of LC to him, but observes that neither Frobenius Forster, the editor of the first complete edition of Alcuin's works,⁴⁵⁸ nor any of his biographers,⁴⁵⁹ claim that he was the author

453 A. Freeman, 'Theodulf of Orléans and the *Libri Carolini*,' *Speculum* 32 (1957): 663-709.

454 *Ibid.*, 668 and n.29, which quotes the text of Cassander's letter as printed in his *Opera omnia* (Paris: A. Pacard, 1616): 1103.

455 *Ibid.*, 669 and n.31, quoting part of the entry in the Annals '...Karolus rex Francorum misit sinodalem librum ad Britannium sibi ad Constantinopoli directum...Contra quod scripsit Albinus epistolam...'.
456 H. Bastgen, 'Das Capitulare Karls des Grossen über die Bilder', *Neues Archiv der Gesellschaft für ältere Deutsche Geschichtskunde*, 36 (1911) 631-66, 37 (1912) 15-51, 455-533.

457 Rome, BAV, Vaticanus Latinus 7207.

458 Frobenius Forster, *Alcuini Opera* (Ratisbon: Englerth, 1777), II, 459-60.

459 F. Hamelin, *Essai sur la vie et les ouvrages d'Alcuin* (Paris: E. Thorin, 1873), 49; C.J.B. Gaskoin, *Alcuin: his life and his work* (London: C.J. Clay, 1904), 74, n.4; A. Kleinclausz, 'Alcuin et la question des images' in

of *LC*. The contrary arguments originally advanced by Frobenius have gained considerable support. They are, first, that language as severe as that of *LC* is uncharacteristic of Alcuin's other theological writings, which are much milder in tone. Second, there are several features of the letter in the Northumbrian Annals which rule out its identification with *LC*. These are the date of *LC*, a 'triennium' after Nicaea, by which time Alcuin was in England; the title of *LC* describing it as an *Opus* and speaking with Charlemagne's own voice,⁴⁶⁰ whereas the Annals refer to the letter as an *epistola*, written on behalf of the princes and bishops of England, and Alcuin's own statements that when he returned to England at the king's bidding, it was to campaign against Adoptianism. Finally, there is the negative evidence that Alcuin's known writings make no mention of image-worship.

Theodulf was first thought to have a superior claim to the authorship of *LC* in 1917.⁴⁶¹ Although this view received a setback when arguments based on perceived similarities between citations from the Psalms in *LC* and those of the Spanish or Mozarabic Psalter were shown to be fallacious,⁴⁶² it has since attracted considerable support.⁴⁶³ Freeman's study more fully explores the significance of scriptural citations in *LC*; a substantial part of it is devoted to those citations and their sources, and to the manuscript evidence. It identifies many *LC* citations with considerable diversions from Vulgate tradition which cannot be sufficiently explained by Old Latin influence. The liturgical literature, and in particular the antiphonal texts, of the ancient Spanish church, provides a great store of quasi-Scriptural material with precisely the characteristics of those enigmatic *LC* citations. The study discusses several examples of *LC* citations which derive from, but do not follow, the Vulgate text; rather, they are virtually identical with the text as it appears in the Leon Antiphony (AL). Further, there are two striking examples of *LC* citations where part of the text does not have a Vulgate source at all, but is taken verbatim from AL.⁴⁶⁴ The study lists twenty of the most notable antiphonal formulae cited in *LC*, for which AL is the primary authority,⁴⁶⁵ as evidence of the strength of the influence of ancient Spanish usage on the author of *LC*.

This naturally raises the question of how these Hispanicisms found their way into *LC*, a work composed at the Carolingian court, whose scholarly circle included but one Spaniard. Freeman notes the inexactitude of some quotations from AL, showing that the author is quoting from memory. The content of *LC* points to its author as someone intimately acquainted with the

Alcuin, (Paris: Société d'Édition des Belles Lettres, 1948), 295-305; E. S. Duckett, *Alcuin, Friend of Charlemagne* (New York: Macmillan, 1951), 188-89.

460 '*Opus Inlustrissimi et Excellentissimi seu Spectabilis Viri Caroli*'.

461 H. von Schubert, *Geschichte der christlichen Kirche in Frühmittelalter* (Tübingen: Georg Olms Verlag, 1917) I, 386.

462 A. Freeman, 'Theodulf of Orléans and the *Libri Carolini*', 672-74.

463 *Ibid.*, 674 and nn. 63-65.

464 *Ibid.*, 679-681.

465 *Ibid.*, 683-88.

Mozarabic liturgy. Freeman therefore finds it difficult to deny that the hand of Theodulf is apparent and identifiable in *LC*.

She also adduces three other pieces of evidence to support the identification of Theodulf as that author. The first is that the content of passages of correction indicates that many of the corrections and additions advised by the correctors⁴⁶⁶ were left in the hands of the author himself, and that the indicative markings in the text and margin follow the usage of the Theodulfian bibles. The second is that examination of the manuscript shows the original spelling to have displayed characteristically Visigothic features such as the use of *qu* rather than *c* (thus *quar* for *cur*, except where the author has copied from patristic sources), confusion of *b* with *v* (thus, *devitam* for *debitam*) and *c* with *g* (*docmata* for *dogmata*), innumerable cases of 'the spurious use of *ae* for *e'*, and total confusion about aspirates (*scema* for *schema*, *cf. higitur* for *igitur*). However, the most interesting orthographic instance is the repeated appearance in *LC* of the old Spanish spelling *cerubin* for *cherubim*, and this spelling is also found in the inscription which Theodulf placed in the apse of the church which he built and dedicated in 806 at Germigny-des-Prés. The third point links with the fact, discussed above, that the quotations in *LC* are liturgical rather than Scriptural; this is a feature of Theodulf's only other known prose work, the tract *De ordine baptismi*. For example, the Song of Songs⁴⁶⁷ is quoted in the tract as '*et odor vestimentorum tuorum super omnia aromata*', as in the antiphon sung in Spain on St. Leocadia's Day '*et hodor vestimentorum tuorum super omnia aromata*', whereas the Vulgate text has '*odor unguentorum*'.

Freeman also draws attention to the biblical and patristic sources excerpted in Theodulf's *De spiritu Sancto*⁴⁶⁸ and their appearance in *LC* also; she identifies four selections, two from Isidore and two from Augustine, which appear in book III of *LC*, and notes that the *LC*'s reference to Jerome as the author of a work on the Holy Spirit is undoubtedly to his translation of the *De Spiritu Sancto* of Didymus of Alexandria, one of the authors excerpted in Theodulf's *De Spiritu Sancto*.⁴⁶⁹ Finally, in this section of her study, she observes that Theodulf has apparently 'appended to his Bibles the very works of patristic explication on which the Scriptural interpretations of the *LC* principally depend'.

466 *Ibid.*, 678, 689-90, where Freeman draws attention to the many cases where the correctors of *LC* altered the original to agree with the Vulgate text.-e.g. Isaiah 61, 7 where *LC* originally had the Spanish canticle reading '*Sancti in terram suam duplicia possidebunt*' which the correctors altered to ...*in terra sua...*'

467 *Canticum canticorum*, 4, 10, '*pulchriora sunt ubera tua vino, et odor unguentorum tuorum super omnia aromata*'. The saint, a native of Toledo, is generally believed to have been martyred in the persecution under Diocletian in 304.

468 Printed in Migne, *PL*, vol. 105, cfm. 239-41, the text of the poem being followed by a list of the seventeen authors excerpted. As edited by Dümmler, *PLAC* I, 527, (*carm. xxxvi*) the poem begins *Perge, libelle, celer Caroli*...and is printed with the six-line *Praefatio ad Carolum magnum imperatorem* (as it is titled by Migne) *Imperii vestri, rex inclite...pia corde patrum* in a separate section at the end.

469 Migne, *PL*, vol. 105, cfm. 253-56.

The final section of Freeman's study is concerned with the previously unsuspected connection between Theodulf's character as a lover and connoisseur of art, and the importance of *LC* as a source for the history of art in that period. That connection, if suspected, would have been unimportant to historians of art who followed Cassander and many later scholars in believing Alcuin to be the author. Broadly speaking, her thesis on this aspect is that the comments on art and artists in *LC* reflect views which Theodulf was known to have held.

In one of the two supplementary notes appended to the study, Freeman quotes a letter from Dom Luis Brou of Quarr Abbey, a noted authority on the Mozarabic liturgy, referring to the antiphonal formulae quoted in *LC* as borrowed from the chants of the ancient Spanish liturgy, there being no other Latin liturgy in existence which possessed those chant texts with their special characteristics. She comments that their presence alone effectively excludes Alcuin, and all other non-Spanish authors at the Carolingian court, from consideration as author of *LC*, but does not state in terms that Theodulf's authorship is unequivocally established. However, given that comment and the absence of any other credible candidate, it appears virtually impossible to construct a tenable argument for attributing the authorship of *LC* to anyone other than Theodulf.

Although *LC* is a prose work, comparisons of textual and of lexical content, of register, and of the sources of the text all have a potential role to play in an attribution study, particularly where the question to be decided is which of two identified candidates is the author. There is no reason why an attribution study of a poetic corpus could not be conducted on a similar basis, but it is less well suited to a study of Paul than the Heidelberg method.

2.3.7 : Study 5.1, Lapidge on Columbanus

(a) *Ad Fidolium* and other metrical poems

This, the earliest of the three studies reviewed in this chapter which have the adonic poem *Ad Fidolium* as their principal subject, was published in 1977.⁴⁷⁰ All three studies also devote considerable attention to two other metrical poems, both in hexameters, namely the seventeen-verse acrostic poem *Ad Hunaldum*, containing the legend COLUMBANUS HUNALDO, and the seventy-seven verse *Ad Sethum*, the second line of which reads *Dicta Columbani fida te voce momentis*. These poems were first published in 1604⁴⁷¹ as the work of S. Columbanus, the founder of Luxueil and Bobbio, and were still generally accepted as such in the mid-nineteenth

470 M. Lapidge, 'Ad Fidolium', 249-314.

471 M. Goldast, *Paraeneticum veterum pars I: In qua producuntur scriptores VIII* (Insulae ad lacum Aconicum (Lindau, Bodensee ; ex officina typographica J.L.Brem, 1604). The second of the eight authors listed is named as S. Columbanus Abbas.

century.⁴⁷² Debate about their authorship began with Manitius' study in 1911⁴⁷³ and has since centred on the state of Hiberno-Latin culture from the sixth century onwards, studied by Smit.⁴⁷⁴ The only debated issue relevant to the present study is the use of the adonic line as a free-standing verse form rather than its original usage as the concluding line of a Sapphic stanza. In what follows, the putative authors are referred to as 'Columbanus of Bobbio' and 'Columbanus of Saint-Trond'.

In 1981, Herren⁴⁷⁵ commented on Lapidge's 1977 study. He considered Lapidge's argument that *Ad Fidolium* is a late eighth century composition, as demonstrated by reference to its literary and metrical form, the sources, the manuscripts and the identity of the person addressed by the poem. Lapidge also noted the contrast between the prose style and the content of letters undoubtedly by Columbanus of Bobbio and the style and content of the disputed poems, and that in the letters he refers to himself as Columba, whereas the manuscript poems 'pass under the name of Columbanus'.

Ennodius (*ca.* 473-521, bishop of Pavia from 514), was the first known composer of letters in continuous adonics,⁴⁷⁶ an example being his poetic epistle to his friend Faustus which ends with twelve lines of continuous adonics (*lux mea, Fauste...farra piorum*).⁴⁷⁷ Lapidge finds it not too far-fetched to suppose that Paul unearthed Ennodius' works and brought them to Charlemagne's court;⁴⁷⁸ but (to anticipate the debate about the authorship of the metrical poems)⁴⁷⁹ is it particularly far-fetched to suppose that Columbanus of Bobbio discovered the works of Ennodius himself between 612, when he arrived at the Lombard court in Milan, and his death at Bobbio in 615?

Lapidge's argument that the poems in question may be properly attributed to Columbanus of Saint-Trond⁴⁸⁰ is based on the likelihood of his having acquired knowledge of Ennodius from

472 See, e.g., T. Wright, *Biographica Britannica Literaria*, Anglo-Saxon Period (London: John W. Parker, 1842), 161-63.; J-P. Migne, *PL*, vol. 80, clm. 291-93.

473 M. Manitius, *Geschichte der lateinischen Litteratur des Mittelalters* (Munich, C.H.Beck, 1911), 184, who refers to 'Die Gedichte Columbanus, wenn sie wirklich von dem sich Columbanus vernannte Abte verfasst sind...'

474 J.W. Smit, *Studies on the Language and Style of Columba the Younger (Columbanus)* (Amsterdam, 1971).

475 M.W. Herren, 'Classical and Secular Learning among the Irish before the Carolingian renaissance', *Florilegium* 3 (1981), 118-157.

476 M. Lapidge, 'Ad Fidolium', 271.

477 F. Vogel, ed., *Monumenta Germaniae Historica Auctores Antiquissimi.*, vol. VII, 29 (Berlin: Weidmann, 1885); quoted by Lapidge, *Ibid.*, 256. 478 Paul's short poem beginning *utere felix, munere Christi*, which forms the ending of his dedicatory letter to Charlemagne accompanying the homiliary, and is preceded by the hexameter poem *amplo mihi vestro*, (ML 7) is printed in its adonic form by Lapidge (*Ibid.*, 257), but not in either Dümmler's or Neff's editions. This is discussed in more detail in Chapter 3.

479 Thus, Herren, 'Classical and Secular Learning among the Irish before the Carolingian renaissance', 128; 'A sixth-century Columbanus could have read and utilized Ennodius when he was in Italy.'

480 Abbot, *ca.* 800; Rudolf, (1070-1138), abbot of Saint-Trond, notes in *Gesta Abbatum Trudonensium* that the fourth abbot in succession from Grimo was named Columbanus; see Lapidge, 'The authorship of the adonic verses "Ad Fidolium" attributed to Columbanus', 294 and n.171 therein, verifying Grimo as having

the works of Paul the Deacon and Alcuin, both prominent members of Charlemagne's court circle,⁴⁸¹ and his associations with the Carolingian ecclesiastical establishment.⁴⁸² He considers it probable that the impulse to use adonics as an epistolary form came from Paul's rediscovery of Ennodius,⁴⁸³ so the Ennodius/Paul/Columbanus of Saint-Trond connection is a significant component of Lapidge's argument.⁴⁸⁴ The association of Angilram with Saint-Trond is also significant. Angilram had been bishop of Metz since 768 and Saint-Trond was in his diocese. He was appointed by Charlemagne as his archchaplain *ca.* 784, when Paul and Alcuin were at Charlemagne's court and Paul, at Angilram's behest, was composing the *Liber de Episcopis Mettensibus*. Columbanus of Saint-Trond is thus linked to Paul and Alcuin through their connection with Angilram⁴⁸⁵ as well as through their knowledge of Ennodius.

The content of the manuscript Berlin Staatsbibliothek Diez B. Sant. 66⁴⁸⁶,⁴⁸⁷ emphasises these connections. It is the work of two scribes, one of whom (scribe B) has copied a variety of poems including one by Angilbert to Peter of Pisa, one by Paul to Peter, one (allegedly by Charlemagne but probably by Paul) to Peter, and two by Fiducia to Angilram. Lapidge regards it as significant that these poems are all by living contemporaries of Scribe B. The manuscript also includes *Ad Fidolium*, which immediately follows a number of metrical treatises; these matters lead him to suggest that scribe B included it as an outstanding example of the continuous adonic and that B's inclination to copy out verses by his contemporaries may indicate that its author was a contemporary of B.

Bischoff suggested that, as Angilbert referred to Angilram as being alive in the poem to Peter of Pisa,⁴⁸⁸ B must have written the part of the manuscript which includes *Ad Fidolium* not later than 791. However, the content of *Ad Fidolium* itself provides rather more evidence about the period during which it may have been written. This part of Lapidge's argument⁴⁸⁹ is that the

been abbot in 741/2.

481 M. Lapidge, 'Ad Fidolium', 257.

482 *Ibid.*, 295.

483 *Ibid.*, 258. We may also note the similarity, to which Dümmler has drawn attention, in 'Alcuini Carmina' in PLAC I, 266 (n.1 to *carm. liv*) between its opening lines *Nunc bipedali | Carmine laudes | Credule, dulces | Mi tibi nati* and the opening lines of *Ad Fidolium*, 'Accipe quaeso | Nunc bipedali | Condita versa | Carminulorum.

484 For other parallels between Columbanus and Ennodius, see Lapidge, 'Ad Fidolium', 271-3.

485 Alcuin's connection with Angilram is attested by the poem (*Pontificalis apex...pater optime serois*, containing the words *Angelramnus ovans*) in MGH *Poetae I* (*carm. cii*), 329.

486 B. Bischoff, ed. *Sammelhandschrift Diez. B Sant.66; Grammatici Latini et Catalogus Librorum* (Graz: Akademische Druck-u. Verlanganstalt, 1973). Lapidge acknowledges that his remarks on the MS in 'The authorship of the adonic verses "Ad Fidolium" attributed to Columbanus' at 286-88 derive from Bischoff's introduction.

487 L. Boyle, *Mediaeval Latin Palaeography: A Bibliographical Introduction* (Toronto: University of Toronto Press, 1984, reprinted 1995) where the MS is noted as 'Caroline, shortly after AD 796, possibly from the court of Charlemagne at Aachen'; see the list of facsimiles, 41, entry 292.

488 The poem in question is *carmina mitto, Petro*, included in both Dümmler's edition of the *Pauli et Petri carmina* in PLAC I, *carm. xlii*, at 69 and Neff, *carm. xxxix*, 163; the reference to Angilram is in v. 11-'*sis memor atque pii patris precor Angelramni.*' Angilram held the see of Metz from 768 until his death in 791.

489 Lapidge, 'Ad Fidolium', 273-85.

central part of the poem expresses the proposition that the lust for gold is the cause of evil deeds, and that its author draws on eight classical stories in support of it. He identifies the poem by the fourth-century poet Tiberianus, entitled *De Auro*, as the source of three, perhaps four, of these stories,⁴⁹⁰ and adduces a number of unequivocal verbal parallels which show that *Ad Fidolium* was modelled on *De Auro*. This still leaves four (or possibly five) to be accounted for. Three of these⁴⁹¹ are readily attributable to classical authors likely to be familiar to the author of *Ad Fidolium*, but no classical poet does more than touch on the other two, namely the Golden Fleece and the Judgment of Paris. Lapidge discerns a likely source of these two stories (together with four of the other six) in the compilation known as the First Vatican Mythographer; the remaining two both appear in *De Auro*. The First Vatican Mythographer may have been compiled at any time from the death of Orosius in 418, until the second half of the twelfth century,⁴⁹² that being the date of the sole extant manuscript.

However, Lapidge argues for a much narrower period. In his view, the latest date for that compilation is the date of *Ad Fidolium*, which cannot be later than the end of the eighth century, that being the date of Berlin Staatsbibliothek Diez B. Sant. 66. The earliest possible date is the date of *Scholia λφψ in Horatium*, in which the scholiast, in commenting on the word *balanus*, quotes Isidore's *Etymologiae*. That work was unfinished at Isidore's death in 636 and was published posthumously by a friend of his. Consequently, neither the *Scholia*, nor the First Vatican Mythographer, which depends heavily on it as a source, can be earlier than the mid-seventh century. So, if one accepts the First Vatican Mythographer as a source of *Ad Fidolium*, Columbanus of Bobbio (543-615) cannot have been the author. Also supporting that conclusion is the use of the archaic nominative *Iovis* in the story of Jupiter and Danaë as recounted in *Ad Fidolium*; this, rather than the form *Iuppiter* used by grammarians, is also found in book VIII of the *Etymologiae* where Isidore recounts that story.⁴⁹³

Lapidge's arguments for eighth-century authorship of *Ad Fidolium* also draw on a possible identification of Fidolius, whom no-one had, to his knowledge, attempted to identify. This close friend (*frater alme Fidoli*) bore a very rare name, but the known connection between the Carolingian court and Salzburg suggested to him, as a possible candidate, the *Fidolius presbyter et monachus* who was active in the *familia* of the Irish cleric Virgil (perhaps, originally, Fergil)

490 *Ibid.*, 277, where Lapidge is uncertain, because of the allusive way in which the Judgment of Paris is told in *De Auro*, whether that poem inspired its inclusion; the three of which he is certain are the opening of the gates of the infernal regions by gold ('The Golden Bough'), the seduction of Danae in a shower of gold, and the murder of Polydorus for the gold which Priam had entrusted to him.

491 The story of Pygmalion and that of Achilles selling Hector's body to Priam are both in the *Aeneid*, and that of Amphiarus and Eriphyle is in Statius' *Thebaid*. ('which would have been familiar to a moderately educated reader'; *Ibid.*, 278.)

492 *Ibid.*, 282-83, and nn. 120-123 therein.

493 *Ibid.*, citing *Ad Fidolium* at 284 ('*non Iovis auri | fluxit in imbre*') and Isidore at 285 ('*Iovis fertur a iuvando dictus...*').

who was bishop of Salzburg from 767 to 784. If that Fidolius was the addressee of the poem, one must look for a contemporary Columbanus. Lapidge identifies two candidates; one, a Columbanus who was a member of the *familia* of the abbot Peter of Nonantola who had intimate connections with the court of Charlemagne; the other, Columbanus of Saint-Trond. Part of the argument for their respective candidacies rests on the authorship of *A solis ortu usque ad occidua*, a *planctus* composed on the death of Charlemagne in 814. While Lapidge considers it not inconceivable that a member of Peter's *familia* could have composed it at his suggestion, he concludes, principally⁴⁹⁴ on the basis of his opportunities to become acquainted with the adonic epistolary form and his connection with Angilram,⁴⁹⁵ that Columbanus of Saint-Trond is much the stronger candidate. The relevance of the authorship of the *planctus* is that, if the arguments summarised above can be accepted, then Columbanus of Saint-Trond, previously unknown as a Carolingian poet, is also the author of *Ad Fidolium*. Lapidge goes on to ascribe to him a long career as a poet, during which he not only added some hexameter verses (present in all extant manuscripts except Berlin *Staatsbibliothek* Diez B. Sant. 66) to *Ad Fidolium*, indicative of being composed late in his life, but composed the hexameter poems *Ad Hunaldum* and *Ad Sethum*.⁴⁹⁶ He supports those two attributions by an exposition of the verbal similarities between *Ad Fidolium* and *Ad Hunaldum*, the identification of a Hunaldus who was a monk of St Gallen at least from 799 to 812, and became prior in, at latest, 820⁴⁹⁷ as a possible addressee, and that all three poems were admonitions on the transience of life and the evils brought on by the acquisition of gold.

(b) Epilogue-Did Columbanus compose metrical verse ?

Between 1977 and 1997, when that Epilogue was published in a volume entirely devoted to the works of Columbanus,⁴⁹⁸ Lapidge's attribution of the three metrical poems *Ad Fidolium*, *Ad Hunaldum* and *Ad Sethum* to Columbanus of Saint-Trond inspired a vigorous debate. Several scholars accepted the possibility that *Ad Fidolium* was an eighth-century composition,⁴⁹⁹ but Löwe was critical of Lapidge's reconstruction of the career of Columbanus of Saint-Trond,

494 He also cites the eleventh-century *Chronicon* of Theitmar of Merseburg as showing that Theitmar knew the author of the *planctus* to be an abbot and that he could not have known this from the content of the poem or any MS annotations.

495 Lapidge, 'Ad Fidolium', 294-97.

496 *Ibid.*, 297-303.

497 *Ibid.*, 300; the dates are established by the charters which he witnessed in those capacities.

498 M. Lapidge, 'Epilogue: did Columbanus compose metrical verse ?' in *Columbanus: Studies in the Latin writings*, ed. M. Lapidge (Woodbridge: Boydell Press, 1997), 274-87.

499 M.W. Herren, 'Classical and Secular Learning among the Irish before the Carolingian renaissance', 128; P. C. Jacobsen, 'Carmina Columbanii' in *Die Iren und Europa in frühen Mittelalter*, ed. H. Löwe (Stuttgart: Klett-Cotta, 1982, 2 vols.), vol. I, 434-67, 457; J. J. Contreni, 'The Irish in the Western Carolingian Empire', *ibid.*, vol. II, 758-98, 760.

especially in relation to the authorship of the *planctus* and the identity of Fidolius,⁵⁰⁰ and Herren argued against the supposition of a ninth-century Columbanus.⁵⁰¹

In the Epilogue, Lapidge re-states the two main arguments of his 1977 study; first, the chronological impossibility of Columbanus of Bobbio having been the author of *Ad Fidolium*, given that the poem draws on sources not available during his lifetime and, second, the possibility that the author was the Carolingian Columbanus of Saint-Trond. He then deploys the new argument that there are more general considerations telling decisively against the supposition that Columbanus of Bobbio ever wrote metrical (quantitative) verse of any kind. The first is the absence of evidence that the principles of quantitative verse were known in sixth and early-seventh century Ireland, although Virgil and Caelius Sedulius had been studied there; the earliest datable quantitative verse composed by an Irishman is by the late eighth-century Josephus Scottus.⁵⁰² Although Lapidge discerns some faint reminiscence of Virgil and Caelius Sedulius in the prose and poetic works⁵⁰³ of Columbanus of Bobbio, he discounts the possibility that Columbanus could have studied them sufficiently to master the technique of quantitative poetic composition, though he accepts him as being adept at the composition of non-metrical verse.

Secondly, from his analysis both of the rhythmical poems and the prose works of Columbanus of Bobbio, and the absence of evidence that any native Latin speaker taught in Ireland during Columbanus' time there, he concludes that Columbanus, having had little, if any, opportunity to hear Latin spoken there,⁵⁰⁴ did not know the stress patterns or the quantities of the words he was using, and was therefore unable to compose hexameters or adonics. The poems appear at first sight to be in a trochaic rhythm, and in some lines the stress patterns fall on correctly stressed syllables (as in *mors incerta subripit*) whereas in others they do not (as in *absit tibi amare* where the penultimate syllable is naturally long and thus should be stress-bearing, but clearly would not be so in the spoken line). In the prose works Lapidge points to

500 H. Löwe, 'Columbanus und Fidolius', *Deutsches Archiv für Erforschung des Mittelalters* 37 (1981) 1-19.

501 M.W. Herren, 'A ninth century poem for St Gall's feast day and the "Ad Sethum" of Columbanus', *Studi Mediaevali* ser. 3, 24, no.2 (1983), 487-520; see the response of Lapidge, Epilogue, at 277, n.16.

502 Josephus Scottus had studied with Alcuin in Britain before coming to Francia ca 790; see Dümmler's introduction to the *Iosephi Scotti Carmina* in *PLAC I*, 149. Three of his six hexameter poems are *carmina figurata* addressed to Charlemagne.

503 Lapidge, Epilogue, 281. He is referring there to the rhythmical (non-metrical) Easter Hymn *Precamur Patrem*, which he accepts as the work of the young Columbanus; see Lapidge, 'Precamur Patrem: An Easter Hymn by Columbanus,' in *Columbanus: Studies on the Latin writings*, ed. M. Lapidge, (Woodbridge: Boydell Press, 1997), 255-63. He also accepts Schaller's attribution to Columbanus of *De Mundi Transitu*; see D. Schaller 'De Mundi Transitu: a rhythmical poem by Columbanus' in *Columbanus*, 240-54.

504 In contrast to Aldhelm and Bede, prolific composers of hexameters, who had ample opportunity to do so in Anglo-Saxon England.

the low frequency in the *Epistulae*⁵⁰⁵ and total absence from the sermons (or *Instructiones*, as they are called)⁵⁰⁶ of rhythmical *cursus*, which was a characteristic stylistic feature of Latin prose of the time. These works were composed after his arrival in Francia; Lapidge states that the *Epistulae* are known to be securely dated to the period 600-613 and that the *Instructiones* were very probably composed at Bobbio,⁵⁰⁷ where he pictures the monastic regime as one in which there would have been scant leisure for Columbanus to repair his deficiencies in the field of quantitative versification.

In summary, Lapidge concludes that the author of *Ad Fidolium* could not have been Columbanus of Bobbio, but was another Columbanus who flourished in the Carolingian era, the most likely candidate being Columbanus of Saint-Trond. He eliminates Columbanus of Bobbio on three grounds, which are that *Ad Fidolium* draws on a source which was not available to him, that he had no knowledge of Ennodius or, in consequence, of the use of adonics as an epistolary form, and that in any case, both his prose works and his non-metrical poems show that he had no understanding of quantity and therefore was incapable of composing metrical verse. On the other hand, Lapidge credits Columbanus of Saint-Trond with the ability to have composed continuous adonics, because Ennodius' use of that form was known at the Carolingian court; if he is the author of the *planctus*, that is additional evidence of his association with the court; and if he is also the author of *Ad Hunaldum*, the addressee was a monk known to have been at St Gall during the Carolingian period.

2.3.8 : Study 5.2, Herren on Columbanus

This study on the authorship of *Ad Fidolium*, *Ad Hunaldum* and *Ad Sethum* was published in 2001⁵⁰⁸ and was expressed to be a token of a fuller study.⁵⁰⁹ Manuscripts dating from the eighth to twelfth centuries assign them to a Columbanus, described variously as *sanctus* or *abbas*. As discussed above, Lapidge has been most sceptical of their attribution to Columbanus of Bobbio. Herren's study challenges both Lapidge's stated grounds for dismissing him as their author and his attribution of these poems to Columbanus of Saint-Trond.

On the question whether Columbanus of Bobbio was (as Lapidge claims) ignorant of the rules of quantitative verse, Herren accepts that he may not have learnt those rules in Ireland, but

505 N.Wright, 'Columbanus's Epistulae', in *Columbanus: Studies on the Latin writings*, ed. M. Lapidge (Woodbridge: Boydell Press, 1997), 29-92.

506 C. Stancliffe, 'The thirteen sermons attributed to Columbanus and their authorship', in *Columbanus*, 93-202, at 150-61.

507 D. Bullough, 'The Career of Columbanus,' in *Columbanus*, 1-28, makes the more nuanced statement that 'assuming their genuineness, they were probably composed and preached by Columbanus at Milan or Bobbio'; see 24, 26-27.

508 M.W Herren, 'Some quantitative poems attributed to Columbanus of Bobbio', in *Poetry and Philosophy in the Middle Ages-a Festschrift for Peter Dronke*, ed. J. Marenbon (Leiden: Brill 2001), 99-112.

509 Which has not appeared at the time of writing.

observes that he is known to have spent some twenty years in Gaul and Italy, where he would have become acquainted with the spoken Latin of the time and place and been able to correct any inherited mispronunciations. Further, he analyses the rhyme and stress scheme of *De mundi transitu* and finds only two errors according to the conventions of Hiberno-Latin poetry of the time. Basing himself on the study by Neil Wright,⁵¹⁰ he also rejects the contention that Columbanus of Bobbio ignored rhythm in his prose writings; Wright, commenting on Columbanus' use of hyperbaton, states that it would be a mistake to think that he wrote in complete ignorance of the *cursus*, or was entirely indifferent to rhythm when composing his *Epistulae*. Finally, on this point, Herren refers to the 205-verse hexameter poem known as the *Praecepta vivendi* which is ascribed to 'Columbanus' in the manuscripts (thus casting doubt on ascriptions to other authors)⁵¹¹ and also by Migné⁵¹². In this he detects two lines borrowed (or recycled) from *Ad Sethum*.⁵¹³ He also notes the use of two-syllable end-rhymes,⁵¹⁴ a stylistic feature of prose works known to be by Columbanus of Bobbio.

Herren agrees with Lapidge that the author of *Ad Fidolium* used *De Auro*, but questions whether that source would have been accessible to a poet of the Carolingian era. He notes that the earliest extant manuscript of *De Auro* is the late ninth- or early tenth-century manuscript Paris, Bn-Fr lat. 7972, thought to have been written in Milan. He doubts Lapidge's *terminus ante quem* for the First Vatican Mythographer, which its most recent editor regards as post-Carolingian.⁵¹⁵ Both *De Auro* and the mythographic material may have been more readily available in Italy (and hence to Columbanus of Bobbio), who could have also acquired knowledge of Ennodius there, given Ennodius' relatively recent connection with Pavia. In all, he considers that the sources of *Ad Fidolium* are at least as likely to have been available to Columbanus of Bobbio as to Columbanus of Saint-Trond.

Herren contests Lapidge's attribution of the metrical poems and of *Praecepta vivendi* to Columbanus of Saint-Trond on the ground that he is not known to have been an author. The erroneous attribution of the *Planctus de obitu Karoli* to him⁵¹⁶ apparently stems from the notion

510 N. Wright, 'Columbanus's Epistulae,' 55-58.

511 M.W. Herren, 'Some quantitative poems attributed to Columbanus of Bobbio', 105, referring to a dubious conjecture by Manitius that Alcinus Avitus was the author, and its inclusion in the corpus of Alcuin's poems as *carm. lxii* in *PLAC I*, 275-81, where the manuscript ascriptions to Columbanus are listed in the critical apparatus at 275.

512 Migné, *PL* vol.80, clm. 287-91.

513 *Vive Deo fidens Christi praecepta sequendo | Sint tibi divitiae divinae dogmata legis*, the fifth and eleventh lines of *Ad Sethum*, are lines 7 and 8 of *Praecepta vivendi*.

514 Compare the end-rhymes *decori, flori, speculatori* in the preface to *Epistula I* with the end-rhymes *haberi, mereri, videri* in lines 3-5 of the preface to *Praecepta vivendi*.

515 M.W. Herren, 'Some quantitative poems attributed to Columbanus of Bobbio', 103, and n.20, citing *Le premier mythographie de Vatican*, N. Zorzetti, ed., J. Berlioz, trans. (Paris: Les Belles Lettres 1995), xi-xiii.

516 Ascribed to Muratori's misinterpretation of the subscription '*hymnus Columbani ad Andeam episcopum de obitu Caroli*'; see Dümmler, *PLAC I*, 434-36.

that the poet was addressing himself in the line *O Columbane, stringe tuas lacrimas* but, as Löwe⁵¹⁷ has observed, this is inconsistent with the repeated refrain *Heu mihi misero* in which the poet addresses himself in the first person.⁵¹⁸ However, even were the attribution correct, the *planctus* is not a quantitative poem and thus cannot be evidence that Columbanus of Saint-Trond was capable of composing metrical verse.

In the part of his study devoted to the content of the three metrical poems⁵¹⁹ Herren, like Lapidge, accepts that they are by the same author; *Ad Fidolium* is all about avarice, which is a central topic of the other two poems and is linked to the transitory nature of human life. These linked themes appear also in the non-metrical poem *De mundi transitu*, firmly attributed to Columbanus of Bobbio by Schaller,⁵²⁰ and the avoidance of avarice features prominently in his *Regula Monachorum*. Herren describes the four poems as ‘poetic *instructiones* for those who want to lead a perfect life and achieve salvation’ and concludes that ‘all we can hope to say is that the content of several quantitative poems ascribed to St Columbanus is consistent with the theological notions contained in his prose writings and in his rhythmical poem *De mundi transitu*’.

2.3.9 : Summary of the competing views on Columbanus

For two reasons, it is unsurprising that the debate about the authorship of *Ad Fidolium* and the other two metrical poems remains unresolved. One is that Columbanus (and its variants) was a relatively common name, so that allusions in the text itself and manuscript ascriptions by scribes cannot provide convincing evidence of authorship. The other is the sheer lack of material either amounting to direct proof of authorship or providing a basis for any firm inference about authorship. There is no undisputed verse corpus attributable to either candidate, capable of founding any inference based on stylistic considerations, and no context indicating the probable time when, or place where, these poems were composed, or which identifies their intended recipient with any degree of certainty.

The common ground in the debate extends to four points. These are that the Hiberno-Latin literary culture of the late sixth century did not extend to the writing of quantitative verse; that the author of *Ad Fidolium* used *De Auro*; that *Ad Fidolium* was written not later than the early 790s, since it is found in Berlin Staatsbibliothek Diez B. Sant. 66, and that its author was also the author of *Ad Hunaldum* and *Ad Sethum*. The debate itself centres on three questions. These are whether Columbanus of Bobbio was capable of writing quantitative verse; whether he had

517 H. Löwe, ‘Columbanus und Fidolius’, 3.

518 M.W. Herren, ‘Some quantitative poems attributed to Columbanus of Bobbio’, 101.

519 *Ibid.*, 106-110.

520 D. Schaller ‘De Mundi Transitu’, 254.

access to the sources used in *Ad Fidolium*; and (which is particularly important if the answer to both the preceding questions is 'no') whether Columbanus of Saint Trond is a credible candidate for authorship. Given the lack of hard facts, the answers to these questions are essentially conjectural, but it is noteworthy that volume I of *Poetae Latini Aevi Carolini*, which contains the works of the Carolingian poets from Boniface (672-754) to the mid-ninth century Gosbert, includes nothing attributed to Columbanus of Saint-Trond and that the *proemium* to the *Planctus de obitu Karoli*⁵²¹ explains that its attribution to him is erroneous.

On all three questions, the opposing arguments are tenable, but not compelling. On capability, Columbanus of Bobbio may not have mastered the composition of quantitative verse in Ireland, but the question whether he could have, and did, develop the scholarly skills necessary for the composition of hexameter verse during the twenty or so years which he spent in Francia and Italy, is unresolved and likely to remain so.

There is one potentially decisive argument against Columbanus of Bobbio as author of *Ad Fidolium*. There is no reason to believe that *De Auro* and the works of Ennodius, both part of the source material, were unavailable to him. But if it were proved that the First Vatican Mythographer, which could not have been compiled before 636, was one of the sources of *Ad Fidolium*, Columbanus of Bobbio (543-615) cannot have been the author.

Columbanus of Saint-Trond's candidacy for authorship rests on his connexion with Charlemagne's court and possible acquaintance with Paul the Deacon and Alcuin, both writers of continuous adonics, and the inclusion of *Ad Fidolium* in Berlin Staatsbibliothek Diez B. Sant. 66, which contains other poems by contemporaries of scribe B. However, as discussed in Chapter 4, manuscript association is a very weak form of evidence of authorship. The complete lack of any evidence that he ever wrote verse of any description militates against his authorship. Inevitably, the conclusion is that the competing arguments have been taken as far as is reasonably possible, given the paucity of evidence, but the authorship of *Ad Fidolium* and the other quantitative poems remains, and is likely to remain, undetermined.

The studies of Columbanus illustrate the value of two types of evidence in attribution studies; they are dating and capability. Each of these may eliminate a candidate author from consideration or may show him to be a credible candidate. Dating includes both the dating of the earliest manuscript witness of the work in question, and of its source material, the content of which may also be relevant. Capability embraces the ability of a candidate author to write in the prose or verse form, and perhaps also in the genre or register in which the work is composed. Both types of evidence feature in this study, particularly in Chapter 5, whose subject is Paul as hymnographer.

521 Dümmler, *PLAC I*, 435.

Part 2: The scope for the use of various types of evidence in an attribution study of the poetic corpus of Paul

2.4: Introduction

Part 1 of this chapter referred to two methods of classifying evidence, that is, as internal or external evidence (evidence which is, or is not, contained in the text), and as testimonial or circumstantial evidence respectively, statements about authorship and facts from which the likelihood of authorship may be inferred). Tables 2.5 and 2.6 present all the types of evidence used in the studies discussed, arranged in accordance with those two classifications. This Part identifies the factors affecting the value of each type of evidence and the extent to which its use in the studies reviewed has led to secure attributions of authorship.

Table 2.5 Non-stylistic criteria used in the studies reviewed in Part 1

Type	Internal		External	
	Criterion	Used in	Criterion	Used in
Testimonial				
Statements of authorship				
	Self-ascription within text (including epigraphic works)		Self-ascription in manuscript ⁵²²	
	Direct	3.1, 3.2	Direct	
	Indirect	3.1, 3.2	Indirect	4.1
			Other manuscript ascriptions	2.1, 3.1, 3.2, 5.2
			Contemporary or later attributions	3.1, 3.2, 4.1
	Incorporation in other works securely attributable to the author	3.2		
Circumstantial				
Evidence derived from the manuscript				
			Manuscript history (date, style, place of origin)	4.1, 5.1a, 5.2
			Transmission history	
			Associations	2.1, 5.1a
History-based evidence				
			General historical context	5.1a,b, 5.2
			Biographical material	4.1, 5.1a, 5.2
			Evidence of commissioning or patronage	4.1
	Text indicating date, place, circumstances of composition, and other cogent content	3.1, 4.1	Association between author and subject-matter of work	3.1, 3.2, 4.1

⁵²² That is, by means of rubrics, inscriptions, subscriptions and marginalia.

Table 2.6: Metrical, lexical and other stylistic criteria used in the studies reviewed in Part 1

Metrical criteria				
	Metrical form	2.1, 5.1a,b		
	Prosody	1.2, 3.1, 3.2		
	Metrical patterns	1.1, 1.2 2.1		
	Stress patterns	1.1, 5.1b 5.2		
	Caesura patterns	1.2		
	Elision and hiatus	1.1, 1.2 3.1, 3.2		
	Lexical localisation	1.2		
Lexical and other stylistic criteria				
	Rhyme ⁵²³	4.2		
	Formulae	1.1,1.2		
	Borrowings from and parallels with other sources	1.2, 3.1, 3.2, 4.1, 5.2		
	Alliteration	1.1, 1.2, 3.2		
	Vocabulary	3.1, 3.2 4.1		5.1a
	Grammar and syntax	1.2, 3.1 3.2		
	Spelling	4.1		

2.5: Statements of authorship

A statement that A is the author of a work may be made by A himself or by some other person (X) and may be direct (where A is named as the author) or indirect (where A is referred to in a way intended to identify him as the author). There are several ways in which such statements, whether within the text or external to it, may be unreliable or inconclusive.

Reduction of a work to written form is often a collaborative process, so much so that Love has warned that 'collaborative authorship is so common, and so often disguised, as to constitute a central concern of attribution studies.'⁵²⁴ Collaborative authorship may take many forms and the appearance of the author's name on the title-page or in an inscription may conceal the extent to which the style and content are due to the producer of the written work. However, that is

⁵²³ Orchard, *Aldhelm*, does contain some discussion of the use of rhyme in the chapter concerned with Aldhelm's octosyllabic verses, at 39-42. The discussion of Orchard's study in this work is confined to the characteristics of Aldhelm's hexameter verse.

⁵²⁴ H. Love, *Attributing authorship*, 37.

not an issue in any of the studies reviewed in Part I of this chapter and it is not considered further.

Statements of authorship apparently made by A himself may generally be regarded as more reliable than any other statements of authorship, but even in those cases, external evidence may raise the possibility that the statement was not in fact made by A but by some unknown person, for the purpose of giving more lasting currency or greater authority to the work than it would have had if published under his own name. The controversy over the authorship of the Pauline epistles provides a good illustration of this. The canon of the New Testament, as it appears in the King James Bible, contains fourteen epistles believed then, and by many scholars subsequently,⁵²⁵ to be the work of S. Paul⁵²⁶. All except Hebrews begin with an assertion of his authorship.⁵²⁷ Several German scholars, the earliest of whom was F.C. Baur, doubted Paul's authorship; Baur accepted only four,⁵²⁸ though later followers of Baur⁵²⁹ accepted three more as authentically Pauline. Morton⁵³⁰ describes the stylometric studies of sentence length in the Greek texts of the epistles carried out by Wake⁵³¹ and adds some observations of his own on the frequency of occurrence of the words *και* and *ει* as first words, and *γαρ* and *δε* as second words, in sentences in the epistles. These results supported Baur's conclusions and the controversy remains unresolved.

Table 2.5 shows that the studies by Schaller on Theodulf⁵³² and Burghardt on Alcuin⁵³³ both rely on self-ascription in the text. In so far as these are statements embedded in the text and not formulaic statements at the beginning (as in the Pauline epistles) or end of the text, which would be relatively easy to tack on, they can be accepted as reliable. In that context it is interesting that Burghardt does not base his attribution to Alcuin of the large number of *Schlussverse* appended to Alcuin's letters on self-ascription in the text but on the fact that they

525 See A.Q.Morton, 'The Authorship of the Pauline Epistles' in *Literary Detection: how to prove authorship and fraud in literature and documents*, (New York: Charles Scribner's, Sons, 1978), 165-83.

526 Romans, I and II Corinthians, Ephesians, Philippians, Colossians, I and II Thessalonians, I and II Timothy, Titus, Philemon and Hebrews.

527 In various forms, e.g., 'Paul, a servant of God'; 'Paul, an apostle of Jesus Christ'; 'Paul, a prisoner of Jesus Christ'. In Philippians, Colossians, I and II Thessalonians and Philemon, others (Timotheus, Silvanus, Timothy) are named with him.

528 F.C. Baur, *Paulus, der Apostel Jesu Christi, sein Leben und Wirken, seine Briefe und seine Lehre* (Stuttgart, Becher and Müller, 1845), founder of the Tübingen school of theology. He accepted Romans, I and II, Corinthians and Galatians as Pauline.

529 E.g., A.B.C. Hilgenfeld, *Histor-kritisches Einleitung in der Neue Testament* (Leipzig: Fues's Verlag, 1875). The further three are Philippians, I Thessalonians and Philemon.

530 A.Q. Morton, *Literary Detection*, 167-81.

531 W. C. Wake 'The Authenticity of the Pauline Epistles: A Contribution from Statistical Analysis', *Hibbert Journal*, 47 (1948-9), 50.

532 See Table 2.4, above, listing six instances of direct, and one of indirect self-ascription in the text.

533 Burghardt, *Gedichten Alcuins*, 13-15, and the Table at 31-33 therein. Burghardt finds ten instances of direct, and twenty-nine of indirect self-ascription; many of them are in the form of references to Flaccus, Alcuin's *nom de plume* in Charlemagne's court circle of poets.

are preserved with other works of Alcuin, namely, the letters themselves. Schaller⁵³⁴ and Burghardt⁵³⁵ have also both made firm attributions based on the author naming himself as the originator of the subject-matter of epigraphic poems, though Schaller qualifies the criterion by the requirement that it must be difficult (to believe) that anyone else can have been the author.

Lapidge's study of Bede provides some instances of unreliable ascription by later commentators and editors. He observes that one of the problems in dealing with mediaeval texts preserved only in modern printed editions is that it is impossible to control the information which they transmit.⁵³⁶ As he says, 'the distinction of Bede's name attracted to it many hymns which could not on stylistic grounds be his', and he notes a number of instances in which hymns attributed to Bede either in mediaeval texts or in modern editions exhibit hiatus (which Bede never used in any hymn securely attributable to him) or contain metrical and grammatical faults which are so uncharacteristic as to eliminate him from consideration as their author.⁵³⁷

Another reason for discounting an apparent self-ascription in the text is that it may be inconclusive or misleading. The studies by Lapidge⁵³⁸ and Herren⁵³⁹ of the quantitative poems attributed to Columbanus exemplify both these possibilities. They accept that, since Columbanus and its variants is a common name for clerics of Irish origin, the occurrence of the acrostic COLUMBANUS HUNALDO in *Ad Hunaldum* and the line '*dicta Columbari fida te voce monentis*' in *Ad Sethum* cannot shed any light on the authorship of those poems. However, a factor in Lapidge's attribution of those poems and of *Ad Fidolium* to Columbanus of Saint-Trond is his supposed authorship of the *planctus de obitu Karoli* which commemorates the death of Charlemagne in 814 and contains the words '*O Columbane, stringe tuas lacrimas*'. Herren argues that the occurrence of that line may have caused Muratori to interpret the subscription '*hymnus Columbari ad Andream episcopum de obitu Caroli*' of the poem in a seventeenth-century collection of the poems of Hrabanus Maurus⁵⁴⁰ as meaning that Columbanus of Saint-Trond was its author.⁵⁴¹ In rejecting that attribution he adopts the argument of Löwe⁵⁴² that the author of the poem addresses himself throughout in the first person in the refrain *heu mihi misero*, which is

534 Schaller, *Theodulf*, criterion Ic; 20: '*ferner, für epigraphische Gedichte, in denen Theodulf als Urheber des jeweils zugrundeliegenden Gegenstandes genannt ist und die schwerlich ein anderer als er selbst verfasst haben kann*'. He makes ten such attributions.

535 Burghardt, *Gedichten Alcuins*, criterion III, 22; expressed in the unqualified words '*A[lcuin] nennt sich als Urheber der jeweils gemeinten Sache*'. He makes four such attributions.

536 Lapidge, 'Bede the poet', *Anglo-Latin Literature*, 326.

537 *Ibid.*, 330 and nn. 71, 72 thereto.

538 Lapidge, '*Ad Fidolium*' and 'Epilogue'.

539 Herren, 'Quantitative poems attributed to Columbanus', 99-112.

540 See the proemium to the poem at *PLAC I*, 434, in which Dümmler rejects its attribution to Columbanus; the poem is printed without any attribution.

541 Herren, 'Quantitative poems attributed to Columbanus', 101.

542 Löwe, 'Columbanus und Fidolius', 3.

inconsistent with the address in the second person in the words quoted, and regards it as placing a 'practically insuperable grammatical difficulty' in the way of Lapidge's attribution.

2.6: Contextual and biographical evidence

Both types of evidence are potentially valuable in determining whether an author is a credible candidate for authorship of the work in question. Such evidence may locate the author in time or place, indicate associations between him and the subject-matter of the work, identify the influences on his writing and the genres in which he wrote, and throw light on his beliefs and attitudes. More specifically, there may be evidence of commissioning or patronage, or the text may contain relevant information bearing on the time, place or circumstances of composition.

The only studies reviewed in which general historical and biographical evidence has played a significant part are those of Lapidge and Herren, already discussed with reference to the value of self-ascription, on the quantitative poems *Ad Fidolium*, *Ad Hunaldum* and *Ad Sethum*. As discussed in section 2.3.8, the evidence has failed to distinguish between the candidates for authorship, though I observe one possible clue to their dating which does not appear to have had any significance for either Lapidge or Herren. The fourth of the six hexameter verses which form the conclusion to *Ad Fidolium* reads '*nunc ad olympiades ter senae venimus annis*'. That period of 'thrice six Olympiads' amounts to seventy-two years, and Raby⁵⁴³ reads the line as a statement that the author was seventy-two years old when he wrote the poem. If that is correct, and if Columbanus of Bobbio (ca 543-21 November 615) was the author, the poem would have been composed in the last year of his life. However, *Ad Fidolium* is transmitted in the manuscript Berlin Staatsbibliothek Diez B. Sant. 66, which dates from 796 or shortly afterwards.⁵⁴⁴ That militates against the attribution to Columbanus of Saint-Trond. If he was seventy-two years old in or around 796, and still alive in 814, as he must have been for the *planctus de obitu Karoli* to have been attributed to him, he would have lived well past the age of ninety. It seems unlikely that such longevity of a senior cleric would have gone unnoticed and unrecorded in the annals of the abbey or elsewhere.

Columbanus of Bobbio was a prolific writer of prose works, but the body of verse securely attributable to him is very small, and his ability to write adonics or any other form of quantitative verse is not established. Columbanus of Saint-Trond, unless he was the author of the *planctus de obitu Karoli*, is not known to have written anything in either prose or verse. The debate regarding the sources on which *Ad Fidolium* draws and the availability of those sources

⁵⁴³ Raby, *Christian Latin Poetry*, 139.

⁵⁴⁴ L. Boyle, *Mediaeval Latin Palaeography*, where the MS is noted as 'Caroline, shortly after AD 796, possibly from the court of Charlemagne at Aachen'.

to the candidate authors remains unresolved, but its resolution may well provide the best opportunity to achieve a secure attribution.

General historical and biographical information also has very little part to play in Freeman's study of the authorship of *Libri Carolini*.⁵⁴⁵ The work is, ostensibly, Charlemagne's response to the Second Nicene Council of 787 and its restoration of images, but the only contenders for authorship are Alcuin and Theodulf. It is dated a 'triennium' after the Council, by which time Alcuin had returned to England from Charlemagne's court; that, however, has never been regarded as evidence against his authorship. The chronology of Theodulf's early life is not well established and it is not known when he arrived at Charlemagne's court, though Andersson surmises that Charlemagne recruited him not so many years after he had recruited Alcuin.⁵⁴⁶ The earliest of Theodulf's poems securely datable to his time at Charlemagne's court is *Ad Carolum regem*⁵⁴⁷ written in 796 to commemorate his victory over the Avars.

Historical information has proved more useful in the study of Theodulf's poems. The three which are attributed to Theodulf on the basis of Schaller's criterion IV (cogent content-related material) are all datable to a period when Theodulf is known to have been at Charlemagne's court and relate to historical events.⁵⁴⁸ *Quid faciunt cycni*⁵⁴⁹ is a satire, whose composition Schaller dates to 798,⁵⁵⁰ in which the author mocks the court circle and, in particular, the Irishman Cadac-Andreas (the Corvinus addressed in the last line). The names of many of the persons satirised also appeared in Theodulf's *Ad Carolum regem*,⁵⁵¹ in a much more laudatory context. Dümmler dates *Rex benedictae, vale*⁵⁵² to the year 800. Its subject is the attack on Pope Leo III in April 799 and Charlemagne's support for him. *Sumito quae misi laetus*⁵⁵³ is a short poem to Fardulf, who was abbot of Saint-Denis 793-806, accompanying gifts to him which are not identified; Andersson⁵⁵⁴ suggests that they may be the other two parts of *carm. xxxiii, qui iuvat ad tempus* and *grande habet initium*.

545 A. Freeman, 'Theodulf of Orleans and the *Libri Carolini*,' 663-709.

546 T.M. Andersson, *Theodulf of Orléans: The Verse*, 3.

547 *Ibid.*, 3, 65-66; Dümmler, *PLAC I, carm. xxv*, 483.

548 This classification is due to Andersson, *Theodulf of Orléans: The Verse*. The arrangement of poems in his edition follows that of Dümmler, *PLAC I, Theodulfi carmina*, 433-581.

549 *PLAC I, carm. xxvii*, 491. Dümmler identifies the 'Getulian' in line 64 as 'Goth' (i.e., Theodulf himself), for which, see n. 7, 492. Note the Visigothic spelling 'cycni' for 'cygni' to which Freeman drew attention.

550 D. Schaller, 'Der junge "Rabe" am Hof Karls des Grossen', in *Festschrift Bernhard Bischoff am 65. Geburtstag*, ed. J. Autenreith and F. Brunhölzl, (Stuttgart: Anton Hiersemann, 1971), 123-41.

Schaller doubts Dümmler's identification and makes a case that 'Getulian' means 'Moor' that is, Maurus (Hrabanus Maurus, Alcuin's pupil).

551 Dümmler, *PLAC I, carm. xxv*, 483, where the poem is dated to 796.

552 *Ibid.*, *car. xxxii*, 523.

553 *Ibid.*, *car. xxxiii*, 33, 524.

554 T.M. Andersson, *Theodulf of Orleans: The Verse*, 116.

2.7: Metrical, lexical and other stylistic evidence

At a general level, such evidence will provide an image of the authorial fingerprint, at any rate when the author is writing in a particular genre; that qualification is made because (for example) an author might choose to employ different metrical patterns, or different vocabulary, or draw on different sources, depending on the purpose and subject-matter of the work in question. However, it may be less valuable in making an attribution to a particular author, due to the difficulty of distinguishing in that way between authors who share a common cultural background and are influenced by the same exemplars. In that context, it is noteworthy that the studies by Schaller on Theodulf⁵⁵⁵ and Burghardt on Alcuin⁵⁵⁶ rely on similar features of prosody and that the classical authors from whom the vocabulary of Theodore's spiritual-didactic poems⁵⁵⁷ is drawn (namely Virgil, Ovid and Prudentius) were well known to Alcuin, as is apparent from the *versus de sancto euboricensis ecclesiae*,⁵⁵⁸ which contains a catalogue of the authors whose works were in the library at York. The footnotes to Dümmler's edition of Alcuin's poems show how often he drew upon classical authors, particularly Virgil and, to a far lesser extent, Ovid.

Orchard's detailed study of the metrical, lexical and stylistic features of Aldhelm's poetry provides a valuable illustration of the power and the limitations of the use of such evidence in attribution studies. In his analysis of the epitaphs to Bugga⁵⁵⁹ and to Archbishop Theodore,⁵⁶⁰ he is able to eliminate Aldhelm as author of the first by the occurrence of inaccurate scansion and grammatical solecisms entirely foreign to his style, and to make a strong case for his authorship of the second by the exactitude of the scansion, the metrical placing of words, the absence of elision, the licence, characteristic of Aldhelm, of lengthening the vowel *a-* before *sp*, the occurrence of phrases found in the Aldhelmian corpus (though six such phrases also occur in Bugga's epitaph) and his fondness for alliteration (which also occurs five times in the fifteen lines of Bugga's epitaph). Understandably, he did not analyse the occurrence of metrical patterns in those poems; that would have been impracticable, since Bugga's epitaph consists of only fifteen verses and Theodore's, thirty-four.

555 Schaller, 'Theodulf,' 38-40.

556 Burghardt, *Gedichten Alcuins*, 39-42, and, in the investigation of the poems not securely attributed, (*ungesicherten Gedichte*), 47-268, *passim*.

557 Dümmler, *PLAC I, Theodulfi carmina*, *carm. i (contriti et cordis)* 445, and *carm. ii (quarto libelle, entitled ad episcopos)*, 452; see Schaller, 33-38.

558 *Ibid.*, *Alcuini carmina, Carm. i. (Christe deus, summi virtus)*, 169. The catalogue of authors begins at 203, v. 1540, with Jerome. Prudentius (Aurelius Clemens Prudentius) appears as Clemens in v.1551, and Virgil in v.1553. Ovid is absent from the catalogue but appears in the footnotes to the poem at n.4, 203 where *illic invenies*, v.1535 (just before the start of the catalogue) is identified as a borrowing from *Ars Amatoria* I, 91. He appears again in n.4, 223, to *carm. iv (cartula, perge cito)*, in which v.3 borrows the phrase *volvoitur undis* from *Metamorphoses* I, 570.

559 Orchard, *Aldhelm*, 243-48.

560 *Ibid.*, 277-80.

Finally, Freeman's study of *Libri Carolini* merits discussion in this context as well as in that of general historical evidence. Although she states that 'the customary procedures of determining authorship on the basis of style and content appear ineffectual here⁵⁶¹', that statement must be understood against the background that almost all of Theodulf's extant work is in verse, not prose. Indeed, her attribution to Theodulf rests heavily on content in the sense that *Libri Carolini* contains scriptural citations influenced by the Mozarabic liturgy⁵⁶² and displays many instances of Hispanic orthography⁵⁶³, including one spelling (*cerubin* for *cherubim*) which also occurs in an inscription in the church at Germigny-des-Près, built and dedicated by Theodulf in 806⁵⁶⁴. These features of *Libri Carolini* make a very strong case for Theodulf's authorship.

2.8: Conclusion

All of the types of evidence employed in the studies reviewed in Part 1 of this chapter are available, and capable of contributing usefully towards an investigation of Paul's possible authorship of the sixty-eight poems associated with him. Some of the poems include statements of authorship in the text, and there are also manuscript ascriptions. There is some historical and biographical evidence, although it is far from complete and there is considerable uncertainty about the dates of the various phases of his life. There is also scope for the use of metrical, lexical and other stylistic evidence, though the relatively small amount of the poetic corpus attributed to him restricts the extent to which analysis of the type carried out by Orchard in his study of Aldhelm and the later Anglo-Latin poets can be usefully employed. The next chapter discusses the uses and limitations of these methods in this study.

561 A. Freeman, 'Theodulf of Orléans and the *Libri Carolini*,' 665.

562 *Ibid.*, sections III 'Scriptural citations and their sources', 674-82 and IV 'Manuscript evidence; LC citations and Mozarabic MSS', 683-88 and the supplementary note to the section at 705.

563 *Ibid.*, section VI, 'Evidence of orthography in Vatican MSS', 690-92.

564 *Ibid.*, 692.

Chapter 3: The problems specific to a study of the poetic corpus attributed to Paul

3.1: Introduction

In Chapter 2, nine studies of authors who flourished between the late sixth and early ninth century were reviewed. The studies are listed in Table 2.1, and Part I of that chapter discussed them in detail. The types of evidence on which they were based fall into three broad categories, namely statements of authorship, biographical and contextual evidence and metrical, lexical and other stylistic evidence. Specific forms of evidence within those broad descriptions may be classified as internal or external evidence (that is, contained within or outside the text of the works studied) and as testimonial or circumstantial evidence. The latter classification focuses on the weight to be accorded to any particular item of evidence. The assessment of testimonial evidence raises issues about the reliability of the maker of the statement, whereas, in assessing circumstantial evidence, the issues relate to the nature and extent of the inferences which can properly be drawn from the observed facts.

Tables 2.5 and 2.6, at the beginning of Part 2 of Chapter 2, provided a detailed division of, respectively, the non-stylistic and the metrical, lexical and other stylistic evidence into specific categories and indicated the studies which rely to a significant extent on each type of evidence. The remainder of Part 2 examined particular aspects of the studies reviewed in Part 1, for the purpose of indicating the power, and the limitations, of the various types of evidence in studies of authorship. Those studies are of two main types. The two studies of Aldhelm examine his stylistic characteristics and are not concerned with the attribution of any poems of doubtful authorship which they mention. The study of Bede is similar but contains some discussion of the authorship of hymns attributed to him.

The other studies are, primarily, attribution studies but there is an important difference in their aims. Those by Freeman on *Libri Carolini* and by Lapidge and Herren on *Ad Fidolium* and other metrical poems aim to establish which of two candidate authors composed the work in question. The studies by Schaller on Theodulf and by Burghardt on Alcuin aim to determine which of the poems included in the editions of their works can be securely, or probably, attributed to them and which cannot. Those studies are only marginally concerned with the authorship of any *dubia* and Burghardt, in particular, relies on studies by relatively modern scholars for that purpose.

This study adopts the approach of Schaller and Burghardt to the extent that poems are identified as securely or probably attributable to Paul if they satisfy selected authenticity criteria. Those criteria are similar to, but not identical with, those employed by Schaller and Burghardt. However, this study goes farther than those by Schaller and Burghardt, in that it

includes the available evidence of authorship of any *dubia*. All the types of evidence employed in the studies reviewed are potentially valuable in the present study, but their value is limited by factors specific to Paul or particularly significant in relation to the works attributed to him. This chapter identifies the most informative types of evidence and the nature and extent of the limitations to which this study is subject.

3.2. *The lack of a collection issued by the author*

3.2.1 : The nature of an attribution study

An attribution study involves comparison of selected features of the material whose authorship is in question with the corresponding features of material securely attributable to a particular candidate author. That process of comparison will have two aspects. One is the choice of features which are characteristic of that author so as to differentiate him, so far as possible, from other possible candidate authors. The other is the analysis of the results of the comparison and the assessment of the probability that he is the author of the work in question. A collection issued by the candidate author; that is to say, either in his handwriting or authenticated by him, provides the most secure basis for comparison. However, that is a relatively uncommon state of affairs and one which does not obtain in any of the studies reviewed in the previous chapter or in the present study of Paul.

Alternatively, the body of work attributed to the candidate author is not issued by him but is assembled as a collection, perhaps many centuries after his death, from manuscript witnesses which may themselves have been far from contemporary and may no longer exist. The investigator then cannot rely on the collection as a whole but has the preliminary task of selecting, from it, the material most securely attributable to the candidate author, and that body of material forms the comparison sample against which the authorship of the remaining material is to be judged. This process of selection must be carried out in a manner which excludes any possibility of circular reasoning. That necessarily excludes reliance on stylistic criteria in the selection of the comparison sample, because the question to be answered in an attribution study is whether the work whose authorship is being studied ('the questioned work') displays the characteristic features (that is to say, the style) of the candidate author's work.

That necessary exclusion therefore compels the investigator to resort to non-stylistic evidence, which may include statements of authorship in the text of the questioned work, manuscript ascriptions by the author or scribe, attributions by contemporaries or near-contemporaries of the candidate author or by more modern scholars, connexions between the candidate author and the subject-matter of the questioned work (particularly evidence of patronage or

commissioning) and incorporation into, or preservation with other works undoubtedly by the candidate author. If a body of work sufficient to form a comparison sample can be assembled in this way, then characteristic metrical, lexical and other stylistic features of the group can be identified and a comparison made with corresponding features of the questioned work.

The studies, reviewed in Chapter 2, by Schaller on Theodulf⁵⁶⁵ (ca. 755-821) and Burghardt on Alcuin⁵⁶⁶ (ca. 735-804) are constructed in that way. Both are based on editions by seventeenth-century scholars; in Schaller's study, those of Sirmond⁵⁶⁷ and Mabillon⁵⁶⁸ and in Burghardt's, the edition by Quercetanus.⁵⁶⁹ Both studies contain comparisons of those editions with the editions by Dümmler,^{570, 571}. The types of evidence listed in Table 2.5 correspond to the authenticity criteria employed by Schaller and Burghardt in their studies.

3.2.2 : The application of the Heidelberg method to this study

The feature of the Heidelberg method⁵⁷² which makes it particularly suitable for the present study is that it focuses on individual poems, and the reliability of authenticity criteria as a means of identifying poems which are certainly, or highly probably, the work of the candidate author does not depend on how many such poems there are. That only comes into play in the comparison between the stylistic characteristics of that group of poems and the corresponding characteristics of the remainder of the available corpus. Both studies show a limitation of the Heidelberg method, namely, that only a relatively small proportion of the available corpus satisfies one of their authenticity criteria. A possible criticism of the method is that requiring a poem to satisfy only one authenticity criterion in order to be regarded as certainly, or highly probably attributable to the candidate author is setting the standard too low. This may be justified if the criterion is weak (e.g., manuscript ascriptions or associations) but not where it is strong (e.g., evidence of commissioning or patronage).

The sources available to Schaller were the Sirmond corpus⁵⁷³, the *editio princeps* consisting of the Sirmond corpus and twelve poems from other manuscript sources, a further ten poems

565 D. Schaller, 'Philologische Untersuchungen zu den Gedichten Theodulf von Orléans', *Deutsches Archiv für Erforschung des Mittelalters*, 18, no. 1 (1962), 13-91.

566 H.-D. Burghardt, *Philologische Untersuchungen zu den Gedichten Alkuins*, (Diss. Phil., Heidelberg, 1960).

567 J. Sirmond, *Theodulfi Aurelianensis Episcopi Opera* (Paris: Cramoisy, 1646).

568 J. Mabillon, *Veterum Analectorum* tom.1 (Paris: L. Billaine, 1675), 384ff.

569 Andreas Quercetanus (André Duchesne) Turoniensis, *Flacci Albini, sive Alcuini Abbatis Caroli magni, Opera Omnia* vol. III, (Paris: Cramoisy, 1617), clm. 1673-1760.

570 See E. Dümmler, ed., *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini, vol. I* (Berlin:Weidmann, 1881), where the table of contents gives the pagination of the *Theodulfi carmina* as 437-568, but this covers only *carm. i-lxxii*, (*carm. lxxii*. being Theodulf's poetic letter to Modoin from exile). After Modoin's reply (*carm. lxxiii*) the edition prints *carm. lxxiv* and *lxxv* at 573-76, and these are followed by the four *dubia*.

571 Dümmler, *PLAC I, Alcuini carmina*, 160-351.

572 So named since both studies were doctoral dissertations submitted at that University.

573 Schaller, 'Theodulf,' 16.

included in Mabillon's edition,⁵⁷⁴ and Dümmler's edition of the *Theodulfi carmina* comprising seventy-five poems, one of which is Modoin's reply to the poem addressed to him by the exiled Theodulf, together with four *carmina dubia*.⁵⁷⁵ Sirmond gave very little information about the manuscript sources of his edition; two of these, the codices *Patavianus* and *Bibliotheca Memmiana* have been identified by Dümmler,⁵⁷⁶ but the only other source to which he referred, the codex *Altae Silvae*, is lost.⁵⁷⁷ The source of Mabillon's additions to the Sirmond corpus is another lost manuscript, the very ancient codex *Vitonianus* in a handwriting of about the year 800.⁵⁷⁸

From the sixty-three poems in the Sirmond *editio princeps*, Schaller was able to identify, using non-stylistic criteria,⁵⁷⁹ a comparison sample of nineteen, which he enlarged to twenty-four with Mabillon's additions to the corpus⁵⁸⁰ and one attribution by Hagen.⁵⁸¹ The comparison sample consisted of 2,454 verses. From that comparison with the other forty-four poems of the Sirmond corpus, amounting to 1,998 verses, he concluded that twenty-four could be safely attributed to Theodulf on grounds of style and content, and a further thirteen were highly probably by Theodulf. He concluded that one was questionable and one undoubtedly by another author⁵⁸². Of the ten poems added by Mabillon, two, as noted above, were included in the comparison sample, and he accepted that three of the other eight might be by Theodulf, but that five should definitely be relegated to an appendix.⁵⁸³

In summary, Schaller, although with minimal knowledge of the original source material, was able to construct a comparison sample containing a little over one-third of the available poetic corpus, and to identify stylistic characteristics of that group whose presence in or absence from each of the remaining poems would determine whether that poem was certainly, probably, probably not or definitely not the work of Theodulf.

574 *Ibid.*, 28-29.

575 For Modoin's reply to the poem addressed to him by the exiled Theodulf, see *PLAC I, carm. lxxiii*, 569-73. The four *carmina dubia, carm lxxvi-lxxix* are at 577-81.

576 See the *proemium* to *PLAC I*, 449-50, identifying the codices as sources L and B respectively. L is Leiden, *codex Vossianus lat. quart. 15* (VLQ 15), which contains the entirety of Theodulf's poem *contra iudices*. B, which originated from the monastery of S. Memmin, is Paris, *BnFr 9308*.

577 Schaller, 'Theodulf,' 19.

578 Dümmler, *PLAC I*, 443; 'ex pervetusto codice Vitoniano "ab annis fere octingentis manu scripto".'

579 Schaller, 'Theodulf,' 19-21, presenting his attribution in tabular form and identifying the relevant authenticity criteria; see also Tables 2.4 and 2.5.

580 Dümmler, *PLAC I, carm. lviii* (*versus in altare*) and *lix* (*In xenodochio*) both identify Theodulf with the subject-matter of the poem, as do the two poems, one of two verses and the other of four, printed in the footnotes to *PLAC I*, 556-57.

581 H. Hagen (ed.), *Carmina Medii Aevi* (Bern: G.Frobenius, 1877), 125. The poem, (*PLAC I, carm. xxiii*) entitled *Teudulfus episcopus hos versus composuit*, is a *carmen figuratum* and the text contains a self-ascription.

582 Schaller, 'Theodulf,' 21-22. These last two poems mentioned are both epitaphs; *carm. xxiv*, the epitaph to Queen Fastrada, and *carm. lxvi*, on the death of Damasus.

583 *Ibid.*, 28-29. In addition to these two epitaphs, he rejected five of Mabillon's additions, *carm. xxxvii, lii-liv* and *lvii*, and expressed doubts about Theodulf's authorship of *carm. lv, lvi* and *lxx*.

By the time that Burghardt embarked on his study of Alcuin, there had been three major editions of his poems, by Quercetanus (QU),⁵⁸⁴ Frobenius Forster (FR),⁵⁸⁵ and Dümmler (DÜ).⁵⁸⁶ Burghardt observes⁵⁸⁷ that Dümmler did not concern himself with the authenticity of the poems but depended on the two earlier editions in that respect, though he did note that QU contained a large number of poems by other authors, whom he identified in the *proemium*.⁵⁸⁸ Burghardt also observes that investigation shows QU to be an exact copy of a lost manuscript originating from the abbey of St. Bertin and that FR and DÜ follow the edition QU to a large extent. His study was apparently conceived as a preliminary to the production of a new edition of Alcuin's poems, and he visualises that that would require not only investigation of the authenticity of the poems collected in QU, but the ascertainment of its value in establishing a definitive text. However, his dissertation is concerned only with the first of those two objectives.

In the section devoted to the poems securely attributable to Alcuin,⁵⁸⁹ Burghardt lists all the poems which satisfy any of his authenticity criteria, identifying them by number and page in DÜ, stating the number of verses in the poem and indicating how the relevant criterion is met. These results are tabulated⁵⁹⁰ and Burghardt states that the total number of verses contained in the *gesicherten Gedichte* (constituting what is called in this study the comparison sample) is 3902, which amounts to more than half of the verses published under Alcuin's name. His comparison of metrical, lexical and other stylistic features of the remaining poems (excluding those securely attributed to other authors) with the corresponding features of the comparison sample⁵⁹¹ enabled him to conclude that some sixty percent of the remainder of QU was definitely, and a further twenty-five percent probably, attributable to Alcuin.

584 Quercetanus, *Alcuini Opera Omnia*, vol. III, clms. 1673-1760.

585 Frobenius Forster, *Beati Flacci Albini seu Alcuini opera* (Ratisbon: Englerth, 1777), reproduced by Migne, *PL*, vol. 100.

586 Dümmler, *PLAC I*, 160-312.

587 Burghardt, 'Dümmler's Ausgabe der gedichte Alkuins', *Gedichten Alcuins*, 1-3.

588 Dümmler, *PLAC I*, 164. There are forty-seven such poems; their authors, in chronological order, are Rusticus Helpidius (credited by Dümmler with twenty-two poems and by Burghardt with twenty-one), Laurentius Scottus (one), Eugenius Toletanus (two), Aldhelm (credited by Dümmler with twenty-two poems and by Burghardt with twenty-one), Bede (one), Fardulf (one), and Angilbert (two). The remaining three, listed as 'Paulus diac. Carm') are included in Neff, *Gedichte*; they are *En tibi, Paule (carm. xxiii)*, *parvula rex Karolus (carm. xxxiii)* and *Rex Karolus gaudens (carm. xli)* all ostensibly by Charlemagne and Burghardt considers *carm xxxiii* certainly, and the other two possibly, to be by Alcuin.

589 Burghardt, 'Die gesicherten Gedichte', *Gedichten Alcuins*, 13-33.

590 *Ibid.*, 31-33. The information in Burghardt's table is presented in this study as Table A2.3.

591 *Ibid.*, 47-268. His conclusions are summarised in this study as Table A2.4, in the Appendix.

3.2.3 : The limitations of the Heidelberg method in establishing the content of the poetic corpus securely attributable to Paul

The corpus associated with Paul consists of sixty-eight poems,⁵⁹² but it is more difficult to apply the Heidelberg method to that corpus than it is to apply it to the seventy-nine attributed to Theodulf or the 272 in the Quercetanus edition of Alcuin. Of course, the size of the group of poems studied does not create any difficulty in determining whether individual poems satisfy authenticity criteria. However, the following comparison of Paul and Theodulf shows that its size and composition can seriously limit the scope for selecting a comparison sample and identifying a set of stylistic characteristics which can be compared with the corresponding characteristics of the poems that do not satisfy any, or sufficient, authenticity criteria.

Over seventy of the poems attributed to Theodulf are composed in elegiac couplets, whereas the poems associated with Paul display a variety of verse forms. Of the fifty-one poems in dactylic metres, nineteen (totalling 375 verses) are in hexameters, twenty-four (552 verses) are in non-epanaleptic elegiac couplets and eight (492 verses) are epanaleptic. In each of the three metrical groups, the *dubia* account for over half the content. After subtracting the *dubia*, the available comparison samples are very small. They consist of eight poems in hexameters (174 verses), twelve in non-epanaleptic elegiac couplets (135 verses) and three in epanaleptic elegiac couplets (99 verses). These are very small *corpora* from which to draw firm conclusions about stylistic characteristics. One can ascertain whether the poems in non-dactylic forms satisfy any of the selected authenticity criteria, but their sparse and varied content precludes investigation of their authorship on the basis of their metrical characteristics. The quantitative verse forms represented are iambic dimeters, sapphics, alcaics and continuous adonics, and the rhythmical forms are trochaic septenarii (the largest group, consisting of five poems totalling 240 verses), two pseudo-sapphics and one in rhythmic hexameter.

The other major limitation arises from the lack of any substantial collection such as the Sirmond and Mabillon editions of Theodulf's poems and the Quercetanus edition of Alcuin's poems. Such collections are likely to contain few poems which are not, or probably not, the work of the author under whose name they are collected. There are fewer than ten among the seventy-nine poems attributed to Theodulf, and the forty-seven identified in the Quercetanus edition of Alcuin amount to just over one-sixth of its total content⁵⁹³. By contrast, the editions of

592 This number includes the three first included in L. Citelli, (ed.), *Paolo Diacono Opere/2, Corpus Scriptorum Ecclesiae Aquilensis* vol. IX/II, (Rome: Citta Nuovo Editrice 2014), 357-451.

593 The edition contains 272 poems in total; of the forty-seven identified as the work of other authors, sixteen are by Aldhelm and nineteen by Rusticus Helpidius.

Paul's poems by Dümmler⁵⁹⁴ and Neff⁵⁹⁵ draw on a total of forty-four manuscript witnesses for their content, and the largest number of poems attributable to Paul in any one collection is in the manuscript Paris, Bn-Fr, lat.528 s. IX^{ex}), f.122-136, which contains sixteen poems. Four are the work of Peter of Pisa and form part of the poetic exchanges of Charlemagne's court circle. Only seven of the other twelve poems are securely attributable to Paul. The next most prolific witness is the manuscript St Gallen, Stiftsbibliothek, 899 s. ix-x, f.5-18 and 57-58, with twelve poems, two of which are the work of Peter of Pisa, while only four of the remaining ten are securely attributable to Paul. In all, the *dubia* constitute more than half of the poetic corpus extracted from these sources.

The investigation of the authorship of the poems associated with Paul is, therefore, inevitably more limited in scope than those of Schaller on Theodulf and Burghardt on Alcuin. It will be carried out in two parts, the first of which adopts their procedure of selecting criteria of authenticity, independent of metrical, lexical and stylistic considerations, by which to identify the poems most securely attributable to Paul. Table 3.1 lists the selected criteria and compares them with those used by Schaller and Burghardt. Chapters 4 and 5 (the latter of which is concerned entirely with the hymns attributed to Paul) address the questions whether, and to what extent, the selected criteria are satisfied.

The second part will be concerned with a stylometric study of the poems composed in dactylic metres, whose primary aim is to assist in the resolution of questions of doubtful authorship. There has been no previous stylometric study of Paul's verse and, given the many questions of authorship which remain unresolved since the publication of Neff's edition of his poetry in 1908, such a study is an obviously essential part of a full investigation.

The only study reviewed in Chapter 2 to employ any form of stylometric analysis is Orchard's study of Aldhelm,⁵⁹⁶ which includes an appendix entitled 'A statistical study of Anglo-Latin verse'. The appendix tabulates the frequencies of occurrence of various metrical characteristics in the hexameter verses of Aldhelm and eight other Anglo-Latin poets, but does not include any statistical calculations based on the data which it contains. The main text contains one statistical calculation, whose purpose was to determine whether the three components of Aldhelm's hexameter verse, that is, the *Enigmata*, the *Carmina Ecclesiastica*, and the *Carmen de Virginitate*, were metrically homogeneous.⁵⁹⁷

It is clearly possible, in principle, to carry out a statistical analysis of the frequencies of occurrence of specified stylistic characteristics in a comparison sample of the authentic works of

594 Dümmler, *PLAC I*, 27-86, supplemented by the *Appendix ad Paulum*, *ibid.*, 625-28.

595 K. Neff, *Die Gedichte des Paulus Diaconus: Kritische und erklärende Ausgabe* (München: C.H.Beck, 1908).

596 A. Orchard, *The Poetic Art of Aldhelm*, (Cambridge, Cambridge University Press, 1994).

597 *Ibid.*, 88-89 and n.62 thereto.

a candidate author (A) and in a work (q) or body of work (Q) as an aid to estimating the likelihood that q or Q is the work of A. The stylistic characteristic analysed in this study is the frequency of occurrence of the metrical characteristics of the hexameter lines of the poems in dactylic metres and the pentameter lines of those composed in elegiac couplets, the epanaleptic and non-epanaleptic poems being considered separately. Chapter 6 of this study discusses the methods used in such analyses and the principles governing their use, and Chapter 7 presents the results of applying those methods to the frequencies of occurrence of metrical characteristics of a selection of the poems studied.

3.3: *The nature of the evidence*

The major studies of the works of Paul reviewed in Chapter 1⁵⁹⁸ show the development of a general consensus that about thirty poems are securely attributable to him and a lack of unanimity as to which they are. Table 1.1 showed the extent of the disagreement between the major biographers, Bethmann and Dahn, and the disagreement between the editors of the major editions, Dümmler and Neff, both with each other and with the biographers. In the major editions, Dümmler presents thirty-four poems as authentic and fifteen *dubia*, while Neff's edition includes thirty-two poems which he considers authentic and an *Anhang* containing eleven poems which he rejects as Paul's work, though most of them have been attributed to him by others. The two editions agree on Paul's authorship of twenty-eight poems and disagree on ten. Neither Dümmler nor Neff provide a systematic survey of the evidence for their acceptance, doubt or outright rejection of Paul's authorship, though Neff's commentary sets out the reasoning underlying his conclusions in some detail.

The evidence regarding Paul's authorship in those four sources includes self-ascription in the texts, manuscript ascriptions, inclusion in other works of Paul, and the sparse historical context. In so far as attributions are based on stylistic evidence, there is little explanation of that evidence, though both Dümmler and Neff draw attention to borrowings from classical authors, and Neff provides a detailed exposition of the form and content of contemporary epitaphs in his commentary on the epitaph to Queen Ansa, *lactea splendifico* (ML 39).⁵⁹⁹ However, there are no analyses of metrical features such as those carried out by Orchard in his study of Aldhelm, and no commentary on prosody or detailed study of vocabulary of the nature provided by Schaller and Burghardt.

598 This excludes the three poems which first appeared in Citelli, (ed.), *Paolo Diacono Opere/2*, (Rome, 2014), 357-451. One of these, *Vale, salus patriae*, is contained in a letter written by Paul and is therefore taken to be authentic; for reasons discussed in section 4.7 of this study, the other two are very unlikely to be his work.

599 Neff, *Gedichte, carm. ix*, 41-45.

Table 3.1: The authenticity criteria used in this study and in those by Schaller and Burghardt

Note: ‘Number’ is the reference number used to identify the criteria selected for use in this study.

	This study	Equivalent criteria	
		Schaller	Burghardt
Number	Description		
	Self-ascription in text		
1a	Direct	Ia	I
1b	Indirect	Ib	II
2	Manuscript ascription	II	
	Historical associations		
3a	With subject of epigraphic poem	Ic	III
3b	With patron, dedicatee or addressee		
3c	Evidence of commissioning, patronage or request		
3d	Other historical evidence		
3e	Manuscript association		
4	Other relevant content of text	IV	VI
5	The poem is included in a prose work of Paul		IV,V

These selected criteria differ from those selected by Schaller and Burghardt in various ways. Unlike Schaller’s selection, they do not include reliance on attributions by any other author. Neither Schaller nor Burghardt include manuscript association; it is, as Chapter 4 will show, a weak type of evidence, but, as Neff, in particular, resorts to it, it is included here. Like Alcuin, but much less frequently, Paul included verse introductions and conclusions in letters, and *Historia Langobardorum* contains five poems, though Chapter 4 will show two of them to be inauthentic. Finally, evidence of patronage and commissioning, and connections with a patron, dedicatee or addressee play an important role in this study but not in those of Schaller or Burghardt.

Table 3.2, below, identifies the authenticity criteria satisfied by the twenty-eight poems which Dümmler and Neff agree in attributing to Paul (hereafter referred to as ‘the DN group’). Twenty-three of those poems satisfy at least two of the selected authenticity criteria. Seven are epitaphs⁶⁰⁰, five are Paul’s contributions to the exchanges in the court circle⁶⁰¹, and six are addressed to his patrons or ecclesiastical superiors⁶⁰². *Aemula Romuleis consurgunt* (ML 6) is the only one of the three *tituli*⁶⁰³ which satisfies more than one authenticity criterion. Arichis built a palace and a church dedicated to SS Peter and Paul in Salerno and, given Paul’s close

600 ML 13, 32, 33, 35 and 50 are for members of Charlemagne’s family, ML 38 is for Venantius Fortunatus and ML 40 is for Paul’s patron, Arichis.

601 ML 14, 21, 37, 58 and 59.

602 ML 7, 8 and 65 (Charlemagne), 10, (Adalhard), 11 (Adelperga), 36 (Theudemar),

association with Arichis, Neff concludes⁶⁰⁴ that we do not have to look any farther than Paul for the author of *aemula Romuleis consurgunt*.

The Lake Como poem *ordiar unde tuas laudes* (ML 45) meets three authenticity criteria; both Dümmler and Neff accept it as Paul's work and there is no support for Dahn's rejection of it.⁶⁰⁵ The two S. Benedict poems, *ordiar unde tuos sacer* (ML 45) and *fratres alacri pectore* (ML 26), together with the narrative poem *angustae vitae fugiunt* (ML 9) all relate to his confinement to the monastic life. Neff's attribution of *angustae vitae fugiunt* to Paul rests in part on the pervasiveness of the theme of exile which is also found towards the end of *ordiar unde tuos sacer*, Paul's poem in praise of S. Benedict⁶⁰⁶. The evidence supporting Paul's authorship of these twenty-three poems is discussed in detail in Chapter 4, sections 4.2-4.6.

This leaves five poems which satisfy only one authenticity criterion. One is a grammatical poem, two are epitaphs and two are verse *tituli*. The grammatical poem is *post has nectit subsequentes* (ML 51), which is an acrostic poem, spelling out *Paulus feci*. It shows the same rhythmic structure as the abecedarian poem *adsunt quattuor in prima*, (ML 4), and deals with the same grammatical topic. Moreover, the two poems appear consecutively in f. 7-8 of Paris, Bn-Fr s.viii^{ex}) which is written in a Beneventan script. However, Neff⁶⁰⁷ attributes *adsunt quattuor in prima* (ML 4) to Peter of Pisa and considers *post has nectit subsequentes* (ML 51) to be Paul's completion of it.

Paul's attachment to the Lombard royal house supports the attribution to him of *lactea splendifico*, (ML 39), the epitaph to Desiderius' wife, Queen Ansa, though Neff's commentary makes it clear that his attribution is founded on grounds of style and content and on the occurrence of the poem in manuscripts containing other works by Paul⁶⁰⁸. The connexion between Paul and the unidentified Sophia, the subject of the epitaph *roschida de lacrimis*, (ML 56) is uncertain; she may have been the daughter of his brother Arichis or, as Neff thinks more probable, a grandchild of Ansa⁶⁰⁹.

Of the three verse *tituli*, *aemula Romuleis consurgunt* (ML 6) has been discussed above. The mentions of Arichis in the other two *tituli* support their attribution to him. Belting's study⁶¹⁰

603 Neff, 'Inschriften auf die Bauten des Arichis', *Gedichte, carm. iv*, I-III, 14-19. The other two are *Christus salus utriusque* (ML 17) and *haec domus est domini* (ML 28). All three are also included by Dümmler, *PLAC I, carm vi, vii* and *xxxii*, 44-45, 66.

604 *Ibid.*, 14-15, where Neff describes Titulus I (that is, *Aemula Romuleis consurgunt*) as 'zweifellos paulinisch'.

605 J.S.F. Dahn, *Paulus Diaconus*, (Leipzig: Breitkopf and Hartel, 1876), 65-67. He considers it to be the work of an unidentified imitator.

606 At v. 132, '*exsul, inops, tenuis poemata parva dedi*' and the passage at 135-38, '*vincula solve...arce piis meritis*'.

607 Neff, *Gedichte*, commentary, *carm. xv* (*Grammatische Rhythmen*), 74.

608 *Ibid*, *carm. ix*; the relevant commentary is at 41-45.

609 *Ibid*, *carm. x*, 49.

610 H. Belting, 'Studien zum Beneventanischen Hof in 8. Jahrhundert', *Dumbarton Oaks Papers* 16, (1962), 141, 170-71.

shows *christus salus utriusque* (ML 17) to be the *titulus* of the apse to the palace church and *haec domus in domini* (ML 28) to be the *titulus* of the entrance to the basilica⁶¹¹. There is no credible candidate author of these *tituli* other than Paul.

⁶¹¹ Also identified as the location of the *titulus* by the inscription ANTE FORES BASILICAE in St Gallen, *Stiftsbibliothek 573*, s.x), p.476.

Table 3.2: Authenticity criteria satisfied by the poems of the DN group

Notes:

(1) The DN group consists of the twenty-eight poems attributed to Paul by both Dümmler and Neff.

(2) the column headed 'ML' gives the numbers of the poems in the master list, Table A1 in the Appendix.

ML	Incipit	Criteria									
		1a	1b	2	3a	3b	3c	3d	3e	4	5
6	Aemula Romuleis consurgunt						■		■		
7	Ampla mihi vestro		■				■				■
8	Utere felix munere Christi		■			■					■
9	Angustae vitae fugiunt								■	■	
10	Ante suos refluus	■				■					■
11	A principio saeculorum					■				■	
13	Aurea quae fulvis					■	■		■		■
14	Candidolum bifido		■	■		■			■	■	
17	Christe salus utriusque					■					
21	Cynthus occiduas			■					■	■	
26	Fratres alacri pectore								■		■
28	Haec domus est domini					■					
32	Hic ego quae iaceo					■	■		■		■
33	Hildegard rapuit					■	■		■		■
35	Hoc tumultata iacet					■	■		■		■
36	Iam fluebat decima	■							■		■
37	Iam puto nervosis		■			■			■	■	
38	Ingenio clarus sensu						■			■	■
39	Lactea splendifico								■		
40	Lugentum lacrimis					■		■		■	
45	Ordiam unde tuas laudes		■	■					■		
46	Ordiam unde tuos sacer								■	■	■
50	Perpetualis amor					■	■		■		■
51	Post has nectit subsequentes	■									
56	Roscida de lacrimis								■		
58	Sensi cuius verba		■			■			■		
60	Sic ego suscepi		■			■			■	■	
65	Verba tui famuli		■	■		■		■	■	■	

3.4: *The substantial number of dubia*

Of the sixty-eight poems which are the subject of this study, only twenty-eight are, at present, securely attributable to Paul. Establishing the authentic corpus of Paul's verse involves the challenging process of evaluating the evidence for and against Paul's authorship of the remaining forty poems, many of which fail to satisfy any of the selected authenticity criteria.

The *dubia* are divided into two groups, listed in Tables 3.3 and 3.4, below. Table 3.3 lists the poems attributed to Paul by either Dümmler or Neff, but not both ('the D or N group'). Table 3.4 lists the poems which neither of them attributes to Paul ('the excluded group'). Both tables contain poems included by Dümmler among the *dubia* in his edition. Those inclusions must imply his acceptance of some possibility, however remote, that Paul is their author. Conversely, the inclusion of a poem in Neff's *Anhang* is to be taken as a firm rejection by him of Paul's authorship; he does not regard those poems as *dubia* but as the work of authors other than Paul. The evidence relating to the authorship of the *dubia* is discussed in detail in Chapter 4, section 4.7 and tabulated in the Appendix, Tables A3-A5, but some comment on it is included at this stage.

The evidence of Paul's authorship of any of the poems listed in Table 3.3 is slight; one poem (*qui sacra vivaci*, ML 54) satisfies two authenticity criteria, and each of the other nine poems satisfies only one authenticity criterion.⁶¹² *Qui sacra vivaci*, a verse history of the bishops of Metz, is found in manuscripts containing other poems securely attributable to Paul and thus satisfies criterion 3e of this study. It also satisfies criterion 4 of this study (other relevant content of text) since its content must have been very well known to Paul, the author of the prose *Liber de Episcopis Mettensibus* and it is plausible that both are the work of the same author. The acrostic poem *pulchrior me nullus* (ML 52) spells out PAULUS, and thereby satisfies criterion 1a of this study (direct self-ascription in the text). It is virtually certain that *multa legit paucis* (ML 42) does not, in reality, satisfy criterion 3b (association with the dedicatee); Traube considered it to inauthentic⁶¹³ and it does not appear in any of the early manuscript witnesses of Paul's *Epitome* of Festus' *De Verborum Significatu*, though it purports to be part of the dedication to Charlemagne. The only criterion satisfied by the remaining seven poems is 3e (manuscript association).

612 See the discussion of the *dubia* in chapter 4, sub-sections 4.7.2. (The likeliest candidates for inclusion in the authentic corpus) and 4.7.3 (The less likely candidates for inclusion in the authentic corpus).

613 L. Traube, 'Zu den Gedichten Paulus Diaconus,' *Neues Archiv der Gesellschaft für ältere Deutsche Geschichtskunde* 15 (1890), 199.

Table 3.3: Authenticity criteria satisfied by poems of the D or N group

Note: The term ‘D or N group’ means the group of poems accepted as authentic by either of Dümmler or Neff, but not by the other.

ML	Incipit	Criteria (see table 3.1)									
		1a	1b	2	3a	3b	3c	3d	3e	4	5
Considered authentic by Neff, but not by Dümmler											
1, I-IV	Adam per lignum (d) ⁶¹⁴ , Crux tua, Christe potens, Crux tua, rex regum, Crux tua, lux lucis								■		
43	Multicolor quali (d)								■		
47	O una ante omnes (d)								■		
52	Pulchrrior me nullus	■							■		
Considered authentic by Dümmler, but not by Neff ⁶¹⁵											
4	Adsunt quattuor in prima								■		
5	Aegrum fama fuit								■		
53	Quaerebet maerens								■		
63	Temporibus priscis								■		
42	Multa legit paucis					■					
54	Qui sacra vivaci									■	

The excluded group⁶¹⁶ consists of the poems which neither Dümmler nor Neff attribute to Paul. Sixteen of these poems satisfy one of the selected authenticity criteria; in thirteen cases it is the weakest criterion, manuscript association. *Hoc satus in viridi*, (ML 34), the epitaph to Lothar, twin brother of the future emperor Louis the Pious, is attributed by Dümmler to Peter of Pisa⁶¹⁷, but Neff disputes this and also excludes its attribution to Paul on stylistic as well as historical grounds⁶¹⁸. Of the other three, *clare beati agnoscere* (ML 18) appears to contain self-ascription in the text, and the other two are incorporated in works undoubtedly by Paul. *Clauditur hoc tumulo* (ML 19) is in *Historia Langobardorum*⁶¹⁹, and *Trax puer adstricto* (ML 59) is an appendix to *sensi cuius verba* (ML 58), Paul’s reply to Peter of Pisa’s *nos dicamus Christo*, written at the time of Paul’s introduction to Charlemagne’s court.

⁶¹⁴ Neff, *Gedichte, carm. v(iii), 22*. The annotation (d) signifies that the poem or group of poems is included in Dümmler’s *carmina dubia*.

⁶¹⁵ All of these are included in Neff’s *Anhang*.

⁶¹⁶ See Chapter 4, sub-sections 4.7.4 (poems highly unlikely to be the work of Paul) and 4.7.5 (poems which may be eliminated from consideration as Paul’s work).

⁶¹⁷ Dümmler, *PLAC I, carm. xxxix, 71; proemium, 29, n.8*.

⁶¹⁸ Neff, *Gedichte, Anhang, carm.i, 170-75, at 171-72..*

⁶¹⁹ *HL, Book III, c.19*.

There are seven poems, all of which have at one time been attributed to Paul, identified in Table 3.4 by the symbol ■ in column Z. These attributions have largely been rejected in subsequent studies. Finally, there are four poems, identified by the symbol X in column Z which have been included in studies of Paul but have never been attributed to him.

In summary, there are twenty-eight poems accepted as authentic by both Dümmler and Neff, and Table 3.2 shows that all of them meet at least one of the selected authenticity criteria. Twenty-three of these are in dactylic metres and form the body of work whose metrical characteristics may be treated as representative of Paul for the purpose of the statistical investigation which is the subject of chapters 6 and 7. There are forty *dubia*, consisting of the ten poems listed in Table 3.3 on whose authorship Dümmler and Neff disagree, and the thirty listed in Table 3.4 which neither of them attributes to Paul. Thus, 59% of the poems associated with Paul are *dubia*, a very much higher proportion than is encountered in either Schaller's study of Theodulf⁶²⁰ or Burghardt's study of Alcuin.⁶²¹ Its effect is to leave a rather limited body of authentic work⁶²² available for the purpose of identifying the metrical, lexical and other stylistic features of the authentic corpus of Paul's poetry.

620 Schaller questioned seven of the seventy-nine poems in Dümmler's edition and rejected two; see Chapter II, Table 2.6.

621 Burghardt identifies forty-seven of the 272 poems in QU as the work of other authors, but of the remaining 225 he finds only two to be definitely not by Alcuin, six to be probably not by him and twenty-seven to be perhaps by him, making a total of thirty-five *dubia*, which is 15.5% of the 225 not definitely attributed to another author.

622 Metrical investigations can be carried out only on the poems in dactylic metres, which amount to 642 verses. Schaller's and Burghardt's stylistic investigations were based, respectively, on 2,452 and 3,902 verses from the poems which satisfied one of their authenticity criteria.

Table 3.4: Authenticity criteria satisfied by poems of the excluded group

Note:-The 'excluded group' consists of the poems which neither Dümmler nor Neff has attributed to Paul. In the column headed 'Incipits', the symbol d indicates that Dümmler has included the poem among the *dubia* in his edition; A indicates that the poem appears in Neff's *Anhang*. In column Z, the symbol X identifies the poems which have never been attributed to Paul.

ML	Incipit	Criteria (see Table 3.1)										Z		
		1a	1b	2	3a	3b	3c	3d	3e	4	5			
2	Ad flendos tuos, Aquilegia ⁶²³													X
3	Ad perennis vitae fontem (d)								■					
12	Aquarum meis quis det (d)								■					
15	Carmina ferre mea (d, A)								■					
16	Christe deus mundi (d)								■					
18	Clare beati agnoscere	■												■
19	Clauditur hoc tumulo											■		
20	Crederet si velles (d, A)								■					
22	Dulcis amice bibe (d,A)								■					
23	Dulcis amice veni (d)								■					
24	Dux, via, vita, tuis ⁶²⁴													■
25	Filius ille dei (A) ⁶²⁵													X
27	Funereo textu scribuntur (A) ⁶²⁶													X
29	Hausimus altifluam (A)								■					
30	Hausimus altifluo (A)								■					
31	Hic decus Italiae								■					
34	Hoc satus in viridi								■					
41	Martir Mercuri ⁶²⁷							■						■
44	O Benedicta soror ⁶²⁸													■

623 Possibly, but not certainly, by Paulinus of Aquileia; see L. Bethmann, 'Paulus Diaconus Leben und Schriften,' *Archiv der Gesellschaft für ältere deutsche Geschichtskunde* 10 (1851): 320, and included by Dümmler in *PLAC I*, *carm. x*, among the *Paulini carmina dubia*. 142.

624 P. Martinengo, *Pia quaedam poemata ac theologica odaeque sacrae diverso carminum generae conscriptae*, (Rome, F. Zanetti, 1590), 250-55, and included (together with *clare beati agnoscere*) in Migne, *PL* vol. 95, clms. 1584-1606.

625 Included by Dümmler in *PLAC I* among the *versus libris saeculi octavi adiecti*, 98. Neff accepts the possibility that Paulinus of Aquileia or a pupil of his may be the author; *Anhang*, *carm. x*, 207.

626 Attributed by Dümmler to Boniface; *PLAC I*, *Bonifatii carmina*, *carm. vii*, 19. However, Neff, *Anhang* *carm. iii*, 178, questions this attribution and states that stylistic investigations indicate a pupil of Peter of Pisa as the author.

627 Petrus Pipernus, *De effectibus magis libri sex; ac De nuca maga Beneventana liber uncius* (Naples: Colligni, 1634), which is also the source of the attribution of *salve, miles egregie* to Paul. See Bethmann, 'Paulus Diaconus Leben und Schriften,' 290-91.

628 Attributed to Paul by A. Wion, *Lignum Vitae II* (Venice: G. Angelerius, 1595) and J. Mabillon, *Acta Sanctorum Ordinis Sancti Benedicti I*. (Paris, L. Billaine, 1668), 42-44. See Bethmann,

48	Pallida sub parvo (A) ⁶²⁹											X
49	Perge, libelle meus (A)								■			
55	Quis possit amplo (d) ⁶³⁰								■			
57	Salve, miles egregie							■				■
59	Trax puer adstricto										■	
61	Sit tibi sancta phalanx								■			
62	Sponsa decora Dei ⁶³¹											■
64	Ut queant laxis ⁶³²								■			■
66	Olim Romuleia sanctus											
67	Rustice lustrivage								■			
68	Vale, salus patriae										■	

3.5 : The value of internal self-ascription and manuscript ascriptions in manuscripts when the candidate author has a common name

The studies by Lapidge and Herren on the quantitative poems attributed to Columbanus⁶³³, exemplify this problem, since Columbanus, together with its variants,⁶³⁴ is a common Celtic name. The controversy over the authorship of those poems arises from the existence of two candidates of that name, Columbanus, the founder of Bobbio (543-615) and Columbanus, a cleric of the early Carolingian period, who became abbot of St. Trond.

Paul is an even commoner name, so its occurrence in self-ascriptions in texts or in manuscript ascriptions is a potential source of uncertainty as to attribution. Thus, among Bethmann's reasons for denying Paul's authorship of the epitome of Festus is the occurrence, in the superscriptions of a few manuscripts of the dedicatory letter, of ascriptions such as *epistola Pauli pontificis*, *Pauli sacerdotis* and *Pauli Atheniensis*, but not of *Pauli diaconi*⁶³⁵. However, in the

'Paulus Diaconus Leben und Schriften,' 323, who rejects this and agrees with Baronius' attribution of this poem to Bertharius (810-83) who was abbot of Monte Cassino at his death.

629 Neff, *Anhang, carm ii*, 176, concludes that this epitaph and the epitaph *hoc satus in viridi* (*Anhang, carm i*, 170) are the work of the same author, whom he does not identify, but (so he asserts) is not Paul.

Dümmler includes it in *PLAC I* among the *Tituli saeculi viii, carm. vi*, 109.

630 Petrus Diaconus, *De viri illustribus Casinensis*, c. 8; see Bethmann, 'Paulus Diaconus, Leben und Schriften,' 290.

631 Martinengo, *Pia quaedam poemata*, 256-58; Mabillon, *Acta Sanctorum Ordinis Sancti Benedicti I*, 42-44, and see Bethmann, 'Paulus Diaconus, Leben und Schriften,' 289.

632 The attribution by Petrus Diaconus, *De viri illustribus Casinensis*, c. 8, is the first of many, and is adopted by Bethmann, 'Paulus Diaconus, Leben und Schriften,' 289-90 and by C. Blume and G.M. Dreves, ed., *Analecta Hymnica* vol. 50 (Leipzig, O.R. Reisland, 1907), 122-23. The controversy over its authorship is acknowledged by J. Chailley, 'Ut queant laxis et les Origines de la Gamme', *Acta Musicologica* 56 (1984), 48-69, who treats it as Paul's work for the purposes of his study.

633 Chapter 2, studies 5.1(a), (b) and 5.2.

634 These include Colm, Colum, Colman (in one of its derivations), Columba and Columban.

635 Bethmann, 'Paulus Diaconus Leben und Schriften,' 320-21.

superscription of the letter as printed by Neff,⁶³⁶ the author refers to himself as '*Paulus ultimus seroulus*' and the superscription, '*praefulgido domino regi carolo regum sublimissimo*' identifies the dedicatee as Charlemagne, leaving no reason to doubt that the author is *Paulus diaconus* and not, as Bethmann suggests, a contemporary of 'our Paul'.

Bethmann also rejects 'our Paul' as author of *clare beati agnoscere* (ML 18). This short poem is transmitted in the eleventh-century manuscript Monte Cassino, Codex Casinensis 349, consisting mainly of an incomplete commentary on the New Testament. The poem follows immediately after a letter of Jerome to Minervius and Alexander about the Pauline epistles. It counsels the reader who wishes to understand the foundation of S. Paul's teaching (*dogmata*) to turn with great attention to the study of a book; and, if he wishes perhaps to know the name of the writer, he is called Paulus Diaconus, himself a monk; he perfected that work with God's help⁶³⁷. Tosti⁶³⁸, who first published the poem, doubted the identification of the author with the Lombard monk (*sc.*, 'our Paul') on the ground, among others, that the necrology of Monte Cassino included a number of persons with the name Paulus Diaconus. Bethmann's most strongly expressed reason for rejecting 'our Paul' as the author of *clare beati agnoscere* is the notoriously barbarous nature of the versification which it displays⁶³⁹. However, the poem reads as if written about Paul, not by him⁶⁴⁰ and is quite devoid of the expressions of humility which Paul habitually used when referring to himself,⁶⁴¹ and I consider that those features of the poem provide much stronger arguments against his authorship.

The occurrence of the name 'Paul' in works attributed to him is discussed in more detail in chapter 4, where Tables 4.1 and 4.2 list, respectively, its occurrences in the text and in manuscript ascriptions. Except for the two poems containing *Paulus* as an acrostic⁶⁴², Dümmler's and Neff's attributions to Paul the Deacon ('our Paul') are secure, independently of the self-ascription or manuscript ascription. If Neff is correct in dating those two poems to the 780s, there are no other known, attested candidates for their authorship.

636 Neff, *Gedichte*, xxx, 123-25.

637 *Clare beati agnoscere dogmata Pauli vult volvere hunc studeat cum magna indagine librum... Scriptoris si forte velles cognoscere nomen Paulus Diaconus vocitatur, et ipse monachus Hoc opus auxilio Deo, perfectit...*

638 L. Tosti, *Storia della Badia di Monte Cassino I*, Stabilimento de Poligrafico di Filippo Citelli, (Naples: Stabilimento de Poligrafico di Filippo Citelli, 1842), 104-5.

639 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 323-34. He does not identify these barbarisms.

640 See n.637, above: *Scriptores... Paulus Diaconus vocitatur*.

641 '*Paulus ultimus seroulus*'; '*Paulus exiguous et supplex*' in the letter to Adelperga, Neff, *Gedichte*, item iii, 12.

642 Neff, *Gedichte*, *carm. xvi*, *Pulchrior me nullus*, (containing PAULUS), 82; Neff, *carm. xv*, 74 and Dümmler, *PLAC I, Appendix ad Paulum*, 627, *post has nectit subsequentes* (containing PAULUS FECI).

3.6: *The lack of a firmly established historical context*

The chronological survey, in chapter 1, of Paul's literary achievements in prose and verse, identified three periods of activity. These took place first, at the ducal court in Benevento between 763 and a date *ca.* 769-74, then at Charlemagne's peripatetic court in 782-786 (or possibly early 787) and finally, from 787 onwards, at Monte Cassino. There are no works of his which can be confidently dated to his time at the royal court in Pavia or to the period of monastic exile which presumably began with Charlemagne's overthrow of the Lombard kingdom in 774 and ended with his arrival at the court of Charlemagne.

The value of historical context evidence in an attribution study is its capacity to link the subject-matter of the work in question to the candidate author. Such links throw light on his knowledge of the persons named in the work, particularly the dedicatee or addressee, of the events described in the work and on his part in them. If those connexions are established, they are strong, but not decisive, evidence of his authorship, for there could have been contemporaries with similar connexions. Such evidence could also decisively eliminate the candidate by showing, for instance, that the event described in the work did not take place, or the persons referred to did not come into existence, until after his death. The following discussion identifies the poems for which more complete historical-context evidence would cast significant light on their attribution.

The earliest uncharted period is that of Paul's stay at the royal court in Pavia. The only poem securely attributable to Paul likely to have been composed in this period is the Lake Como poem *ordiar unde tuas laudes* (ML 45). Worstbrock⁶⁴³ and Bullough⁶⁴⁴ both identify it as Paul's earliest work, and Neff argues that such an enthusiastic description (*begeisterte Schilderung*) could have been written only by someone who himself had seen and felt the attractions (*Reize*) of the region⁶⁴⁵. He accepts that this has not been definitively established, but argues that it follows with certainty from Paul's undoubted stay at nearby Monza. However, he does not provide any firm evidence for that stay and the passages in *Historia Langobardorum*⁶⁴⁶ to which he draws attention are mainly concerned with the history of the church established there by Queen Theudelinda.

643 F.J. Worstbrock., 'Paulus Diaconus OSB' in *Deutsches Litteratur des Mittelalters Verfasserlexikon, Band 11, Nachträge und Korrekturen*, ed. K. Ruh, (Berlin: Walter de Gruyter (2004), clm. 1172-86.

644 D. Bullough, 'Ethnic History and the Carolingians: An alternative reading of Paul the Deacon's *Historia Langobardorum*,' in *The Inheritance of Historiography 350- 900*, ed. C. Holdsworth, and T.P. Wiseman, (Liverpool: Liverpool University Press, 1986), .85.

645 Neff, *Gedichte, carm. i*, 1-2.

646 L. Bethmann and G. Waitz, eds., *Monumenta Germaniae Historica, Scriptorum Rerum Langobardicarum et Italicarum, Pauli Historia Langobardorum* 12-187; *HL*, book IV, c 21, 22 and 47; book V, c.6, 38.

If Paul is the author of *ut queant laxis* (ML 64), the sapphic hymn to S. John the Baptist, and if he did spend some time at Monza, that would have provided perhaps his best opportunity to experience the beauties of Lake Como, and S. John the Baptist would have been an obvious subject for a hymn, since Theudelinda's foundation at Monza was dedicated to him and he was venerated as a patron saint of Lombardy⁶⁴⁷. Theudelinda's daughter Gundeperga, wife of Rodoald (*652-53), also built a church to S. John the Baptist in Pavia,⁶⁴⁸ so the hymn (if it is his) may date from his time at the royal court there.

The period between Paul's departure from the Beneventan court, which must have taken place after 26 August 768 if Paul was present at the consecration of Arichis' newly-built church in Salerno, and his entry into the monastic life, in or shortly after 774, is another obscure area. If Paul spent some or all of that period at the Lombard court, and composed the verse *tituli* associated by Neff with Lombardy rather than Benevento⁶⁴⁹, they may date from that period; however, the buildings to which they relate are not identified, and Dümmler includes the *tituli* among the *carmina dubia*⁶⁵⁰. Neff associates *multicolor quali* (ML 43), the first of the *tituli*, with Queen Ansa, and, as stated above, the *tituli* appear in sequence in Leipzig, Staatsbibliothek Rep. I, 74, f. 37^v-38 after the epitaphs to the unidentified Sophia (*roscida de lacrimis*, f. 36^v-37) and Ansa (*lactea splendifico*, f. 37-37^v).

The lack of any clear historical context has led to divergent opinions about the authorship of these two epitaphs. Bethmann did not mention *lactea splendifico* (ML 39) at all, and considered Paul's authorship of *roscida de lacrimis* (ML 56) doubtful⁶⁵¹. Dahn denied Paul's authorship of *lactea splendifico* at some length,⁶⁵² in part because he was unable to reconcile the incomplete historical information with Paul's authorship. However, he expressed the view (though without explanation) that *roscida de lacrimis* is more likely to have been Paul's work than many of the poems which Bethmann regarded as undoubtedly by Paul. Although Paul's attachment to the Lombard royal house makes him a credible candidate for authorship of the epitaph to Ansa, and to Sophia if she was Ansa's granddaughter, the attributions of these two epitaphs to Paul by both Dümmler and Neff do leave important questions unanswered. After Ansa's exile following the overthrow of the Lombard kingdom, nothing is known of her life, or the date and place of her death, so it is entirely unclear how, when and where the news of her death reached him. Those questions also arise in relation to Sophia, whether she was Ansa's granddaughter or

647 See, in particular, *HL* book V, c.6, relating to the emperor Constantine's intended invasion of Lombardy.

648 *HL*, book IV, c.47.

649 Neff, *Gedichte, carm. v* (I-III), *Andere Inschriften*, 20-22.

650 Dümmler, *PLAC I, carm. xlvi-xlviiii*, 77-78.

651 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 319.

652 Dahn, *Paulus Diaconus*, 67-68.

a child of Paul's brother Arichis, since there is no evidence of any communication between Paul and his exiled brother's family.

The period of Paul's exile to monastic life, from 774 or shortly thereafter until 781-2, is also obscure, and there is some controversy over his location during that period. More recent scholarship favours Monte Cassino,⁶⁵³ though both Traube⁶⁵⁴ and Manitius⁶⁵⁵ had identified Civate as, at least, the earliest place of his exile. However, the few poems possibly datable to that period⁶⁵⁶ are all unquestionably the work of Paul, so his location during that period is irrelevant to the authenticity debate.

3.7: Summary

The problems specific to a study of Paul are of two types. The study of the corpus as a whole is hampered by the lack of an edition either issued by him or based on a substantial contemporary or near contemporary manuscript collection. The poems associated with him are transmitted in over forty manuscript sources and constitute a small proportion of the content of any manuscript in which they are found. In addition, almost sixty percent of the poems associated with him are *dubia*, which creates a serious obstacle to ascertaining the metrical, lexical and other stylistic characteristics of Paul's poetic corpus.

For individual poems, the problems include cases of apparent self-ascription and manuscript ascription where the 'Paul' identified in the text might be someone other than 'our Paul'. Other problems occur with manuscript ascriptions, with the lack of historical information connecting Paul more closely to the addressees, dedicatees or subject-matter of several poems (particularly epitaphs and verse *tituli*), and due to the very limited value of manuscript association as evidence of authorship.

Despite the limitations discussed in this chapter, and the relatively small amount of material compared with that available to Schaller and Burghardt in their studies, their method is the best suited, of all those reviewed, to the present study. The authenticity criteria selected for this study are similar to theirs. Approximately one-third of the poems studied here satisfy more than one of them, and that analysis strongly suggests that a 'provisional canon' consisting of the twenty-eight poems attributed to Paul by both Dümmler and Neff provides a suitable basis of comparison for such stylistic and stylometric analysis as can reasonably be carried out. In this

653 D. Bullough, 'Ethnic History and the Carolingians', 87. This is also the view of Bethmann, 'Paulus Diaconus Leben und Schriften,' 259, and Neff, *Gedichte*, in his commentary to *carm. viii, angustae vitae fugiunt*, 38.

654 L. Traube, *Abhandlung der Bayerische Akademie der Wissenschaften*, 21, (1891) 639, 709 ff.

655 M. Manitius, 'Die Universalen Schriftsteller; 41, Paulus Diaconus' in *Geschichte der Lateinischen Literatur des Mittelalters: Erster Teil, von Justinian bis zur Mitte des zehnten Jahrhunderts* (Munich, C.H. Beck, 1911), 257 and (citing Traube) *Ibid.*, 260.

656 At the beginning of the period, the two S. Benedict poems (*ordiar unde tuos sacer* and *fratres alacri pectore*), and the poem lamenting Paul's change of circumstance (*angustae vitae fugiunt*) and, at the end of the period, the plea to Charlemagne, *verba tui famuli*.

respect the study does not follow those of Schaller and Burghardt, whose stylistic investigations rely heavily on the respective authors' lexical peculiarities and their use of hiatus and elision, all of which are rare in Paul. The evidence for and against Paul's authorship discussed in Chapters 4 and 5, the latter relating solely to Paul as hymnographer, includes stylistic features of individual compositions. The one stylistic feature investigated in detail is the frequency of occurrence of metrical characteristics in the poems composed in dactylic metres, which is the subject of Chapters 6 and 7.

The studies by Schaller and Burghardt were the last serious endeavours to define a Carolingian verse corpus. Resolving the uncertainty about the content of the authentic corpus of Paul's work, which still persists, over eleven decades after the publication of Neff's edition, is long overdue. This study seeks to provide that resolution by means of two approaches. One is the use of authenticity criteria in the manner which is the foundation of Schaller's and Burghardt's studies. The other is a statistical approach which is original both in the method of analysis of the metrical data and because no previous study of Paul's verse has attempted anything of that nature.

Chapter 4: The evidence for and against Paul's authorship

4.1 : Introduction

The previous three chapters laid the foundation for the analysis of the evidence for and against Paul's authorship of the poems associated with him, to which this chapter is devoted. Chapter 1 identified all sixty-eight of the poems associated with Paul, and these are tabulated in the master list, Table A1 of the Appendix.⁶⁵⁷ Twenty-eight are ascribed to Paul in both major editions, and ten are attributed to him in one or other of those editions. For the remainder, there is a spectrum of doubt ranging from admitting some possibility of Paul's authorship to an unequivocal rejection.

Chapter 2 addressed the question of what criteria might be usefully employed in establishing the authentic content of Paul's verse. The first part of the chapter examined the methods employed, and the evidence relied on, in a series of studies of early mediaeval Latin authors. The present study has the same object as those of Schaller on Theodulf and Burghardt on Alcuin. Like those studies, it identifies authenticity criteria, that is, types of evidence which point to the candidate author as the author of the poems in which they occur. The second part of the chapter was concerned with the potential for the application of those criteria to an attribution study of the poems associated with Paul. Chapter 3 moved from the potential towards the actual applicability of those criteria, having regard to the difficulties which are specific to a study of Paul. Building on that foundation, Chapter 4 will assemble and evaluate the evidence relevant to the question of Paul's authorship of the verse compositions, other than the hymns, which have been attributed to him. For the reasons given in Chapter 5, which is entirely devoted to them, the hymns demand separate treatment.

4.2 : *The historical context*

4.2.1 : Nature of the evidence

Apart from the uncertainties which hinder any attempt to provide a coherent account of Paul's life history, the available historical evidence in his case is limited to two types. One is where the work in question is datable from its content, that is, by reference in the text to some identifiable person or event; the other is where there is evidence, in the text or elsewhere, that the work was commissioned by, or dedicated to, a specified person. Often, though not invariably, that person will have been a patron

⁶⁵⁷ This list, referred to throughout this work as the master list, is Table A1 in the Appendix, and poems mentioned are identified by their incipits and master list (ML) numbers.

or one whose patronage was sought by Paul. Epitaphs, and poems composed to mark the occasion of (for instance) the dedication of important buildings, are good examples of poems authenticable in that way, but, as we shall see, there are compositions attributed to Paul, for which evidence of patronage or commissioning is lacking, and other historical evidence is tenuous.

4.2.2 : Commissioning and patronage

The only patronage known to have been enjoyed by Paul during the period of his early adult life spent at the Lombard royal court at Pavia is his employment by Desiderius as tutor to his daughter, Adelperga. There is no evidence that any of the rulers of that time⁶⁵⁸ commissioned either the poem, *ordiar unde tuos laudes* (ML 45) in praise of Lake Como whose composition is placed in that period by some scholars,⁶⁵⁹ or any other verse. Evidence of commissioning and patronage does not appear until Paul, had, in Bullough's words 'successfully negotiated a change of ruling dynasty'.⁶⁶⁰ That dynasty was created in 758 when Desiderius appointed the Friulian nobleman Arichis to be duke of Benevento, and Arichis married Desiderius' daughter Adelperga. Since Paul, himself a Friulian, had been Adelperga's tutor, he had links to both the duke and the duchess. She was the dedicatee of his acrostic poem *A principio saeculorum* (ML 11) which is unequivocally dated to the year 763 by its eighth verse. The initial letters of its verses spell out the words 'ADELPERGA PIA'.

There is no evidence that Adelperga herself ever commissioned any verse from Paul, though the *Historia Romana*, Paul's six-volume continuation of Eutropius, was written at her request. However, Arichis' patronage is well attested. Belting's 1962 study,⁶⁶¹ which refers to the important role played by Paul in the development of literary culture at the court of Benevento,⁶⁶² also recounts the substantial building programme which Arichis initiated in Benevento and Salerno, and his commissioning of *tituli* from Paul for the palatine church of SS. Peter and Paul which he founded in Salerno.⁶⁶³ The earliest evidence for Paul's authorship of such verses dates from the late tenth century; an anonymous chronicler mentions Arichis' fortification of Salerno, the building of the

658 Kings Ratchis (744-49) and briefly, after his successor Aistulf (749-56), in 757; Desiderius (757-774).
659 K. Neff, *Die Gedichte des Paulus Diaconus: Kritische und erklärende Ausgabe* (Munich: C.H. Beck, 1908), *carm.i*, 1-3; D. Bullough, "Ethnic History and the Carolingians: An alternative reading of Paul the Deacon's *Historia Langobardorum*", in *The Inheritance of Historiography 350-900*, ed. C. Holdsworth, and T.P. Wiseman, (Liverpool: Liverpool University Press, 1986), 85-106, at 86-7.

660 *Ibid.*, "Ethnic History and the Carolingians," 87.

661 H. Belting, 'Studien zum Beneventanischen Hof in 8. Jahrhundert', *Dumbarton Oaks Papers* 16, (1962) 141-93.

662 *Ibid.*, section IV 1, "Das Bildungszentrum am Hof und Paulus Diaconus", 164-69.

663 *Ibid.*, section IV 2, "Die Kunst unter Arechis, Bauten und Inschriften", 169-71.

palace and its associated church, and Paul's *tituli* for those buildings.⁶⁶⁴ Belting does not identify the verses in question, but Neff's edition, under the heading *Inscripfen des Bauten Arichis*,⁶⁶⁵ contains the three compositions *Aemula Romuleis consurgunt* (ML 6), *Christe salus utriusque* (ML 17) and *Haec domus in domini* (ML 28). Neff also includes three more *tituli*, under the heading *Andere Inscripten*⁶⁶⁶ but in his view, these originate from the Lombard, not the Beneventan court, and only two of the three, *O una ante omnes* (ML 47) and *Adam per lignum* (ML 1, I-IV) are probably by Paul.⁶⁶⁷ The other is *multicolor quali* (ML 43).

It is not known when Paul left the Beneventan court, or where he went immediately afterwards. The earliest date proposed for his departure is 769; Neff⁶⁶⁸ associates that event with the political complications arising from Charlemagne's marriage to Desiderius' daughter in 770 and the repudiation of that marriage the following year⁶⁶⁹, after which he married Hildegarde, daughter of Count Gerold of Alemannia.⁶⁷⁰ Neff suggests that at that time, Desiderius, being in need of Paul's counsel, recalled him to the royal court, from which he was banished in 774 following Charlemagne's annexation of Lombardy and the exile of the Lombard royal family.

If Neff is correct, Paul would have almost certainly been at the Beneventan court on the occasion of the translation of the relics of S. Mercurius to Arichis' newly founded church of S. Sophia in Benevento on 26 August 768. Paul's presence would make him a candidate for the authorship of the two verse compositions commemorating that event, the prayer *salve miles egregie* (ML 57) and the hymn in the sapphic metre, *Martir Mercuri, saeculi futuri* (ML 41). These compositions were indeed attributed to Paul in a seventeenth-century work, referred to by Bethmann⁶⁷¹ as 'the most wonderful book of the physician Petrus Pipernus, *De magicis effectibus*',⁶⁷² but that work cites no manuscript sources for either poem and none have since come to light. The prayer, in Pipernus' book, is preceded by the words '*Oratio S. Mercurii composita per Paulum*

664 U. Westerbergh, ed., (Stockholm: Almqvist & Wiksell, 1956), *Chronicon Salernitanum*, cap. 17, 22, 37, possibly composed by the Salernitan monk Radoald, Abbot of San Benedetto. It relates the local history from the time of Charlemagne and Arichis onwards, but terminates at the year 974.

665 Neff, *Gedichte, carm. iv* (I-III), 15-19.

666 *Ibid.*, *carm. v* (I-III), 20-22.

667 *Ibid.*, in his commentary to *carm. iv* (I-III), 18-19.

668 *Ibid.*, in his commentary to *carm. vi* (*ordiar unde tuos sacer*, in praise of S. Benedict), 24.

669 J. L. Nelson, *King and Emperor: A New Life of Charlemagne*, (London: Allen Lane, 2019), 107-110.

670 M. Costambeys, M. Innes and S. MacLean, *The Carolingian World* (Cambridge: Cambridge University Press, 2012), 66. See also the diagram showing the descendants of Charlemagne on the unnumbered page preceding the Introduction.

671 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 291.

672 Petrus Pipernus, *De effectibus magicis libri sex; ac De nuce maga Beneventana liber unicus* (Naples, Colligni, 1634), 147.

Diaconum sanctissimae vitae monachum montis Casini, quondam secretarium principis Arichis Beneventani'.⁶⁷³ Belting⁶⁷⁴ demonstrates that Pipernus was certainly correct in describing Paul as '*quondam secretarium principis Arichis Beneventani*'; however, that merely identifies him as a possible candidate. As I shall show in Chapter 5, there are strong textual and stylistic grounds for rejecting Paul as author of either composition.

There is no further evidence of commissioning or patronage before Paul's arrival in Francia. Paul himself recounts how, on a visit to the grave of the sixth-century poet Venantius Fortunatus at Poitiers, he was asked by Aper, the abbot of Saint-Hilaire, to compose an epitaph for the poet, and did. Paul included the epitaph, *ingenio clarus, sensu celer*, (ML 38), together with a short biography of Fortunatus, in *Historia Langobardorum*.⁶⁷⁵

There is evidence of commissioning for both prose and verse works during the Frankish period, and there are connexions between the two forms of Paul's writings due to his habit (also evident in *Historia Langobardorum*) of including poems in the body of his prose works, and prefacing or ending letters with dedicatory or farewell verses. Works displaying such connexions include the homiliary which he compiled at Charlemagne's behest, the Epitome of Festus, and the *Liber de episcopis Mettensibus* commissioned by Charlemagne's archchaplain, Angilram,.

The homiliary contains the dedicatory poem *ampla mihi vestro* (ML 7), and one of its three manuscript sources⁶⁷⁶ also contains the concluding short adonic poem *utere felix, munere Christi* (ML 8) which Neff attributes to Paul on grounds of style and similarities with his dedication of Eutropius.⁶⁷⁷ The epitome of Festus' *De verborum significatu* is dedicated to Charlemagne, but its date and place of composition remain contested. Until the recent study by Clare Woods, the received opinion was that a copy of Festus existed at Charlemagne's court and Paul's epitome was composed at Charlemagne's request, either in Francia or after he had returned to Monte Cassino.⁶⁷⁸ Woods,⁶⁷⁹ however, infers from a passage in the dedicatory letter⁶⁸⁰ that the epitome was intended

⁶⁷³ Bethmann, 'Paulus Diaconus, Leben und Schriften,' also notes at 292 that Pipernus mentions the hymn in the words '*composuit etiam alium de eius passione*'.

⁶⁷⁴ Belting, *Studien*, 164-75.

⁶⁷⁵ *HL*, Book II, c.13.

⁶⁷⁶ Munich, Staatsbibliothek clm. 4533, s.xi.

⁶⁷⁷ Neff, *Gedichte*, 132.

⁶⁷⁸ *Ibid.*, 124.

⁶⁷⁹ C. Woods, 'A contribution to the King's Library: Paul the Deacon's Epitome and its Carolingian Context' in Verrius, *Festus and Paul*, ed. F. Glinister and C. Woods, (London: Institute of Classical Studies, University of London, 2007), 109-35.

⁶⁸⁰ *Ibid.*, 118, '*Cupiens aliquid vestris bibliothecis addere...*' (wishing to add something to your book collections...).

as an addition to the court library and that Paul composed it as a means of bringing himself to Charlemagne's attention.⁶⁸¹ The four-line poem *multa legit paucis* (ML 42) associated with the Epitome contains both explicit (*hoc serous fecit, Karolo rege, tuus*) and oblique (*det David vires scilicet ipse Deus*) references to Charlemagne. Dümmler includes it, together with two other concluding verses of letters,⁶⁸² among the *Pauli et Petri Carmina*⁶⁸³ but Neff⁶⁸⁴ cites, with approval, Traube's claim that the verse is inauthentic.

Of the ten other poems composed during Paul's Frankish phase, five are exchanges within the court circle and thus arose in the context of patronage and court sociability. *Sensi cuius verba* (ML 58) with its appendage, *Trax puer adstricto* (ML 59), is Paul's reply to Peter of Pisa's poem, *Nos dicamus Christo*, marking his introduction to the court circle. It is unclear whether Paul is the author of *Trax puer adstricto*⁶⁸⁵ or it was someone else's translation, which he remembered from his schooldays. The other four are, or contain, answers to riddles. Three (*candidolum bifido*, ML 19, *iam puto nervosis*, ML 37 and *sic ego suscepi*, ML 60) are replies to Peter, while the other (*cynthus occiduas*, ML 21), is addressed to Charlemagne.

The remaining five poems are epitaphs for members of Charlemagne's family. Two (*hic ego quae iaceo*, ML 32 and *perpetualis amor*, ML 50) are for his sisters, Rothaid and Adelheid, respectively. Two more are for his daughters by Queen Hildegarde, Adelheid and Hildegarde (*hoc tumulata*, ML 35 and *Hildegard, rapuit*, ML 33) and one is for Hildegarde herself (*aurea quae fulvis*, ML 13). All five are included in the *Liber de Episcopis Mettensibus* and it is plain from the words '*Quarum omnium epitaphia a nobis iussu gloriosi regis Caroli composita...*' which immediately precede the epitaph to Rothaid that they were commissioned by Charlemagne.

4.2.3 : Personal associations and the general historical context

In addition to the poems for which there is evidence of commissioning or patronage, several more are attributable to Paul on the basis of known associations with the relevant persons or events.. Those most firmly attributable to Paul, through his strong associations with the persons addressed, are the acrostic poem to Adelperga, *A principio saeculorum* (ML 11), the plea

681 *Ibid.*, 124: see the section entitled 'A contribution and a calling card'.

682 *Iam fluebat decima*, (ML 36) concluding the letter to Theudemar (see Neff, *carm. xiv*, 73) and *ante suos refluxus*, (ML 10) concluding the letter to Adalhard (see Neff, *carm. xxxi*, 130). The manuscript source of the three letters is Paris, BnFr, lat. 528, s.ix.

683 Dümmler, *PLAC I*, 62. 684

684 Neff, *Gedichte*, 125.

685 W.R. Paton, ed. 'Sepulchral Epigrams,' *The Greek Anthology*, vol. 2, book VII (Cambridge, MA: Loeb Classical Library, Harvard University Press, 1989)

to Charlemagne (*verba tui famuli*, ML 65) the epitaph for his patron, Arichis of Benevento (*lugentum lacrimis*, ML 40), and verses in his letters to Theudemar (*iam fluebat decima*, ML 36, and *Vale, salus patriae*, ML 68⁶⁸⁶) and Adalhard (*ante suos refluus*, ML 10).

It is entirely plausible that Paul should have written in praise of S. Benedict and, given the connection between Benedict, Gregory the Great and Monte Cassino⁶⁸⁷, that the miracles ascribed to Gregory should also have featured in his verse compositions. The epanaleptic poem in praise of S. Benedict, *ordiar unde tuos sacer* (ML 46), and its companion piece in iambic dimeters (*fratres, alacri pectore*, ML 26) (which Raby describes as 'a mere paraphrase of the longer poem and nothing more than a catalogue of miracles from the second book of Gregory's *Dialogues*')⁶⁸⁸ are both transmitted in the *Historia Langobardorum*.⁶⁸⁹ Neff links the two Benedict poems and *angustae vitae fugiunt* (ML 9) to a period of Paul's exile from the royal court at Pavia to Monte Cassino following Charlemagne's overthrow and exile of the Lombard royal family in 774, but there is no firm evidence that Paul had actually been in Pavia then.

Paul's earlier association with Desiderius admits the possibility that he could have been the author of the epitaph to Desiderius' wife, Queen Ansa (*lactea splendifico*, ML 39). Although Ansa was buried in the abbey of Brescia founded in 769 by herself and Desiderius, it is not known where or when she died. The earliest manuscript witness, Leipzig, Staatsbibliothek Rep. I, 74, s.ix, entitles the epitaph '*super sepulcrum domnae Ansa reginae*'. However, there is no historical context for Paul's authorship beyond the lack of any other likely author.. The date of death of Sophia,⁶⁹⁰ the subject of the epitaph *roschida de lacrimis* (ML 56) is unknown, and the question whether she was one of the four children of the exiled Arichis or (as Neff believes) Ansa's granddaughter, is unresolved. The text of the poem does not indicate any form of relationship, but two of the three manuscript sources⁶⁹¹ refer to her in the title as '*neptis*', which might mean 'niece' or as in classical Latin, 'granddaughter'.

686 In Citelli, *Opere*/2, 340 and 449. It is not included in either Dümmler's or Neff's editions of the poems, but, for the letter containing it, see Dümmler, *MGH Epistolae Karolini Aevi*, II, 510-14.

687 W. Goffart, *The Narrators of Barbarian History A.D.550-800*, (Notre Dame, Indiana: Notre Dame University Press, 2005), 329-421. This is a reprint of the original edition (Princeton, N.J.: Princeton University Press, 1988).

688 F.J.E. Raby, *Christian Latin Poetry*, 2nd edn., (Oxford: Clarendon Press, 1953), 164-5.

689 *HL Book I*, c.26. Another poem firmly attributable to Paul and included in that work is the epitaph to Venantius Fortunatus, *ingenio clarus, sensu celer*, Book II, c. 13.

690 Neff, *Gedichte*, 49.

691 Leipzig, Staatsbibliothek Rep. I, 74, s.ix, has 'EPITAFION SOPHIA NEPTIS', while Paris, Bn-Fr, lat. 528, has 'epitaphium sophiae neptis', which is the title reproduced in Dümmler's edition, *PLAC I, carm. x*, 46. In accordance with his view of who Sophia was, Neff entitles the poem 'Auf das Grab der Enkelin Sophia'. 'Enkelin' is translated as 'granddaughter' in all dictionaries which I have consulted: the German for 'niece' is 'Nichte'.

The Lake Como poem, *ordiar unde tuos laudes* (ML 45) is firmly attributed to Paul by all scholars but Dahn. Bullough, in his account of Paul's early career, states 'where he was in the 750s...he nowhere indicates. But he clearly managed to extend his book-learning, write his first surviving poem-the highly accomplished *Ordiar unde tuos laudes*, *O maxime Lari*, in praise of Lake Como and apparently composed *sur le motif*'.⁶⁹² However, Bullough does not adduce any direct evidence for the proposition that the poem was written at that time. The two primary facts underpinning the proposition are that Paul would have had the opportunity to acquaint himself with the beauties of Lake Como during his time at the Lombard royal court and that, as Neff puts it, such an enthusiastic description (*sc.*, of those beauties) could only be composed by a poet who had himself seen and felt the appeal of its location.⁶⁹³ Neff concedes that investigation has not established with certainty that Paul had such experience, but that it may be firmly deduced from his undoubted stay in nearby Monza. As evidence of that 'undoubted stay', Neff relies on passages from *Historia Langobardorum* which demonstrate Paul's acquaintance with the history of the foundation at Monza dedicated to S. John the Baptist, founded by Queen Theudelinda in 620⁶⁹⁴, and from the conclusion, in Traube's study of the *Regula S. Benedicti*,⁶⁹⁵ that Paul had stayed in the Peterkloster,⁶⁹⁶ established, according to tradition, by Desiderius in Civate, not far from Lake Como.

That context is also relevant to the question of Paul's authorship of *ut queant laxis*, (ML 64), a hymn in the sapphic metre for the feast-day of S. John the Baptist. The *Historia Langobardorum* testifies both to Paul's patriotism and the Lombard veneration for the saint. On those grounds, and in the absence of any other known candidate, it is reasonable to attribute the poem to Paul.

In summary, there are thirteen poems for which the historical context supports Paul's authorship. Six are addressed to persons whose connection with Paul is beyond doubt. Three are associated with his transition from court to monastic life, which most probably occurred *ca.* 769-774. His connection with Desiderius would account for the composition of epitaphs to Queen Ansa, and to Sophia if she was Ansa's granddaughter. Finally, the historical context is compatible with his authorship of both the Lake Como poem and the hymn to S. John the Baptist, but falls far short, in each case, of establishing it with certainty.

692 D. Bullough, *Carolingian Renewal: Sources and Heritage* (Manchester: Manchester University Press, 1991), 93.

693 Neff, *Gedichte*, 1, at the opening of his commentary on *ordiar unde tuas laudes* (the Lake Como poem): 'Ein so begeisterte Schilderung konnte nu rein Dichter entwerfen, der die Reize jener Gegend selbst geschaut und gefühlt hatte. Dies ist zwar von Paulus nicht wörtlich überliefert, lässt sich aber mit Bestimmtheit aus seinen nicht anzuzweifelnden Aufenthalt in nachgelegten Monza folgern'.

694 E. Peters, ed., W.D. Foulke, trans., 'Paul the Deacon, *History of the Lombards*, 1907. (Reprint, Philadelphia: University of Pennsylvania Press, Book IV, c. 21. 166; book V, c. 6, 219.

695 L. Traube, *Textgeschichte der Regula sancti Benedicti* (Munich, Verlag der k. Akademie, 1898), 44.

696 That is, the abbey of San Pietro al Monte.

4.3 : Internal self-ascription

The problematic nature of internal self-ascription as evidence of authorship has already featured in Chapter 2 of this study, where the question whether Columbanus of Bobbio or Columbanus of Saint-Trond was the author of *Ad Fidolium* and other metrical poems was discussed. That problem will arise whenever there is more than one historically identified person with the name in question, and is even more acute in relation to disputed works with apparent self-ascriptions to the even commoner name 'Paul'. Commentators from Bethmann onwards have doubted, in various cases, whether the Paul whose name occurs in the text is 'our Paul'.

Less frequently, the problem is whether the occurrence of the name is, in fact, an occurrence of self-ascription. For example, in *a solis ortu usque ad occidua*, a *planctus* composed to mark the death of Charlemagne, which is doubtfully ascribed to Columbanus of Saint-Trond, the seventeenth stanza contains the line '*O Columbane, stringe tuas lacrimas*'. Herren observes that 'it is just as likely that an anonymous author issued a prayer to S. Columbanus in heaven as it is that a ninth-century poet named Columbanus is addressing himself'⁶⁹⁷.

Table 4.1 identifies all occurrences of the name 'Paul' in any form in poems associated with him and indicates whether the poem containing the name is a member of the DN group (accepted as authentic by both Dümmler and Neff), the D or N group (accepted by only one of them), or the excluded group (E), accepted by neither. The problems discussed above may also arise in relation to manuscript evidence such as titles, subscriptions, rubrics and marginalia. Table 4.2 lists all such instances and identifies the manuscript sources by the sigla in square brackets.

Table 4.1: Occurrences of the name 'Paul' in poems associated with to him

Note: In this study, a poem is said to be associated with Paul if it is included in any edition or study of his verse, whether or not it has been attributed to him.

ML	Group	Incipit	Relevant text
10	DN	<i>Ante suos refluxus</i>	In the letter to Adalhard, which concludes with this poem, the writer refers to himself as ' <i>Paulus supplex</i> '
18	E	<i>Clare beati agnoscere</i>	(v.1) <i>Clare beati agnoscere Pauli dogmata qui vult...</i> (v.8) <i>Paulus diaconus vocitatur et ipse monachus</i>
29	E	<i>Hausimus altifluam</i>	' <i>Hausimus altifluam Petri Paulique salutem</i> '

697 M. W. Herren, 'Some quantitative poems attributed to Columbanus of Bobbio' in *Poetry and Philosophy in the Middle Ages*, ed. J. Marenbon (Leiden: Brill, 2001), 101.

36	DN	<i>Iam fluebat decima</i>	In the letter to Theudemar, which concludes with this poem, the writer refers to himself as ' <i>Paulus pusillus filius supplex</i> '
45	DN	<i>Ordinar unde tuos laudes</i>	<i>Qui legis ista, precor, 'Paulo' dic 'parce, redemptor'</i>
51	DN	<i>Post has nectit subsequentes</i>	Acrostic poem; Initial letters of the ten verses spell ' <i>Paulus feci</i> '
52	D or N	<i>Pulchrior me nullus</i>	Acrostic poem; initial letters of its six lines spell ' <i>Paulus</i> '

Paul's habit of referring to himself in terms of self-abasement, which is not confined to communications with ecclesiastical superiors, is even more pronounced in the letter to Adelperga,⁶⁹⁸ composed within a few years of *A principio saeculorum*, where he uses the words '*Paulus exiguus et supplex*'. By contrast, he does not designate himself by name in the dedicatory letter accompanying the homiliary, but rather, refers to himself as '*famulus supplex*'. There is no direct or indirect reference to himself in either of the associated verses *ampla mihi vestro* (ML 7) and *utere felix* (ML 8).

Similarly, the preamble to the dedicatory letter accompanying the Epitome of Festus composed by Paul for Charlemagne ends with the words '*Paulum ultimus servulus*' but this does not cast any light on the authorship of the concluding verse *multa legit paucis* (ML 42). Neff comments that its inauthenticity has been proved by Traube⁶⁹⁹ and that exact investigation of Paul's manner of writing confirms Traube's conclusion,⁷⁰⁰

Table 4.2 lists eight poems where there is manuscript evidence indicating Paul's authorship, but all of them are securely attributable to him, without recourse to that evidence, from evidence of personal association and historical context discussed above, in sub-section 4.2.3.

698 Neff, 'Brief an Adelperga', *Gedichte*, 12.

699 L. Traube, *Neues Archiv der Gesellschaft für ältere deutsche Geschichtskunde* 15, (1890): 199.

700 See Dümmler, *PLAC I*, 62, where it is printed together with the concluding verses of the letters to Theudemar (*iam fluebat decima*, ML 36) and Adalhard (*ante suos refluxus*, ML 10). Dümmler adds the footnote '*claudunt epistolam, qua Paulus excerpta ex libris Pompeii Festi facta Carolo regi dedicavit*'. For Neff's denial of its authenticity, see the critical apparatus to *Paulus an Karl (Widmung seinen Ausgabe aus Festus)*, in *Gedichte, carm. xxx*, 125.

Table 4.2: Manuscript evidence indicating Paul's authorship of poems attributed to him

Note: Footnote⁷⁰¹ identifies the manuscript witness to which each siglum refers.

ML	Group	Incipit	Relevant evidence and source
11	DN	A principio saeculorum	Title, <i>versus Pauli diaconi de Annis a principio</i> , [A]
14	DN	Candidolum bifido	Titles, <i>versus Pauli ad Petrum</i> [P]; <i>item versus Pauli diaconi</i> [B]
21	DN	Cynthus occiduas	Title, <i>item versus Pauli missi ad regem</i> , [P]; marginal note, <i>Pauli diaconi</i> , [G]
37	DN	Iam puto nervosis	Title, <i>Pauli [diaconi] contra Petrum [diaconum]</i> ⁷⁰² [G]
40	DN	Lugentum lacrimis	Prefatory note, <i>nunc quae a diacono Paulo, elegante viro, prolata sunt, minime omittatus, sed huic ystoriae enucleatim inserere facias</i> [C]
45	DN	Ordinar unde tuos laudes	Title, <i>Hos versus Paulus Diaconus composuit in laude Larii laci</i> [L]. However, in the earlier source [G] the title contains no reference to Paul.
60	DN	Sic ego suscepti	Title, <i>versus Pauli diaconi</i> , [G]
65	DN	Verba tui famuli	Title, <i>item versus Pauli ad regem precando</i> , [P], [H]

701 The sigla are those used by Neff and refer to the following sources: [A], Madrid, Biblioteca nacional da Espana, Codex Matritensis A 16; [G], St. Gallen, Stiftsbibliothek, Cod. Sang. 899; [P], Paris, BnFr, lat. 528; [B], Oxford, Bodleian Library, Add.C 144; [C], Rome, BAV lat. 5001; [H], London, BL, Harley 3685; [L] Leipzig Staatsbibliothek Rep. I, 74.

702 Neff, *Gedichte*, observes that the words 'diaconi' and 'diaconum' are in a more recent handwriting; see the footnotes to his *carm. xx*, 96.

4.4: Inclusion in an authentic work of Paul

The prose works by Paul which contain verse are the *Historia Langobardorum* and Paul's letters. *Historia Langobardorum* contains five poems, of which three are indisputably authentic; these are the two S. Benedict poems *ordiar unde tuos sacer* (ML 46), *fratres, alacri pectore*, (ML 26)⁷⁰³ and the epitaph, *ingenio clarus, sensu celer*, (ML 38) for Venantius Fortunatus.⁷⁰⁴ However, inclusion in *Historia Langobardorum* is not conclusive proof of Paul's authorship, since it also contains one of the *dubia* and one poem which has no other connexion with Paul and is attributed to Archbishop Benedict of Milan.⁷⁰⁵

Clauditur hoc tumulo (ML 19)⁷⁰⁶ is included among the *dubia*, rather than being excluded from consideration, since it meets this and another authenticity criterion, namely, that it is transmitted in Paris, Bn-Fr lat. 528, together with seven poems which are certainly the work of Paul; However, it was omitted from both Dümmler's and Neff's editions. It is an epitaph for Droctulft (Latinized as Drocton or Toctron) who was involved in the war between the Lombards and the Byzantine emperor Maurice, supported by the Frankish king Childebert. He was killed while fighting on the emperor's side during the siege of Classis, the port of Ravenna, ca. 584-88,⁷⁰⁷ and was buried in the church of S. Vitalis, the patron saint of Ravenna. It would seem that Paul included it to perpetuate the memory of a gallant enemy of his nation.

The poem, *Culmen, opes, sobolem, pollentia regna, triumphos*,⁷⁰⁸ celebrates the conversion to Christianity of an Anglo-Saxon king, Cedoal⁷⁰⁹, King of Wessex 687-89, who was 'magnificently received' (*ab eo mirifice susceptus est*) at the Lombard court by King Cunicpert (*688-700) before journeying to Rome for baptism by Pope Sergius, on Easter Day 689, ten days before his death.⁷¹⁰

Verse compositions are found in Paul's letters to Theudemar (*iam fluebat decima*, ML 36, and *Vale, salus patriae*, ML 68⁷¹¹) and Adalhard (*ante suos refluxus*, ML 10)⁷¹², and to Charlemagne. The dedicatory letter accompanying the homiliary commissioned by Charlemagne⁷¹³ includes the poems *ampla mihi vestro* (ML 7), and *utere felix, munere Christi* (ML 8).⁷¹⁴ The authenticity of these

703 *HL*, Book I, c.26

704 *Ibid.*, Book II, c.13.

705 G. Waitz, ed., 'Pauli *Historia Langobardorum*', in *MGH Scriptores Rerum Langobardicarum et Italicarum*, saec. VI-IX, (Hanover: Impensis Bibliopoli Hahniani, 1878), 225.

706 *HL*, Book III, c. 19.

707 T. Hodgkin, *Italy and her Invaders*, (Oxford: Clarendon Press, 1895), Book VI, 91-92.

708 *HL*, Book VI, c.15.

709 Otherwise known as Cadwalla, Caedwalla or Cadwallon.

710 Sir F. Stenton, *Anglo-Saxon England*, 3rd edition, (Oxford: Clarendon Press, 1971), 69-73.

711 Citelli, *Opere*/2, 340 and 449. It is not included in either Dümmler's or Neff's editions of the poems, but, for the letter containing it, see Dümmler, *MGH Epistolae Karolini Aevi*, II, 510-14.

712 See section 4.2.3, above.

713 See section 4.2.2, above.

714 This is included in only one manuscript source, Munich, Staatsbibliothek clm. 4533, s.xi.

verses is undoubted, but there is one doubtful case, the quatrain *multa legit paucis* (ML 42) which is included in both Dümmler's⁷¹⁵ and Neff's editions.⁷¹⁶ Neff discusses whether it was part of the dedicatory letter to Charlemagne which accompanied Paul's epitome of Festus⁷¹⁷ and adopts the view of Traube,⁷¹⁸ subsequently endorsed by Dümmler,⁷¹⁹ that it was not.

4.5: Manuscript associations and transmission history

Where there is no authorial or contemporary collection of an author's verse, the occurrence of a questioned work (q) in a manuscript containing one or more compositions (C1, C2, etc.) which have been firmly attributed to the author on the basis of other evidence may lead to an inference that the author of C1, C2, etc., is also the author of q. That inference is seen as being stronger when q immediately follows or is embedded in a sequence of authenticated works.

There is little scope for the use of such evidence in this study; over thirty of the manuscript sources identified by Dümmler and Neff contain only one poem attributed to Paul. In the introduction to his edition of Paul's poems, Neff listed the content of seven manuscripts which contain three or more poems possibly attributable to Paul. Table 4.3 is constructed from the information contained in Neff's introduction.⁷²⁰ In Table 4.3, the term 'context poem' denotes a poem, not by Paul, which is included by Dümmler, Neff or both, in their respective editions, either as part of the poetic exchanges at the court of Charlemagne or as being relevant in some other way as, for example, Hilderic's epitaph to Paul, *Perspicua clarum nimium*.⁷²¹ An important study of the manuscript London, BL, Harley 3685, s.xv⁷²² mentions two poems, associated with Paul, not mentioned in Neff's introduction; these are the epitaphs for the warrior, Droctulft⁷²³ and the Saxon king, Cedoal⁷²⁴, which Paul included in *Historia Langobardorum*.

715 Dümmler, *PLAC I*, one of the three items making up *carm. xxvi*, 62.

716 Neff, *Gedichte*, *carm. xxx*, 'Paulus an Karl', 123-25.

717 Sextus Pompeius Festus, who compiled a twenty-volume epitome of Verrius Flaccus' lexicon. *De verborum significatu*.

718 L. Traube, 'Zu den Gedichten des Paulus Diaconus,' *Neues Archiv der Gesellschaft für ältere deutsche Geschichtskunde* 15, (1890): 199-201.

719 E. Dümmler, 'Zu den Gedichten des Paulus Diaconus,' *Neues Archiv der Gesellschaft für ältere deutsche Geschichtskunde* 17, (1892): 397-401.

720 Neff, 'Inhalt der wichtigsten Handschriften,' *Gedichte*, xiii-xx. The prefix A indicates that the poem is included in the *Anhang*.

721 Dümmler, *PLAC I*, 'Epytaphyum Pauli Diaconi,' *carm. lvi*, 85; Neff, 'Auf das Grab des Paulus Diaconus,' *Gedichte*, *carm. xxxvi*, 150-56.

722 H-J Künast and H. Zäh (ed.), *Die autografen Katalog Peutingers, Der nicht-juristischen Bibliotheksteil* (Tübingen: Max Niemeyer Verlag, 2003), 429-433.

723 *Clauditur hoc tumulo* (ML 19), *HL III*, 19; Harley 3685, f.4^v.

724 *Culmen, opes, sobolem* (not included in the Master List), *HL VI*, 15; Harley 3685, f. 5^v.

Table 4.3: The most important manuscript witnesses for poems associated with Paul.

Note: ML = Master list; the ML numbers of poems listed are in brackets after the incipit; CP = context poem (see Glossary, section 1.2, and Appendix, Table A2).

Manuscript and date	Page/folio	Item (incipit/ML or CP))	Neff <i>carm.</i> ⁷²⁵
Berlin, Staatsbibliothek Diez. B 66, s. viii ^{ex}			
	220	Carmina mitto Petro ⁷²⁶ (CP)	XXXIX
	220-21	Rex Carolus Petro (CP)	XL
		Iam puto nervosis (37)	XX
	221-22	Fiducia ad Angilramn, Carmina ferte mea (15)	A IV(I)
		Crede si vellis (20)	A IV(II)
Paris, Bibliotheque Nationale de France, lat.528, s. ix ^{ex}			
	122-122v	Hic decus Italie (31)	--
		Clauditur hoc tumulo (19)	--
	123-123v	Nos dicamus Christo (CP)	XII
	123v-124	Sensi cuius verba (58)	XIII
	124-125	Lumine purpureo (CP)	XVII
	125-125v	Candido lumbifido (<i>sic</i>) (14)	XIX
	125v-126	Cynthius occiduas (21)	XVIII
	126-126v	Verba tui famuli (65)	XI
	126v-127	Roscida de lacrimis (56)	X
	127v-128	Ante suos refluus ⁷²⁷ (10)	XIV
	128v-129	Ad perennis vitae fontem (3)	--
	129-130	Aquarum meis quis det (12)	--
	130-131v	Ordinar unde tuos sacer (46)	VI
	133-133v	Culmina se regum (CP)	XXXVIII
	135v	Hoc satus in viridi (34)	A I
	135v-136	Paule sub umbroso (CP)	XXI
St Gallen, Stiftsbibliothek, 899 s.ix-x			
	5-6	Ordinar unde tuos laudes (45)	I
	6-7	Quaerebat maerens (53)	A VI (II)
		Temporibus priscis (63)	A VI (III)

⁷²⁵ The entry '--' indicates that the poem is not included in Neff's edition.

⁷²⁶ Neff, 'Angilbert ad Petrum', *Gedichte, carm. xxxix*. As with the other context poems, it is not included in the master list.

⁷²⁷ The manuscript contains the entire letter to Theudemar, which concludes with this six-verse poem.

	7-8	Iam puto nervosis (37)	XV
	8	Paule sub umbroso (CP), vv. 1-15	XXI
	9-10	Aegrum fama fuit (5), vv. 40-68	A VI (I)
	11	Paule sub umbroso (CP), vv.16-25	XXI
	12	Multicolor quali (43)	V(I)
	13-15	Sic ego suscepi (60)	XXII
	15-17	Lumine purpureo (CP)	XVII
	18	Cynthus occiduas (21) Hoc satus in viridi (34)	XVIII A I
	57-58	Hic decus Italie (31)	---
Leipzig, Staatsbibliothek Rep. I, 74, s. ix or x ⁷²⁸			
	24	Pulchrior me nullus (52)	XVI
	35 ^v -36	Ordinar unde tuos laudes (45)	I
	36 ^v -37	Roscida de lacrimis (56) Lactea splendifico (39)	X IX
	37-37 ^v	Multicolor quali (43)	V(I)
	37 ^v	O una ante omnes (47)	V(II)
	37 ^v -38	Christe deus mundi (16)	--
St Gallen, Stiftsbibliothek 573, s.x			
	466	O una ante omnes (47)	V(II)
	466-67	Adam per lignum, crux tua... (four distichs, I-IV)	V(III)
	467-69	Ad perennis vitae fontem (3)	--
	470-474	Aquarum meis quis det (12)	--
	474-75	Dulcis amice veni (23)	A VII
	475	Dulcis amice bibe	--
	476	Haec domus est domini	IV(III)
Oxford, Bodleian Library, Add. C 144, s.xi			
	58	Candidolum bifido (14)	XIX9
	58 ^v	Hausimus altifluo (30) Perge, libelle meus (49)	A VII A.IX

⁷²⁸ Neff dates it as s. ix, Dümmler as s. x.

London, British Library, Harley 3685, s.xv			
	1	Angustae vitae fugiunt (9)	VIII
	1-1v	Aemula romuleis consurgunt (6)	IV(I)
	1v-2	Sit tibi sancta phalanx (61)	--
	2-2v	Ausimus (<i>sic</i>) altifluam (29)	A.XI
	2v-3v	Hoc satus in viridi (34)	A.I
	5v-6	Roscida de lacrimis (56)	X
	6	Verba tui famuli (65)	XI

The table shows that Neff does not regard the occurrence of poems in unbroken sequence with others firmly attributed to Paul as conclusive evidence for authorship. For example, the section of the table devoted to the content of Paris, Bn-Fr lat.528 shows that although *ad perennis vitae fontem* and *aquarum meis quis det* are part of an unbroken sequence immediately preceded by *ante suos refluxus* (ML 10), which concludes Paul's letter to Theudemar and followed by *ordiar unde tuos sacer* (ML 46) in praise of S. Benedict, both of which are undoubtedly authentic, Neff not only excludes them from the Pauline corpus but even from any mention or discussion in his *Anhang*, although Dümmler had included them in the *dubia*.⁷²⁹

Nevertheless, Neff occasionally relies on evidence from manuscript association. The epitaph to Sophia, *roscida de lacrimis* (ML 56) is included in three of Neff's weightiest sources of Paul's verses, namely Paris, BnFr, lat.528, Leipzig Staatsbibliothek Rep. I, 74, and London, BL, Harley 3685. Neff considers this, together with stylistic observations (which he does not specify) to be evidence of Paul's authorship but the clinching piece of evidence, in his estimation, is its occurrence in the Leipzig manuscript immediately before the epitaph to Ansa, *lactea splendifico* (ML 39).⁷³⁰ However, his conviction that Sophia was Ansa's granddaughter rather than (as others had thought) Paul's niece, may have impelled him to place particular weight on that piece of evidence.

In his commentary on *verba tui famuli*⁷³¹, (ML 65) Neff attributes it to Paul not merely on the basis of its content but also because of its occurrence in Paris, BnFr, lat.528, immediately after a series of undoubtedly Pauline poems more or less contemporary with it. Nevertheless, the

729 Dümmler, *PLAC I, carm. li, lii*, 79-82; they are, respectively, entitled '*alfabetum de bonis sacerdotibus*' and '*alfabetum de malis sacerdotibus*'.

730 Neff, *Gedichte*, 49. '*Dafür spricht vor allem die Überlieferung: das Epitaph geht in der leipziger Handschrift unmittelbar dem der Ansa voraus.*' He also notes, in the critical apparatus, that in the Paris manuscript it is immediately followed by the letter to Theudemar, 51.

731 *Ibid.*, 53.

content of that manuscript illustrates the danger of relying on such evidence. The five poems, all part of the exchanges in the court circle, which precede *verba tui famuli*, are themselves immediately preceded by *hic decus Italiae* (ML 31) and *clauditur hoc tumulo* (ML 19); both are epitaphs relating to deaths which took place centuries earlier⁷³² and whose subjects have no obvious connexion with Paul.

The manuscript association that Neff relies on for his attribution of *pulchrior me nullus* (ML 52) to Paul⁷³³ is somewhat different. The only manuscript witness for this six-verse acrostic poem in rhythmic hexameters is Leipzig Staatsbibliothek Rep. I, 74. Folios 15-24v of that manuscript consist of a collection of riddles entitled *questiones enigmatum rhetoricae aptis* (Neff reads the last word as *artis*). Neff places great weight on the fact that that manuscript contains several poems of undoubtedly Pauline origin. However, as Table 4.3 shows, those poems do not immediately follow *pulchrior me nullus* (f.24); they appear on ff. 35v-38, and that sequence ends with *Christe deus mundi*, which Neff excluded from his edition, and Dümmler included among the *dubia*.⁷³⁴ The argument from manuscript association is therefore weaker in this case than in the case, discussed above, of *roscida de lacrimis* (ML 56). Although Neff places that evidence in the forefront of his argument, he also relies on the investigations of Meyer,⁷³⁵ who concludes, from a study of their form and content, that riddle-poems of this nature featured in Lombard poetry during the seventh and eighth centuries⁷³⁶. Meyer prints a collection of sixty-two such riddle poems⁷³⁷ in the same rhythmical form as *pulchrior me nullus*, which he appends as a footnote. None of the sixty-two are acrostic, but acrostic riddle-poems are a feature of the eighth century poetic output, Boniface (*ca.* 675-754) being a particularly prolific source.⁷³⁸

Table 4.3 deals only with the content of seven of the manuscript witnesses for poems attributed to Paul. However, a full discussion of possible manuscript associations requires coverage of the complete range of witnesses. Table 4.4 shows that Dümmler and Neff have between them included, in their editions, a total of forty-four manuscripts transmitting one or more poems associated with Paul. In the table, the manuscripts are listed in chronological order. Unfortunately, there are several instances in which Dümmler and Neff identify the

732 *Hic decus Italiae* is the epitaph of the emperor Constantinus Chlorus, who was killed in Britain in 306 in the course of an expedition against the Picts and Scots, while *clauditur hoc tumulo*, which Paul included in *HL*, commemorates the death of Doctrulft during the siege of Classis, the port of Ravenna, in the period 584-88.

733 Neff, *Gedichte*, *carm.* *xvi*, 82.

734 Dümmler, *PLAC I*, *carm.* *xlix*, 78.

735 W. Meyer, *Gesammelte Abhandlungen zur Mittellateinischen Rhythmik* (Berlin, Weidmannsche Behandlung, 1905), vol. II, 161.

736 In addition to the Leipzig manuscript relied on by Neff, there are three particularly important manuscript sources of the riddle-poems collected by Meyer, the earliest of which is the eighth-century Bern, Burgerbibliothek 611.

737 Meyer, *Gesammelte Abhandlungen*, 162-178.

738 Dümmler, *PLAC I*, 'Aenigmata Bonifatii Episcopi quae misit sororae suae', 3-15.

same witness by different *sigla* and, additionally, many of those referred to in Dümmler's *proemium* are not identified by *sigla* at all. In what follows, witnesses are referred to by the numbers in the column of Table 4.4 headed 'Ref'.

Table 4.4: Chronological list of Dümmler's and Neff's manuscript witnesses

Note:-The symbol ø in the Dümmler (D) column indicates that he has mentioned the source without denoting it by a siglum.

Ref	Siglum		Shelf-mark	Date
	D	N		
1		O	St. Petersburg, National Library of Russia, s. Germani 169	viii
2	B	D	Berlin, Staatsbibliothek Diez. B 66	viii ^{ex}
3		Q	Paris, BnFr, lat. 7530	viii ^{ex}
4		W	Paris, BnFr, lat. 653	viii ^{ex} -ix ^{inc}
5	M	N	Paris, BnFr, lat. 9428	ix ^{inc}
6	B1		Bern, Burgerbibliothek Cod. 363 (A)	ix
7	ø	Σ	Rome, Biblioteca Casanetense B.IV.18	ix
8	Ur		Rome, BAV, Urb lat 585,	ix
9	Va		Rome, BAV, Vat. lat 7172	ix
10	K	P	Karlsruhe Badische Landes Bibliothek, früher Augiensis 173	ix
11	Q		Paris, BnFr, lat. 14143	ix
12		E	Paris, BnFr, lat. 4841	ix
13	F	F	Paris, BnFr lat. 2832	ix ^{med}
14	P	P	Paris, BnFr, lat. 528	ix ^{ex}
15	L	L	Leipzig, Staatsbibliothek Rep. I, 74	ix or x ⁷³⁹
16 ⁷⁴⁰	R	Z	Bern, Burgerbibliothek Cod. 522	ix-x
17	S	I (J)	St Gallen, Stiftsbibliothek, 573 ⁷⁴¹	ix-x or x ⁷⁴²
18	ø		Bern, Burgerbibliothek Cod.303	ix-x
19	ø		Montecassino (Cod. Casinensium) ⁷⁴³ 353	x
20	B2		Bern, Burgerbibliothek Cod. 455	x

739 Neff dates it as s. ix, Dümmler as s. x.

740 This source is discussed in the *proemium* to *PLAC I* as containing part of Peter of Pisa's *ars grammatica* but contains no poems attributed to Paul.

741 Neff, *Gedichte*, xiii, gives this the *siglum* I in the list of abbreviations in his *Übersicht über die Abkürzungen*, but where the witness is mentioned in the critical apparatus, the *siglum* is given as J.

742 Dümmler dates it as s. ix-x, Neff as s. x

743 Dümmler refers to this source and sources 32 and 33 as 'Casinensibus'. The description in this table is taken from the title page of the Montecassino catalogue.

21	Pa	S	Paris BnFr, lat. 5294	x
22	V	Q	Leiden, Bibliothek der Rijksuniversiteit Voss. Lat. 4	x
23	ø		Leiden, Bibliothek der Rijksuniversiteit Voss 15	x
24	U1		Rome, BAV, urb lat. 532	x
25	G	G	St. Gallen, Stiftsbibliothek, 899	x
26		R	Rome, BAV, pal. lat.1753	x
27		B	Oxford, Bodleian Library, Add. C144	xi
28	D	R	München, Bayerische Staatsbibliothek, Codex Latini Monacensis 4533	xi
29	ø		Brussels, Bibliotheque Royale de Belgique, 5666	xi
30	ø		Rome, BAV, Ott. lat 477	xi
31	ø		Rome, BAV, Vat. lat 623	xi
32	ø	Π	Montecassino (Cod. Casinensium) 453	xi
33		Γ	Montecassino (Cod. Casinensium) 55	xi
34	∇ ⁷⁴⁴		Rome, BAV, Vat lat 1202	xi
35 ⁷⁴⁵		V	St Gallen, Stiftsbibliothek, 184	xi
36	U2		Rome, BAV, urb lat 585	xi ^{ex}
37		M	Montecassino (Cod. Casinensium) 175	xi ^{ex}
38	A	A	Madrid, Biblioteca Nacional, A.16	xii
39	ø		Paris, BnFr, lat.1720	xii
40	ø		Rome, Biblioteca Vallicelliana C 93 ⁷⁴⁶	xiii
41	C	C	Rome, BAV, Vat. 5001	xiii-xiv
42	U	U	Rome, BAV Vat. Urb. 533	xiv
43	ø		Madrid, Escorial, Real Biblioteca B1.12	xiv
44	H	H	London, BL Harley 3685	xv

Table A4.1⁷⁴⁷ lists a further sixty-nine manuscript witnesses identified in three articles, in *Analecta Hymnica*, by Stella, and by Chailley⁷⁴⁸.

744 Dümmler had already used this siglum to indicate Monacensis 4533.

745 This is included in the list because it appears in the discussion of manuscript sources in the introduction to Neff, *Gedichte*, xiii, although it is annotated there as containing no poems by Paul.

746 Dümmler also mentions Vallicelliano B106, C9 and C113 as sources of *ordiar unde tuos laudes*, but gives no dates.

747 Tables whose numbers are preceded by the letter A are in the Appendix.

748 G. Dreves, ed., *Analecta Hymnica*, vol. 50, (Leipzig: O.R. Riesland, 1909): 117-24; F. Stella, 'La poesie di Paolo Diacono: nuovo manoscritti attribuzioni incerte', *Atti del Convegno Internazionale di studi, Cividale del Friuli-Udine, 6-9 maggio 1999*, cur. Paolo Chiesa, (Udine : Forum editrice universitaria udinese) 2000: 551-574; J. Chailley, 'Ut queant laxis et les Origines de la Gamme', *Acta Musicologica* 56, (1984): 48-69. Chailley's Appendix at 62-64 lists the witnesses, including the twenty-three identified in *Analecta Hymnica*.

Table A4.2 of the Appendix shows the codices identified by Dümmler and Neff in which each of the poems in the master list occurs. The poems are divided into two groups. The first contains the poems securely attributable to Paul; the second contains all the *dubia*. Table A4.3 is the converse of Table A4.2; it shows, for each of the poems in the master list, the sources listed in Table 4.4 in which the poem occurs. Table A4.2 reveals that there is hardly anything to be derived from manuscript associations other than those which occur in the witnesses listed in Table 4.3, which Neff identified as the most important. The discussion in section 4.3, above, clearly demonstrates that even when a poem of uncertain authorship appears in a manuscript immediately after or before an authentic poem, it is not conclusive evidence that the two poems had the same author. Table A4.2 also shows that, apart from Neff's seven important manuscripts, there is only one codex which contains more than two poems. That is source 21, Paris BnFr, lat. 5294, which contains the five epitaphs to the members of Charlemagne's family and which are unequivocally attributable to Paul since they are all transmitted in the *Liber de Episcopis Mettensibus*. It is unsurprising that all five epitaphs appear in a tenth-century Paris manuscript.

Table A4.3 further reinforces the conclusion that the transmission history of the poems is of little value in establishing their authenticity. Only four occur in more than three manuscripts. Three of them are hymns. The authorship of *Fratres alacri pectore*, which is found in eight manuscripts, is not in doubt. *Quis possit amplo* is found in thirteen and *ut queant laxis* in fifty-two. No doubt that hymn owes its widespread distribution to its use by Guido d' Arezzo as the basis of the solmization system based on its opening stanza which he invented in the eleventh century: thirty-eight of the fifty-eight manuscripts date from the eleventh century or later. The only secular poem found in more than three is the Lake Como poem, *ordiar unde tuos laudes* (ML 45), for which Table 4.4 lists twelve manuscripts, and Table A4.1 contains twelve more. The earliest is Rome, Biblioteca Casanetense B.IV.18, s. ix. Of the later manuscripts in that table, three are from Monte Cassino⁷⁴⁹ and three from Rome, BAV.⁷⁵⁰ The other five are widely scattered; between the ninth and fourteenth centuries the poem was incorporated into manuscripts now in Leipzig, Leiden, St Gallen, Paris and Madrid.⁷⁵¹ The witnesses listed in Table A4.1 are somewhat similarly distributed; the poem seems to have reached France by the twelfth century.⁷⁵² The location of its subject-matter, and the preponderance of Italian (particularly Casinensian) sources render it very likely that the author was a north Italian, and despite Dahn's suggestion that the poem was the work of an

749 Manuscripts 19, s. x and 32, 33, s. xi.

750 Manuscripts 30, 31 and 34, all s. xi.

751 In that order, manuscripts 15, s. ix-x; 23, s. x; 25, s.x; 39, s. xii and 43, s.xiv.

752 Manuscripts 88, 89 and 103.

imitator of Paul,⁷⁵³ no remotely credible alternative candidate for authorship has come to light. Dahn's objections are that there is no evidence of Paul having spent any length of time in the neighbourhood of Lake Como and that a person of his pious nature would have thought it blasphemous to address his holy father (presumably Benedict is meant) and a profane lake in the same words; he juxtaposes *ordiar unde tuos, sacer O Benedicte triumphos* with *ordiar unde tuos laudes, o maxime Lari* to add force to this argument, but it has attracted no comment or support.

4.6: Verse forms, metrical and other stylistic features

4.6.1: Verse forms in poems associated with Paul

In an attribution study, questions may arise regarding the ability of an author to compose verse in a particular metre or rhythmic form⁷⁵⁴ and whether structural devices such as acrostic and alphabetic poems, *carmina figurata* and riddle-poems were available as exemplars, or in vogue, at the time when the candidate author flourished.

From the two major biographical studies by Bethmann (1851)⁷⁵⁵ and Dahn (1876)⁷⁵⁶ and the two editions compiled by Dümmler (1882)⁷⁵⁷ and Neff (1908)⁷⁵⁸ it has been possible to identify sixty-five verse compositions which have been examined in studies of Paul, and the recent edition by Citelli (2014)⁷⁵⁹ has added three more. The poems associated with Paul represent a wide range of verse forms. Comparisons of metrical or rhythmical patterns can only be made within the poems of each form, and not across the whole range of poems.

This type of evidence is particularly important in relation to Paul because of the variety of metres and rhythmical patterns employed in the sixty-eight poems associated with him. The study of metrical characteristics discussed in chapters 6 and 7 is necessarily restricted to the poems in dactylic metres, which represent some eighty percent of the material under consideration. Of the fifty-one poems in dactylic metres, nineteen are in hexameters and

753 Dahn, *Paulus Diaconus*, 66.

754 M. Lapidge, 'The authorship of the adonic verses "*Ad Fidolium*" attributed to Columbanus', *Studi mediaevali ser 3*, 18:2, (1977), 249-314; . M. Lapidge, 'Epilogue: did Columbanus compose metrical verse? in *Columbanus: Studies on the Latin writings*, ed. M. Lapidge (Woodbridge: Boydell Press, 1997), 274-87; M. W. Herren 'Some Quantitative Poems attributed to Columbanus of Bobbio', in *Poetry and Philosophy in the Middle Ages*, ed. J. Marenbon (Leiden: Brill, 2001) 99-112.

755 Bethmann, 'Paulus Diaconus Leben und Schriften.'

756 Dahn, *Paulus Diaconus*.

757 Dümmler, *PLAC I*, 27-86, supplemented by the *Appendix Ad Paulum*, 625-28.

758 Neff, *Gedichte*.

759 Citelli, '*Opere*/2, 337-451. Not all of the *Carmina* are reproduced in full; Italian translations are provided for those which are, and there is editorial commentary in Italian on those which are reproduced and on some which are not.

thirty-two (eight of which are epanaleptic) are in elegiac couplets. There are six other quantitative poems, of which two are sapphics, a form which contains adonics, one is entirely in adonics, one is alcaic and two are in iambic dimeter. Finally there are eight rhythmical poems, five of which are trochaic septenarii, two are composed so that each stanza contains three dodecasyllabic and one adonic line (a form described by Norberg as 'pseudo-sapphic'),⁷⁶⁰ and one is a rhythmic hexameter.

The two hymns in the sapphic metre, *ut queant laxis* (ML 64) and *martir Mercuri, saeculi futuri* (ML 41) have attracted more scholarly attention than any of the other quantitative non-dactylic poems. These, together with the other hymns attributed to Paul, will be discussed in detail in Chapter 5 (Paul as hymnographer). At this stage it suffices to say that despite Licht's doubts on the question whether any of the early Carolingian poets had studied Horace,⁷⁶¹ there is evidence in both Dümmler's and Neff's editions of occasional borrowings not only from Horace, the great exponent of the sapphic metre, but from Prudentius, another composer of sapphics⁷⁶². He, like his fourth-century near-contemporary Hilary of Poitiers, had employed the metre in religious poetry,⁷⁶³ and its use in hymnody persisted through the Carolingian and into the Ottonian age⁷⁶⁴.

760 So called because it looks very like a Sapphic at first glance, but differs in that the second hemistich of each line of the pseudo-Sapphic is 7pp (seven syllables ending with a proparoxytone), not 6p (six syllables ending with a paroxytone) as found in a Sapphic; see D.L. Norberg, *An Introduction to the study of Mediaeval Latin Verse*, ed. J. Ziolkowsky, trans. G.C. Roti and J. Skubly, (Washington, D.C. : Catholic University Press): 212-15.

761 T. Licht, 'Horazüberlieferung in Frühmittelalter', in *Ex Praeteritis Presentia. Sprach-, literature-und kulturwissenschaftliche Studien zu Wort- und Stoffgeschichten, Festschrift zum 70. Geburtstag von Theo Stemmler*, ed. M. Eitelmann und N. Stritzke (Heidelberg: Winter, 2006): 109-34.

762 For example, in Dümmler, *PLAC I, carm. viii (lactea splendifico, ML 39, v.19, securus iam carpe viam, 46; cf. Horace, Satires II, 6, carpe viam; carm v (angustae vitae fugiunt, ML 9, v.3, per rosulenta magis cupiunt; 43; cf. Prudentius, Peristephanon III, 199, per rosulenta...prata. On Paul's knowledge of Horace, see also Raby, 'Paul the Deacon', *Christian Latin Poetry*, 162-66; 'although the poet had obviously given close attention to the sapphics of Horace, he admits hiatus at the end of verses; but, in the first two books of his *Odes*, Horace had permitted himself a similar licence'.*

763 Hilary of Poitiers (d. 367) and Prudentius (ca. 348-405).

764 P. S. Diehl, *The Mediaeval European Religious Lyric*, (Berkeley: University of California Press, 1985), 67 and 191. Hymns in that metre are attributed to Alcuin, his pupil Hrabanus Maurus (780-856) and Ratpert of St. Gallen, (ca. 865-911).

Table 4.5:-Verse forms employed in poems associated with Paul

Note: In this table, the 'authentic' poems are the twenty-eight accepted by Dümmler and Neff as the work of Paul and one other poem, contained in a letter by Paul, and included only in the Citelli edition.

	Authentic		<i>Dubia</i>	
Metrical poems				
Quantitative, (dactylic)				
	Poems	Verses	Poems	Verses
Hexameter	8	174	13	242
Elegiac couplet				
Epanaleptic	3	198	5	294
Not epanaleptic	13 ⁷⁶⁵	272	12 ⁷⁶⁶	282
Sub-total	24	644	30	818
Quantitative, (other)				
Iambic dimeter	1	64	1	6
Alcaic	0		1	36
Sapphic	0		2	92 (23 adonic)
Adonic	1 ⁷⁶⁷	10	0	
Sub-total	2	74	4	134
Rhythmical				
Trochaic septenarius	3	102	2	138
Dodecasyllabic	0	0	2	184 (46 adonic)
Hexameter	0	0	1	6
Sub-total	3	102	5	328
Total	29	820	39	1280

The table distinguishes between epanaleptic and non-epanaleptic elegiac couplets because the epanaleptic form requires the second hemistich of the pentameter line in each couplet to replicate the opening of the hexameter line, thus imposing a constraint to which non-epanaleptic couplets are not subject. In the table, the authentic poems of each verse form consists of the compositions which can be securely attributed to Paul on the basis of the non-stylistic evidence discussed in sections 4.2-4.5; the remainder are the questioned poems. The twenty-nine authentic poems exhibit, between them, eight verse forms and total 820 verses,

765 This includes the poem *Vale, salus patriae*, a single couplet which is included in a letter written by Paul. It is mentioned only in the Citelli edition (Citelli, *Paolo Diacono Opere*/2, 340-41 and 449) and its metrical data are not incorporated into the statistical calculations discussed in Chapter 7.

766 This includes the six-verse *Trax puer adstricto*, (ML 59), which is printed in both editions as an appendix to *sensi cuius verba* (ML 58).

767 This, which begins with the words *utere felix, munere Christi*, (ML 8) is a conclusion to the dedicatory letter to Charlemagne which accompanied the homiliary compiled by Paul. It is printed in both editions as five decasyllabics, thereby disguising the fact that each of those five consists of two adonics. The letter also contains the hexameter poem *amplo mihi vestro*, (ML 7) which follows the dedication.

while the thirty-nine *dubia* display nine verse forms and contain 1280 verses in total. It is clear, from the number of poems of each form and the total number of verses which those poems contain, that only the poems composed in dactylic metres can provide a sufficient corpus to make any form of quantitative analysis realistic.

The twenty-nine authentic poems are, with one exception, attributed to Paul in both Dümmler's and Neff's editions. The exception is the distich *Vale, salus patriae*, which is in neither edition but can be firmly attributed to Paul as it is contained in one of his letters to Theudemar,⁷⁶⁸⁷⁶⁹ Both editions also contain poems which are admittedly not by Paul but which were included as part of the context in which he wrote, that is, because they were part of the exchanges within the court circle or were relevant to Paul's life and works in other ways. Table A2 lists these 'context' poems.

4.6.2 : The occurrence of hiatus and elision

While hiatus and elision often provide a valuable diagnostic tool, Paul very rarely employed hiatus, and used elision much less often than Virgil and other classical Latin poets. Three poems, *Aemula Romuleis consurgunt* (ML 6), *candidolum bifido* (ML 14) and *cynthias occiduas*, (ML 21) totalling 104 verses, account for twenty-two of the forty-six occurrences of elision in the authentic poems composed in dactylic metres; there are twenty-four occurrences in the 534 verses of the other twenty-one such poems. Thus we have three poems in which elision occurs, on average, approximately once every five verses, and twenty-one in which it occurs, on average, once every twenty-two verses, which is a notable disparity. It is therefore apparent that the frequency of occurrence of elision is valueless as evidence of the probability of Paul's authorship of any one poem; consequently, neither the frequency of occurrence of hiatus or elision is investigated further.

⁷⁶⁸ Citelli, *Opere*/2, 340, where the letter is printed, and 449.
⁷⁶⁹ E. Dümmler, ed., *MGH Epistolae Karolini Aevi* II, 514.

4.6.3 : Metrical patterns in the poems composed in dactylic metres

A more promising stylometric approach to the study of poems associated with Paul is the statistical analysis of the metrical characteristics of those composed in hexameters or elegiac couplets. Chapter 6 will present a summary of the use of this and other stylometric methods in attribution studies. Although studies of prose works predominate, there have been studies of metrical patterns in the poetical works, composed in hexameters, of both classical⁷⁷⁰, ⁷⁷¹ and Anglo-Latin⁷⁷² poets. The metrical feature investigated, but not subjected to any form of statistical testing, in those three studies was the frequency of occurrence of the sixteen possible combinations of dactyls and spondees which can occur in the first four feet of a hexameter.

For the reasons explained in chapter 6, I had to devise a more suitable method of analysing the metrical characteristics of the poems composed in dactylic metres. The principal reason was that an analysis of full metrical patterning would require the division of the small amount of data into sixteen categories, corresponding to the sixteen patterns of spondees and dactyls that can occur in the first four feet of a hexameter line. To do so would reduce the expected frequencies of occurrence in many of those categories to a level insufficient to support any meaningful conclusion. The scheme of metrical analysis in the method devised for this study requires only the counting of the number of syllables in the first four feet (F1-F4) of each hexameter verse. The lowest possible syllable count is eight (four spondees) and the highest is twelve (four dactyls). It is permissible to restrict the analysis in this way since, although F5 may be either a dactyl or a spondee, verses containing five spondees are generally rare and have not been encountered in this study. The division of the data among five, rather than sixteen categories greatly reduces the chance of excessively low frequencies of occurrence. I have also adapted the method to the analysis of the pentameter verses of the poems composed in elegiac couplets, both epanaleptic and non- epanaleptic.

4.6.4 : Other stylistic features

Metrical patterning is only one among several stylistic indicators considered in relation to the questions of authorship which arise in this study. The poems in dactylic metres which account for twenty-four of the twenty-nine poems firmly attributable to Paul are composed in the tradition of his principal exemplars, Virgil and Ovid. His vocabulary includes few, if any, rare words, nor does he resort to rhyme (which occurs occasionally) or alliteration, or strive

⁷⁷⁰ W.M. Drobisch, 'Ein statistischer Versuch über die formen des lateinischer Hexameters' *Berichte über die Verhandlungen der Königl-Sächsischen Gesellschaft der Wissenschaften, Philologische-Historische Klasse* 18 (1866): 75-139.

⁷⁷¹ M. Platnauer, *Latin Elegiac Verse: A Study of the Metrical uses of Tibullus, Propertius and Ovid*, (Cambridge: Cambridge University Press, 1951).

⁷⁷² A. Orchard, 'A statistical study of Anglo-Latin Verse' in *The Poetic Art of Aldhelm* (Cambridge: Cambridge University Press, 1994), Appendix 5.2, 293-98.

for rhetorical effects. The one distinctive feature of his style is his tendency to self-deprecation and reverence for ecclesiastical superiors and patrons, amounting in several cases to extreme self-abasement. Thus in *sensi cuius verba* (ML 58) Paul denies the attainments with which Peter credits him; in his letters to Theudemar and Adalhard he is '*supplex*' or even '*pusillus filius supplex*'; to his former pupil and ducal patron Adelperga he is '*exiguus et supplex*' and to Charlemagne he is not merely '*famulus supplex*' but '*ultimus seroulus*'. He is eulogistic of his patrons and superiors, so the absence of such epithets referring to Angilram in *qui sacra vivaci* (ML 54) and to Arichis in *Martir Mercuri* (ML 41) tells against him as author of those poems, as does the recommendation to the reader of *clare beati agnoscere* (ML 18) to study the works of Paulus Diaconus.

4.7: Authorship of the *dubia*

4.7.1 : Introduction

The *dubia* are classified in Table A3 by reference to their inclusion in Dümmler's or Neff's editions and whether that inclusion indicates that Paul's authorship is accepted, doubted or denied. Table A4 lists the *dubia* in the same order and summarises the grounds on which Paul's authorship is accepted, doubted or rejected. Finally, Table A5 lists the *dubia* by reference to the probability, estimated on the basis of the evidence discussed in this section and summarised in Table A4, of Paul's authorship. In what follows, the sequence in which the *dubia* are discussed follows the estimate of probability of Paul's authorship. This study uses six ratings, namely, certain (A); highly probable (B); more likely than not (C); possible but less likely than not (D); highly unlikely (E); and no probability (F).

4.7.2 : The more likely candidates for inclusion in the authentic corpus

This section is concerned with four poems, *Vale, salus patriae* (ML 68, rating A); *pulchrior me nullus* (ML 52, B); *perge, libelle meus* (ML 49, C) and *ut queant laxis* (ML 64, C). *Vale, salus patriae* was included among the *dubia* only because it does not appear in either Dümmler's or Neff's editions; it is one of the three poems included in Citelli's edition which is in neither of the others. It is a distich which forms part of the conclusion of a letter,⁷⁷³ officially sent by Theudemar, abbot of Montecassino 778-97, but actually the work of Paul;⁷⁷⁴ it accompanied a copy of the *Regula S. Benedicti* which Charlemagne commissioned from Paul. Dümmler's acceptance of the letter as authentic implies the authenticity of the verses which it includes.

⁷⁷³ E. Dümmler, ed., *MGH Epistolae Karolini Aevi*, vol. II, 510-14; Citelli, *Opere*/2, 332-41.

⁷⁷⁴ *Ibid.*, 332, n.21; the text of the distich is at 340.

Pulchrrior me nullus (ML 52), is an acrostic poem of six rhythmic hexameters in praise of wine, whose initial letters spell 'PAULUS'. It is printed in *PLAC IV* under the title ITEM DE VINO,⁷⁷⁵ as the sixty-third and last of a collection of riddles entitled *Aenigmata hexasticha* with a page-header title *Rhythmi aevi Merovingici et Carolini*. Neff's identification of the 'PAULUS' spelt out acrostically as 'our Paul' rests, so he states, on several sound grounds (*mehrere triftige Grunden*). Its source is the manuscript Leipzig Staatsbibliothek Rep. I, 74, s. ix, which contains the Lake Como poem *ordiar unde tuas laudes* (ML 45) and the epitaphs *lactea splendifico* (ML 39) and *roscida de lacrimis* (ML 56). The section of this manuscript (ff 15^v-24) in which it appears is a collection of riddles in rhythmic hexameters, a form found in other Lombard inscriptions. Paul's verse compositions at the Carolingian court included riddles and their answers and he was also known to have composed acrostic rhythmical poems, including *A principio saeculorum*, (ML 11) with its acrostic identification of the dedicatee, *Adelperga pia* and the grammatical poem *post has nectit subsequentes* (ML 51) in which the acrostic spells out *Paulus feci*. It is, in short, very much a type of poem that Paul could have written and there is no other suggested candidate author.

Perge, libelle meus (ML 49) is found in Oxford, Bodleian Library, Add. C 144, s. xi, together with one poem, *candidolum bifido*, (ML 14) undoubtedly the work of Paul, and immediately after *hausimus altifluo*, (ML 30) which has been firmly attributed to Paulinus of Aquileia,⁷⁷⁶ ⁷⁷⁷. It is not included in Dümmler's edition, but is printed in a later volume of *Poetae Latini Aevi Carolini* under the heading VERSUS PAULI DIACONI (?).⁷⁷⁸ That tentative attribution to Paul is based on an article by Crivellucci⁷⁷⁹ published the year after Neff's edition. This farewell letter, as Neff describes the poem, is in elegiac couplets, a form adopted by Paul for compositions of a similar nature, namely *angustae vitae fugiunt* (ML 9) which depicts his emotions on being confined to the monastic life,⁷⁸⁰ and the short poem, *ante suos refluxus Rhenus* (ML 10) which concludes the letter to Adalhard⁷⁸¹ in which he complains about the quality of his life.

There are plausible arguments for both Neff's attribution of this poem to Paulinus and Crivelluci's attribution to Paul. The first argument depends on the interpretation of its opening line, *Perge, libelle meus, dominum dominamque salute*. In Neff's view, the *dominus* and

775 K. Strecker, ed., *Monumenta Germaniae Historica Poetae Latini Aevi Carolini IV, tom 2, 3* (Berlin: Weidmann 1914), 759.

776 Neff, *Gedichte*, 202.

777 D.L. Norberg, *L'oeuvre poetique de Paulin d'Aquileia*, (Stockholm: Almqvist & Wiksell, 1979): 35.

778 *Ibid.*, 912.

779 A. Crivellucci, 'Una poesia di Paolo Diacono attributa a Paolino d'Aquileia.' *Studi Storici* 18, (1909), 201-207.

780 Neff, *Gedichte*, 38. The words *ante potest flavos Rhenos*, which are similar to those in the letter to Adalhard, occur in v.17.

781 Neff, *Gedichte*, 130.

domina are Charlemagne and his wife Fastrada, and the addressee of the poem (whom Neff does not identify) is being requested to convey his greetings to the royal couple; his separation from them is very hard for him to bear. However, the poet's heart impels him to compose such a letter as he departs, as he himself had to watch the sorrow of Benevento. Neff interprets this as an allusion to its loss of independence when Arichis surrendered to Charlemagne in 787. It was in that year that Paulinus returned from Francia to Lombardy, following his elevation to the patriarchate of Aquileia. Equally plausibly, in my view, Crivelluci interprets the *dominus* and *domina* of the opening line as being Arichis and Adelperga, and the sorrow referred to as being, not sorrow for the travails of Benevento, but Paul's sorrow at the imprisonment of his brother and the ruin of his people, this being an allusion to Charlemagne's annexation of Lombardy in 774 and the subsequent defeat of the rebellion in 776 in which his brother was a participant.

A second argument arises from the defective nature of the text, which Neff (hampered, so he states, by the poor quality of the photographic copy from which he had to work) and Crivelluci have reconstructed differently.⁷⁸² A particularly significant difference, in relation to the competing interpretations, occurs in v.7, where the unreconstructed text reads:

*Et d..... aspicere*⁷⁸³, o Benevente, tuum ?

Neff worked from a text in which he read that line as:

Et l..... aspicerem, o Benevente, tuum,

and he reconstructed the missing word as '*luctum*', interpreting the line, accordingly, as referring to the sorrows of Benevento. However, if the missing word is reconstructed as '*ducem*', as in the Citelli edition which reproduces Crivelluci's reading,⁷⁸⁴ it is simply a reference to the duke and there is no lament for the sorrows of Benevento. Crivelluci's view is that the poem, addressed to Adelperga and Arichis, may have been composed shortly before Paul's journey to Francia and certainly earlier than the letter to Theudemar which can be dated to 10 January 783. But even if Neff's reading of '*luctum*' is to be preferred to Crivelluci's '*ducem*', there is no reason to doubt that Paul could equally well have addressed a poem to his former patrons lamenting the loss of Beneventan independence when Arichis surrendered to Charlemagne at Capua in April 787.

There is little to choose between these interpretations, but the argument which I consider decisive is founded on the verse form employed in the poem. It is surprising that Neff, whose

⁷⁸² No reconstruction is attempted in Strecker's edition, cited at n.771, above.

⁷⁸³ It may be that this is a typographical error in the Strecker edition, as both the Neff and Citelli editions have '*aspicerem*'. '*Ut ducem aspicerem, o Benevente, tuum ?*' (that I might have beheld your duke, O Benevento) seems to make sense in the context.

⁷⁸⁴ Neff also suggested that 'et' at the beginning of v.8 should be replaced by 'ut' and the Citelli edition does so.

attributions are often based on stylistic grounds, should have chosen to attribute this poem to Paulinus, fourteen of whose sixteen poems are in rhythmical forms⁷⁸⁵ and who was, on his own admission, a careless and less than competent composer of hexameters.⁷⁸⁶ To his poem entitled *Regula fidei metric promulgata stile Mucrone*, Paulinus appended a letter addressed to his dearest brother (*O karissime frater*) acknowledging his lack of care in the matter of prosody in the words ‘*per incuriam brevem pro longa aut longam pro brevi*’ and listing other failures to observe prosodic conventions. I therefore consider it highly improbable that Paulinus composed a poem in elegiac couplets in accordance with accepted rules of prosody. Paul, whose sixteen poems in elegiac couplets constitute over half of the corpus securely attributable to him, is a much more plausible candidate for the authorship of such a composition.

Ut queant laxis (ML 64) will be considered in detail in Chapter 5, but to complete this section it suffices to say that the author, whoever he may have been, must have possessed three characteristics; he must have been aware of, and a participant in, the Lombard veneration of St John the Baptist, have flourished in the late eighth or possibly early ninth century, and been a writer of hymns able to compose in the sapphic metre. The only other candidates who fulfil the first two conditions are Paul’s Lombard contemporaries, Peter of Pisa and Paulinus of Aquileia. No poetic works are attributed to Peter other than those forming part of the exchanges at Charlemagne’s court, and Paulinus, as discussed above, was accustomed to write rhythmical, rather than quantitative verse forms, at whose composition he was inexpert. No previous study has considered the authorship of *ut queant laxis* with regard to those characteristics, but it is clear that Paul is the only known candidate who fulfils all the conditions.

4.7.3 : The less likely candidates for inclusion in the authentic corpus.

This group consists of six poems (rating D) which are possibly, but less likely to be, the work of Paul. These are *Trax puer adstricto* (ML 59), the three fables *aegrum fama fuit, querebat maerens* and *temporibus priscis*, (ML 5, 53 and 63), *qui sacra vivaci*, (ML 54), the verse history of the bishops of Metz, and *multicolor quali* (ML 43), one of the three *tituli* collected, in Neff’s edition, under the heading ‘Andere Inschriften’.

The epigram *Trax* (or *Thrax*) *puer adstricto* (ML 59) is a Latin translation of a poem in Greek, the text of which is included in the Palatine Anthology. The translation is in the form of an appendix with the Latin title *De puero qui in glacie extinctus est*, to Paul’s poem *Sensi, cuius*

785 D.L. Norberg, *L’oeuvre poetique de Paulin d’Aquilaia*.

786 Dümmler, *PLAC I*, 130, after the text of Paulinus’ hexameter poem ‘Incipit Regula Fidei Metrico Promulgata Stili Mucrone, 126-130.

verba (ML 58), which is his reply to Peter's *Nos dicamus, Christo*, composed to mark his arrival at Charlemagne's court. Peter's poem contains praise of Paul's learning and contains allusions to his proficiency in Greek. This would have been valuable to Charlemagne since the contemplated marriage of the ten-year-old son of the Byzantine Empress Irene to Charlemagne's eight-year-old daughter Rotruda would have required a formal visit to the Byzantine court. Paul, as usual, deprecates this praise and replies (as translated by Godman)⁷⁸⁷ that:

'If your⁷⁸⁸ scholars speak in that land no more
Greek than what they have learned from me
They will be laughed at like dumb statues

But lest it be said that I am an ignoramus in languages
I shall repeat a few of the lines that were taught to me
As a boy; the rest have slipped my mind as old age weighs upon me⁷⁸⁹

The debate about whether the Latin translation was Paul's own work or one which he remembered from his schooldays remains unresolved.⁷⁹⁰

The authorship of the three fables *aeegrum fama fuit* (ML 5), *quaerebet maerens* (ML 53) and *temporibus priscis* (ML 63),⁷⁹¹ has been much debated. Their earliest witness is St Gallen, Stiftsbibliothek, 899, s.ix-x, which also includes the Lake Como poem *ordiar unde tuas laudes* and five poems from the Carolingian court exchanges, three by Paul⁷⁹² and two by Peter of Pisa.⁷⁹³ Dümmler⁷⁹⁴ appears to have adopted Müllenhoff's attribution of these poems to Paul.⁷⁹⁵ Neff observes that this attribution appears to rest, above all, on the occurrence of these fables in the St Gallen manuscript within a series of poems which are undoubtedly the work of Paul while at the Carolingian court and which are close, in content, to the riddle poems together with which they are preserved and with which the court circle was entertained. However, in his view, stylistic investigation shows that Paul could not have been the author; the fables do not contain any of the turns of phrase that we have learned to expect from Paul,

787 See P. Godman, *Poetry of the Carolingian Renaissance* (London: Duckworth, 1985), whose translation, along with the text of *sensi cuius verba* and *trax puer adstricto*, is at 86-88.

788 That is, Charlemagne's scholars; Paul makes it clear in the first stanza that although the message is ostensibly the work of Peter, he regards him as a mere conduit for the real originator of the message.

789 Allowing for the uncertainty of his date of birth, Paul would have been in his late fifties or early sixties when he arrived at Charlemagne's court.

790 M. Rubensohn, 'Eine Übersetzung des Paulus Diaconus aus der griechischen Anthologie, *Jahrbücher für Theologie und Pädagogik* 147 (1895), 764-5; Neff, *Gedichte*, 67-68; Godman, *Poetry of the Carolingian Renaissance*, 89, n.12.

791 Respectively, the fables of the sick lion, the calf and the stork, and the gout and the flea.

792 *Iam puto nervosis*, (ML 37), *sic ego suscepi* (ML 60) and *cynthias occiduas*. (ML 21).

793 *Paule sub umbroso* and *lumine purpureo*.

794 Dümmler, *PLAC I*; see the proemium at 31-32. The fables are printed as *carm.* xxvii-xxix, 62-64.

795 K. Müllenhoff, 'Über Reinhart Fuchs', *Zeitschrift für deutsches Altertums* 18 (1875), 31. The title of the article is a reference to the fox, who plays a principal part in the narrative.

but show many which are foreign to him. He also rejects von Winterfeld's attribution of the fables to Notker⁷⁹⁶ and concludes that they were not a product of the Carolingian literary circle but were brought there by someone who knew of Charlemagne's enjoyment of riddle-poems.⁷⁹⁷

There are competing arguments about the authorship of the verse history of the bishops of Metz, *qui sacra vivaci* (ML 54). One argument, not hitherto explored, which would favour Paul's authorship, is that the verse and prose histories of the bishops of Metz are an *opus geminatum*, that is, a work of twin parts, one in verse, the other in prose. In his study of this literary form, Godman⁷⁹⁸ traces its development from the Roman rhetorical practice of *conversio*, the turning of prose into verse or vice versa. Caelius Sedulius was an influential exponent of this form: his own *Carmen* (the earlier of the pair) and *Opus Paschale* were widely read and studied. *Opera geminata* had been composed by Bede (the various *Vitae S. Cuthberti*) and Aldhelm's prose and verse *De Virginitate* well before Paul's period of literary activity (ca. 760-790). Alcuin's *Vita S. Willibrordi* also belongs to that period. Paul may or may not have known of this literary form. There is certainly no evidence that he did so and, although Raby has described the hymn *fratres alacri pectore* (ML 26) as 'nothing more than a catalogue of miracles from the second book of Gregory's dialogues'⁷⁹⁹ there is no reason to suppose that *fratres alacri pectore* (ML 26) was intended to be the verse component of an *opus geminatum* of which Paul's *Vita Beati Gregorii* was the prose component. But even had that been so, there is no evidence for an attribution of *qui sacra vivaci* (ML 54) to Paul on the basis that it is, or might be, the verse component of an *opus geminatum* of which the *Liber de Episcopis Mettensibus* was the prose component.

In essence, the argument for Paul's authorship is that he is indisputably the author of the prose *Liber de Episcopis Mettensibus*, a work commissioned by Angilram, himself bishop of Metz (768-91)⁸⁰⁰ and appointed by Charlemagne as his archchaplain in 784, while Paul was at the royal court. It is therefore natural to ascribe the authorship of the verse history to him, as do Bethmann,⁸⁰¹ Dümmler⁸⁰² and Dahn,⁸⁰³ who considers that Paul is very probably, but not

796 Notker Balbulus, or Notker the Stammerer (840-912) was a monk of St Gallen who wrote verse and prose works and was also a musician. His prose works include the *Gesta Karoli*, a collection of anecdotes written after Charlemagne's death.

797 Neff, *Gedichte*, 191-93.

798 P. Godman, 'The Anglo-Latin *opus geminatum*: from Aldhelm to Alcuin', *Medium Aevum* 50, no.2, (1981), 215-29.

799 Raby, *Christian Latin Poetry*, 165.

800 Angilram was the successor of Chrodegang, who held the office from 742 to 766 and is the last of the bishops whose life history is treated in detail in the prose work.

801 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 294.

802 Dümmler, *PLAC I*, 60-61.

803 Dahn, *Paulus Diaconus*, 71.

certainly, the author. However, Neff strongly disagrees.⁸⁰⁴ His principal argument is that if Paul had been the author, there would have been words of praise for Angilram and wishes for his good fortune, but the poem contains neither praise nor good wishes for Angilram. By contrast, the prose work concludes by addressing Angilram with great warmth and reverence, and that is a consistent feature of Paul's letters to Theudemar (addressed as *dilecto domino meo*)⁸⁰⁵, Adalhard (*carissimo fratri et Domino*)⁸⁰⁶ and Charlemagne (*praefulgido Domino regi Carolo sublimissimo*)⁸⁰⁷. I consider that the single cursory mention of Angilram in the poem⁸⁰⁸ is highly inconsistent with Paul's usual style of address and renders it unlikely that he is the author.

The *titulus, multicolor quali* (ML 43), is considered together with the other two *tituli* that make up the 'Andere Inschriften', *O una ante omnes* (ML 47) and *Adam per lignum* (ML 1). Neff concluded, from investigations of their manuscript occurrence, that they are connected with the Lombard, rather than the Beneventan court. They appear, in that sequence, in Leipzig, Staatsbibliothek Rep. I, 74, immediately following the Lake Como poem *Ordinar unde tuas laudes* and the epitaphs *lactea splendifico* (ML 39) to Queen Ansa and *roscida de lacrimis* (ML 56) to the unidentified Sophia. A connection with Queen Ansa is that *Multicolor quali* is also included in the manuscript St Gallen, Stiftsbibliothek, 899, immediately after the epitaph to her, from which Neff infers that this *titulus* refers to the church in which she was buried. However, he does not provide any evidence that *Multicolor quali* is inscribed in the abbey of S. Salvatore, Brescia, in which (as he states in his commentary to *Lactea splendifico*) Ansa and Desiderius were interred. And although there is no doubt that Paul was closely associated with the Lombard royal family in the early years of Desiderius' reign, there is no reliable indication of any such association subsisting after 763, by which time Paul had transferred his allegiance to the Beneventan court. Neff conjectures that Paul was recalled by Desiderius from the Beneventan court in 769, and may have remained there until 774.⁸⁰⁹ The highest at which the case for Paul's authorship of *multicolor quali* can be put is, first, that if he had known of Ansa's death, it is not unlikely that he would have composed a *titulus* for her place of burial, and second, that he is the most plausible candidate, since none of his contemporaries are known to have had any connexion with the Lombard court.

804 Neff, *Gedichte*, 186.

805 *Ibid.*, 'Brief an Theudemar', *Gedichte*, 71;

806 *Ibid.*, 'Brief an Adalhard', 129.

807 *Ibid.*, Paulus an Karl, the letter accompanying the Epitome of Festus, 124.

808 See vv. 57-58, *Auxilio fultus trahit ad pia pascua vitae/ Angelramni oves*. Neff describes the persons addressed as *Untergebenen* (literally, subordinates).

809 Neff, *Gedichte*, 24. This is part of the commentary on Paul's poem in praise of S. Benedict. During the period in question, there were friendly relations between Charlemagne and Desiderius, one of whose daughters (possibly Gerperga) he married in or about 769, but they became enemies after Charlemagne discarded her and married Hildegard, daughter of the German Count Gerold, in 771.

The case for Paul's authorship of the other two *tituli* is weaker. Neff grouped the three together in his edition, without adducing any evidence, apart from manuscript association, which supports the proposition that the other two are the work of the same author. Both are included in the Leipzig manuscript and in St Gallen, Stiftsbibliothek 573, s.x, which does not contain any poem firmly attributable to Paul. The *Basilica Sanctae Mariae* to which the title of *O una ante omnes* (ML 47) refers is not identified, nor is the location of the *Versus super crucem* consisting of four distichs, of which *Adam per lignum* (ML 1, I-IV) is the first. Apart from the fact that these three *tituli* all appear in the Leipzig manuscript in sequence with the epitaphs to Ansa and Sophia and other poems undoubtedly the work of Paul, there is nothing to support his authorship of either of those two *tituli* or that they are intended to commemorate any member of the Lombard court.

4.7.4 : Poems highly unlikely to be the work of Paul

There are seventeen poems in this group (rating E). For ten of these, the only evidence on which an attribution to Paul could be based is that they occur in manuscripts containing authentic works of Paul.⁸¹⁰ For one other, *filius ille dei* (ML 25), the evidence is even weaker. On the basis that the earliest witness is Paris, BnFr lat.653, s.viii^{ex}-ix^{nc}, Dümmler included it in his grouping VERSUS LIBRIS SAECULI OCTAVI ADIECTI.⁸¹¹ Neff accepted the possibility that it was a production of Charlemagne's court circle, detecting reminiscences of Paulinus of Aquileia.⁸¹² This dating allows consideration of Paul as author, but there is no evidence supporting his authorship.

Rustice lustrivage (ML 68) is one of the three poems not included in any edition of Paul's works prior to that of Citelli.⁸¹³ Its source is the manuscript St Gallen, Stiftsbibliothek 899, s. x, where it appears immediately after Peter of Pisa's composition, *lumine purpureo*, and Paul's *cynthus occiduus* (ML 21) is the next but one poem in the manuscript. It is described as a 'small and curious poem' of nine hexameters; the text consists almost entirely of forty-eight vocatives, addressed to the god Pan. The text⁸¹⁴ is printed in the anthologies edited by Baehrens⁸¹⁵ and by Bücheler and Riese⁸¹⁶ and the poem has been cautiously attributed to Paul on lexical grounds by Mazzarino⁸¹⁷ on account of the appearance of some very rare words also

810 They are listed in Table A5, section E.

811 Dümmler, *PLAC I*, 87-98, at 98.

812 Neff, *Gedichte*, 207.

813 Citelli, *Opere/2*, 431, where there is commentary on the poem, but the text is not reproduced.

814 Posted, with English translation and notes, by M. Gilleland on 18 January 2013 on laudatortemporisacti.blogspot.com/2013/01/a-poem-addressed-to-pan.html (accessed 16 May 2019).

815 E. Baehrens, ed., *Poetae Latini Minores*, Vol. III (Leipzig: B.G. Teubner, 1881), 170.

816 F. Bücheler and A. Riese, eds., *Anthologia Latina*, Pars I, Fasc. II, 2nd ed. (Leipzig: B.G. Teubner, 1906), 158.

817 A. Mazzarino, 'Considerazioni sul carne a Pan,' *Helikon* 29-30, (1989-90): 305-20.

attested in poems by Paul. The commentary in Citelli's edition⁸¹⁸ mentions only one of these, *caudate*,⁸¹⁹ which is said to appear also in *candidolum bifido*,⁸²⁰ (ML 14) though the word which Paul actually uses in that poem is *cauditus*⁸²¹. The evidence for Paul's authorship is therefore very weak and is outweighed by the style, which is entirely foreign to Paul, and the unlikelihood of Pan as dedicatee of a poem by Paul.

There are two poems for which more credible attributions have been proposed. The first is *husimus altifluo* (ML 30), firmly attributed to Paulinus of Aquileia both by Neff⁸²² and Norberg⁸²³. Neff identifies the addressee of the poem, the priest Zacharias, as an Italian cleric known to Paulinus, who relocated to Ireland and engaged in pastoral work there. The second, the abecedarian grammatical poem *adsunt quattuor in prima*, (ML 4), in twenty-three stanzas, is included in Dümmler's *Appendix ad Paulum*,⁸²⁴ where it is entitled *De speciebus praeteriti perfecti*. Neff attributes it to Peter of Pisa, relying on the manuscript study by Lejay,⁸²⁵ who dates it to 779 when Peter, but not Paul, was at the court of Charlemagne.

The two poems to S. Scholastica, *sponsa decora Dei* (ML 62)⁸²⁶ and *O Benedicta soror* (ML 44)⁸²⁷ are written in epanaleptic elegiac couplets, as is Paul's Benedict praise poem, *ordiar unde tuos sacer*, (ML 46) and the Lake Como poem, *ordiar unde tuas laudes* (ML 45). S. Scholastica (ca 480-ca 543), the sister of S. Benedict, is said to have founded a monastery herself, at Piumarola, near Monte Cassino. It would not be surprising if, as was originally believed,⁸²⁸ *sponsa decora dei*, written in the same style as Paul's poem in praise of Benedict, was Paul's work. Mabillon adopted that view,⁸²⁹ and Bethmann and Dahn concurred, yet the poem does not appear in either Dümmler's or Neff's edition. Dümmler attributed *sponsa decora Dei* to a Casinese monk,

818 Citelli, *Opere*/2, 432.

819 In v.2, *Cinyphie hirpigena pernix caudate petulce*, which Gilliland translates as 'Cinyphian (from the region of the river Cinyps in Libya), wolf-born, quick, with a tail, butting with horns'.

820 In fact, v.38 reads '*Sic patre curtato cauditus gignitur agnus*' (thus a tailed lamb is born to a tailed father).

821 The word is sufficiently rare that neither it nor any related form appears in Lewis & Short's Latin Dictionary, (which is strange if the word was used by Horace) but *cauda*, with its secondary meaning 'tail', and the adjective *caudatus* (tailed) are in both the *Oxford Latin Dictionary*, ed. P.G.W. Glare, (Oxford: Clarendon Press, 1968), 286, and J.E. Niemeyer and L. van der Kieft, eds., *Mediae Latinitatis Lexicon Minus* (Leiden: Brill, 2002), vol. I, 209.

822 Neff, *Gedichte*, 202.

823 D.L. Norberg, *L'oeuvre poetique de Paulin d'Aquileia*, 35, where the poem is sub-titled *Ad Zachariam*.

824 Dümmler, *PLAC I*, 625.

825 P. Lejay, *Revue de philologie* 18 (1894), 42-52. The manuscript source is the late eighth-century Paris, Bibliotheque Nationale lat. 7530, which also includes the acrostic grammatical poem *post has nectit subsequentes* (ML 51) in ten stanzas, the initial letters spelling out *Paulus feci*.

826 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 289; Dahn, *Paulus Diaconus*, 63,71.

827 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 323; Dahn, *Paulus Diaconus*, 63,71.

828 P. Martinengo, *Pia quaedam poemata ac theologica odeaqae sacrae diverso carminum generae conscriptae* (Rome: F. Zanetti, 1590).

829 J. Mabillon, *Acta Sanctorum Ordines S. Benedicti* (Paris: L. Billaine, 1668) vol. I, 42-44.

Alberico da Settefrati⁸³⁰ who, he thought, had taken Paul's poem as a model.⁸³¹ It was eventually printed by Silagi in a supplement to the *Poetae Latini Medii Aevi* without attribution.⁸³² There is a late sixteenth-century attribution of *O benedicta, soror*, to Paul,⁸³³ which was accepted by Mabillon⁸³⁴ but, with one exception, subsequently rejected.⁸³⁵ Bethmann accepted Baronius' identification of the author as the abbot Bertharius, who wrote it as a pendant to his own verses on S. Benedict.⁸³⁶ Dahn⁸³⁷ rejects the attribution to Paul on the ground that the inclusion of Greek words and words in Greek script is not characteristic of Paul, which is slightly curious since Paul's knowledge of Greek was one of the accomplishments which commended him to Charlemagne. Dümmler likewise does not accept the attribution to Paul⁸³⁸ but offers no alternative. Like *sponsa decora Dei*, it is printed in Silagi's supplement to *Poetae Latini Medii Aevi* without attribution, thus implicitly rejecting Bethmann's attribution to Bertharius.⁸³⁹

In summary, there is some support for Paul's authorship of *sponsa decora dei* but virtually none for *O benedicta soror*. I have investigated these possibilities by statistical analysis of metrical patterns of both the hexameter and pentameter verses of the two poems. The results, which are discussed in chapter 7, indicate that Paul is not the author of either poem and that the two poems are by different authors.

4.7.5 : Poems which may be eliminated from consideration as Paul's work.

There are thirteen such poems (rating F). I first consider the eight for which there is no evidence regarding Paul's authorship. *Pallida sub parvo* (ML 48) is included by Dümmler in the collection of epitaphs entitled TITULI SAECULI VIII.⁸⁴⁰ The text of the epitaph reveals its

830 He was born in about 1100 and was abbot of Monte Cassino, 1137-46.

831 E. Dümmler, 'Die handschriftliche Überlieferung der lateinischen Dichtungen aus der Zeit der Karolinger I; Paulus Diaconus,' *Neues Archiv der Gesellschaft für ältere deutsche Geschichtskunde* 17, (1892), 102-112, at 103.

832 G. Silagi (ed.), *Monumenta Germaniae Historica, Poetae Latini Medii Aevi, Die Lateinischen Dichter des deutschen mittelalters*, vol. V (die Ottonenzeit), Part 3, (Munich: 1979), 596.

833 A. Wion, *Lignum vitae, ornamentum et decus Ecclesiae* (Venice, 1595), vol. III, 47.

834 J. Mabillon, *Acta Sanctorum Ordines S. Benedicti* vol. I, 40-41.

835 M. Forman, OSB, trans., 'Three songs about St. Scholastica by Aldhelm and Paul the Deacon' *Vox Benedictana, A Journal of Translations from Monastic Sources* 7/3 (1990) 229-251. Aldhelm is represented by an extract from *Carmen de Virginitate*.

836 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 323. He does not identify Baronius, who is presumably the sixteenth-century scholar and annalist The Venerable Caesar Baronius (1538-1607). Bertharius (810-882), who was eventually canonised, was at one time the abbot of Monte Cassino.

837 Dahn, *Paulus Diaconus*, 72.

838 E. Dümmler, *Die handschriftliche Überlieferung der lateinischen Dichtungen aus der Zeit der Karolinger I; Paulus Diaconus*, 103.

839 G. Silagi, ed., *Poetae Latini Medii Aevi, Die Lateinischen Dichter des deutschen mittelalters*, vol. V (die Ottonenzeit), Part 3, (Munich, 1979), 598. Bertharius died in 882, while Otto I, (912-73), became king of Germany in 936 and was crowned Holy Roman Emperor in 962.

840 Dümmler, *PLAC I*, 99-115, at 109.

subject as Aggiardus, identified by Neff as Eggihard, a seneschal of Charlemagne killed at the battle of Roncesvalles,⁸⁴¹ as the conclusion of the epitaph states, *obit de XVIII Kalendas Septembriis*.⁸⁴² The only manuscript witness identified by either Dümmler or Neff is Paris, BnFr 4841, s. ix, which mainly consists of epitaphs. Neff states that the many stylistic relationships (*Beziehungen*) between this epitaph and the epitaph to Lothar,⁸⁴³ *hoc satus in viridi*,⁸⁴⁴ (ML 34) which precedes it in his *Anhang*, prompted him to accept that they are the work of the same author,⁸⁴⁵ whom he does not identify. Although Dümmler includes *hoc satus in viridi* (ML 34) among the *Pauli et Petri carmina*,⁸⁴⁶ it appears from a footnote that he considers Peter of Pisa, rather than Paul, to have been the author, on the ground that at the time of Lothar's death in 780 Paul had not yet travelled to France, nor is that epitaph among the epitaphs for members of Charlemagne's family which he included in his prose history of the bishops of Metz. The epitaph *funereo textu scribuntur*,⁸⁴⁷ (ML 27) is for Dombercht, an Anglo-Saxon and a one-time pupil of Wynfrith (Boniface) who had followed his teacher to Germany. It appears in Dümmler's edition after the *Bonifatii carmina* in a sub-section entitled *Appendix carminum Anglicorum*.⁸⁴⁸ Neff attributed it to an unidentified pupil of Peter of Pisa, the status of the author being deduced from the line '*Rogo te, domine pater, ut emendas et corrigas*' which follows the conclusion of the epitaph itself and clearly eliminates Paul.

Carmina ferte mea Angelramno (ML 15) and *credere si velles* (ML 20) appear in Dümmler's edition among the *dubia*, and in Neff's edition under the title 'Fiducia an Angilram'. The manuscript source of the Fiducia poems is Berlin, Staatsbibliothek Diez. B 66, s. viii^{ex}, in which they follow a sequence of poems that originated at Charlemagne's court. Those poems are *carmina mitto Petro* (from Angilbert to Peter of Pisa), *Rex Carolus Petro* (which Neff attributes to Charlemagne himself) and *iam puto nervosis*, (ML 37) which is undoubtedly by Paul and is his solution of the second of the two riddles posed by Peter in *lumine purpureo*. Whoever Fiducia was, he was acquainted with the poetic activities of the court circle; this is clear from the reference in vv. 16-18 of *carmina ferte mea* to Theodulf and Angilbert, both divine poets (*divini ambo poetae*), whose literary knowledge he extols (*quos Flaccus, Varro, Lucanus, Nasonis honorant*). The connexion with Charlemagne is also shown by the concluding two lines,

841 Neff, *Gedichte*, 176.

842 In modern dating, 15 August. The battle of Roncesvalles took place in 778.

843 Lothar was the twin brother of Louis the Pious, co-emperor with Charlemagne (813-14) and sole emperor (814-40).

844 Neff, *Gedichte*, 171; Dümmler, *PLAC I*, 71.

845 Neff, *Gedichte*, 171.

846 Dümmler, *PLAC I*, 71.

847 Neff, *Gedichte*, 178.

848 Dümmler *PLAC I*, 19-23, at 19.

Me tetigit Carolus dominus de cuspidē pinnae:

Errore confectus scriptio nostra fuit

Neff comments that the author wishes to say that in this poem, for which he has incurred the reproaches of Charlemagne, the simplest rules of grammar and prosody have been disobeyed, and that the author has shown himself so inexperienced, that one can easily accept that the defective pentameter was appended by way of a joke.⁸⁴⁹ Inexpert grammar and prosody are wholly uncharacteristic of Paul.

*Ad flendos tuos, Aquilegia*⁸⁵⁰ (ML 2), which recounts the destruction of Aquileia by the Huns under Attila in 452, is an alphabetical *planctus* in twenty-three stanzas, rhythmically similar to the grammatical poem *adsunt quattuor in prima*. It is not at all clear why anyone should have considered attributing the poem to Paul, particularly as it is doubtful whether he composed any of the other three abecedarian poems in the same style which are printed in Dümmler's edition.⁸⁵¹ Bethmann considered it as doubtfully attributable to him, but Dahn thought it to be at least as likely to be by him as some poems whose Pauline authorship Bethmann did not doubt⁸⁵². However, Dahn's reasons, such as they are, do not bear examination. He states that this poem is completely in the style of the previous (*vorigen*) author (presumably, this means the author of the works which he lists immediately before *ad flendos tuos, Aquilegiae*) and certainly (*gewiss*) by the same author (*demselben Verfasser*).⁸⁵³ But that list includes not only *hic decus Italiae*, (ML 31) the epitaph to Constantius (of which he remarks that such a Roman senator who was a contemporary of Paul would be difficult to find),⁸⁵⁴ but the *Versus de episcopis sive sacerdotibus (ad perennis vitae fontem, ML 3)* which he attributes perhaps (*vielleicht*) to Paul, alternatively to Paulinus or Wahlafrid Strabo and its companion piece, the *Versus de malis sacerdotibus (aquarum mei quis det, ML 12)* which he attributes doubtfully to the same author.⁸⁵⁵ In summary, Dahn does not unequivocally identify Paul as the author of these verses and, therefore, he cannot do so in the case of *ad flendos tuos, Aquilegia*.

849 Neff, *Gedichte*, 183, note to v. 22 of *carmina ferte mea*.

850 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 320; Dahn, *Paulus Diaconus*, 72.

851 Dümmler, *PLAC I*, includes *ad perennis vitae fontem* and *aquarum mei quis det* among the *dubia*, and *adsunt quattuor in prima*, which Neff attributes to Peter of Pisa, in the Appendix ad Paulum, 625-28.

852 Dahn, *Paulus Diaconus*, 72.

853 There is a potential ambiguity here since 'Verfasser' is both the singular and plural form of the word, but 'demselben' which precedes it shows that it is the singular (der Verfasser), not the plural (die Verfasser) which would be preceded by the form 'denselben'.

854 'Dahn, *Paulus Diaconus*, 72, item V; 'ein solcher römische Senator als Zeitgenosse Pauls dürfte schwer aufzufinden'. The subject of the epitaph is the emperor Constantinus Chlorus, who was killed in Britain in 306 while leading an expedition against the Picts and Scots; see Th. Mommsen, 'Grabschrift des Kaisers Constantinus Chlorus,' *Hermes* 28, (1894), 33-39.

855 Dahn, *Paulus Diaconus*, 72, items VI and VII.

The poem *olim Romulea sanctus* (ML 66), composed in elegiac couplets, is mentioned only in Citelli's edition.⁸⁵⁶ It is found in the manuscript Casinensis 318, s. xi. It is in the form of a series of statements by Gregory, Ambrose, Charlemagne and Paulinus about the Gregorian and Ambrosian liturgies, followed by a prose passage entitled 'Sententia' which expresses a preference for the Roman (that is, the Gregorian) chant. It was at one time attributed to Paul on stylistic grounds by Amelli,⁸⁵⁷ though earlier studies had not adopted that view.⁸⁵⁸ Although de Santi had connected the poem with eleventh-century Aquileia,⁸⁵⁹ Amelli viewed it in the context of the reforms to liturgy and worship, including the use of Ambrosian chant, which Charlemagne sought to bring about in the 780s, and with which Paul was involved. The poem has recently been studied by Winkelmüller in the context of the ninth-century political situation and its conflict with the preservation of local tradition.⁸⁶⁰ It supports Amelli's view of the context but does not go so far as to attribute the poem to Paul. It identifies the Paulinus of the poem with the Paulinus of Charlemagne's court circle and states that it contains *topoi* and characteristics which were no longer current in the eleventh century but were customary two hundred years earlier. It refers to linguistic similarities with other poems attributed to Paul, but does not adduce any facts from which Paul's authorship might be inferred.

Clauditur hoc tumulo (ML 19) is included only because it appears in *Historia Langobardorum*,⁸⁶¹ and inclusion of a poem in an authentic work of the candidate author is an acknowledged authenticity criterion. It is the epitaph of one Droctulft⁸⁶² (or Toctron, in its Latinised form), and is mentioned by Bethmann⁸⁶³ in his commentary on Paris, BnFr lat. 528, s.ix^{ex}, which is an important source of the poetic works of Peter of Pisa as well as those of Paul. He states unequivocally that this poem is not the work of Paul; Dümmler concurs with that opinion,⁸⁶⁴ and the poem has never been attributed to Paul.

856 Citelli, *Opere*/2, 413, which provides a commentary but no text.

857 A. Amelli, 'l'epigramma di Paolo Diacono intorno di canto Gregoriano e Ambrosiano', *Memorie Storiche Foroguiliesi*, 55 (1913), 163-75.

858 A. Maselli, *De alcune poesie dubbiamente attribuite a Paolo Diacono* (Montecassino, 1905), 115; P. Paschini, *San Paolino patriarca a la Chiesa aquileise alla fine del sec. VIII* (Udine, 1906), 163.

859 A. de Santi, 'Paolo Diacono, Studi Recenti I, La Civiltà Cattolica s.17 vol.88, fasc. 1185 (1899), 268-72.

860 M. Winkelmüller, 'Politische Unifikationsbestrebungen im Konflikt mit der Wahrung lokaler Tradition: "Gallia tota" im Gedicht "Olim romulea" (Montecassino 318', in *Nationes- Begriffe in mittelalterlichen Musikschritftum: Politische und regionale Gemeinschaftsnamen in musikbezogenen Quellen, 800-1400*, ed. F. Hentschel, (Berlin: Walter de Gruyter, 2016), 41-50.

861 *HL*, book III, c. 19.

862 Droctulft was a man of Swabian descent who (or whose family) had been captured by the Lombards and who sought to avenge his captivity by joining the opposition forces. He was killed in a battle against the Lombards when they attacked Classis, the port of Ravenna, and was honourably buried in the church of S. Vitalis.

863 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 248.

864 Dümmler, *Die handschriftliche Überlieferung der lateinischen Dichtungen aus der Zeit der Karolinger I; Paulus Diaconus*, 105.

In addition to those eight poems for which there is no evidence regarding Paul's authorship, there are five where there is strong contrary evidence. The two compositions *Martir Mercuri, saeculi futuri* ((ML 41) and *salve, miles egregie* (ML 57) commemorating the translation of the relics of S. Mercurius are considered in chapter 5. Of the remaining three, *dux, via, vita, tuis* (ML 24) can be eliminated on historical grounds. The poem, a life of the abbot Maurus⁸⁶⁵ in elegiac couplets, was attributed to Paul by Martinengo,⁸⁶⁶ but Migné, who included it among Paul's poems in *Patrologia Latina*, does not mention Martinengo; inexplicably, he cites Mabillon, who denied Paul's authorship on the ground that the vision described in the poem as having been seen by Anguareth occurred in the year 847,⁸⁶⁷ and the poem was not composed before 865. Also, as Bethmann observes in his rejection of Paul's authorship, the translation of the arm of the holy Maurus, which the poem recounts, took place in or about the year 1000.⁸⁶⁸

Clare beati agnoscere (ML 18) is found in a tenth century manuscript which Bethmann identifies as Casinese 343. The eighth verse of the poem is *Paulus Diaconus vocitatur et ipse monachus*. This may be the reason why Tosti,⁸⁶⁹ to whom Migné referred in connexion with the poem, mentioned it. However, it is surprising that Migné included it among the works of Paul, because Tosti denied Paul's authorship on account of the 'rather modest' quality of the verses and also because the Casinese necrology included various persons named Paul.⁸⁷⁰ Bethmann strongly adopted that view, asserting that 'this Paul⁸⁷¹ could not be our Paul, as the notoriously barbaric versification appeared to him to show.'⁸⁷²

But whatever the quality of the versification, there are stronger grounds for rejecting Paul's authorship. The poem is not in the style which Paul habitually employed for histories and commentaries. His usual technique is to give fulsome praise to the dedicatee and, where

865 Maurus (510-584), founder of the abbey of Glanfeuil, whose bones are said to have been discovered there in 845 by the then abbot, Gauzlin.

866 Martinengo, *Pia quaedam poemata*, 250-53.

867 J. Mabillon, *Acta Sanctorum Ordines S. Benedicti* (Venice: S. Coleti and J. Bettinelli, 1738) vol. 4/2, 185.

868 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 324.

869 L. Tosti, (1811-97), Benedictine historian. His *Storia Della Badia di Montecassino*, Vol. I, was published in Naples in 1843.

870 Citelli, *Opere*/2, 386. 'Tuttavia il livello qualitative piuttosto modesto di questi versi e la presenza nei necrology cassinese di vari personaggi col nome 'Paolo Diacono' hanno indotto Tosti a negare che l'autore sia identificabile con il Monaco longbardo, e in questa opinione e stato seguito da Bethmann e da tutti gli studiosi successivi'. [However, the rather modest qualitative level of these verses and the presence in the necrology of various characters with the name 'Paolo Diacono' led Tosti to deny that the author is identifiable with the Longobard monk, and in this opinion was followed by Bethmann and all subsequent scholars.] The commentary does not identify the successive studies in which this view of the authorship is endorsed.

871 That is, the Paul named in the line quoted.

872 Bethmann's actual words are 'Dass aber dieser Paulus nicht unser Paulus sein kann, scheint mir die barbarische Versification satstsam zu beweisen'.

alluding to his own authorship, to do so directly, but self-deprecatingly. He was reverential to ecclesiastical superiors, as the letters to Adalhard⁸⁷³ and Theudemar⁸⁷⁴ show, as well as to secular patrons, as in the letter to Adelperga⁸⁷⁵ and the dedication of the *Epitome of Festus* to Charlemagne.⁸⁷⁶ He would not have exhorted the reader to study the book with great industry (*cum magna indagine librum*). He would have directly identified himself as author, rather than laying claim to it in the convoluted manner of vv. 7 and 8, thus:

If perhaps you wish to know the name of the writer

He is called Paul (the) deacon, himself a monk

and he would not have described his work as being perfected with the help of God (*hoc opus auxiliante Deo perfecit...*), without giving elaborate thanks and praise for that help, which are entirely lacking.

The last poem in this group is *multa legit paucis* (ML 42). This is one of three short pieces printed together as *carm.* xxvi in Dümmler's edition, and the footnote to it states that it closes the letter that Paul extracted from the book of Pompeius Festus which he dedicated to Charlemagne.⁸⁷⁷ Neff, in his commentary (which he simply entitles 'Paulus an Karl') on Paul's *Epitome of Festus*, rejects Paul's authorship, stating that 'the inauthenticity of the verse has been proved by Traube and the exact investigation of Paul's style (*Schreibweise*) resulted only in the confirmation of Traube's claim'.⁸⁷⁸ Traube's criticisms of the style of this quatrain are to the effect that Paul was a thoughtful man, knew his grammar and composed his verses no worse than any of his recognised contemporaries. Yet in v.2, (*hoc servus fecit, Karolo rege, tuus-* (your servant made this, [O] King Charles) the author has, as Traube puts it 'inflicted' (*aufzubürden*) the vocative 'rege' on Paul, whereas the vocative of *rex* is *rex* (and that of *Karolus* would be *Karole*). Also, (which Traube does not mention) if the author had written the correct vocative *Karole rex, tuus* there would be only six syllables in the second hemistich rather than the seven, consisting of two dactyls and an anceps, which the metre requires. Traube's article makes two other telling points. The first is that the reference to Charlemagne as "David" is foreign to Paul; Paul's references to him are always extremely deferential and anyway, it is not clear that these nicknames were in use during Paul's time at the court. The second is that it does not appear in the manuscripts of Festus, but 'stems directly from the 'witches' kitchen'

873 The words of his opening address to Adalhard are '*Carissimo fratri et domino Adalardo, viro Dei, Paulus supplex*'.

874 Theudemar is addressed as '*...dilecto domino meo, patri abbati Theudemari, Paulus pusillus filius supplex*'.

875 '*Dominae Adelpergae eximiae summae ductrici, Paulus exiguus et supplex*'.

876 '*Summo apici rerum regi dominoque potenti dat famulus supplex verba legenda suus*'.

877 Dümmler, *PLAC I*, 62.

878 L. Traube, 'Zu den Gedichten des Paulus Diaconus,' *Neues Archiv der Gesellschaft für ältere deutsche Geschichtskunde* 15, (1890), 199-201.

(*Hexenküche*) of the seventeenth-century German philologist Caspar von Barth⁸⁷⁹ and that it was adopted by a succession of scholars, including Bethmann, so that Dümmler must have been misled in accepting it as Paul's work. Indeed, the commentary in Citelli's edition⁸⁸⁰ refers to a subsequent article by Dümmler⁸⁸¹ negating Paul's authorship of this poem.

4.7.6 : Summary

Excluding the four hymns, the authorship of thirty-six poems has been considered in this chapter. There are very few candidates for inclusion in the authentic corpus of Paul's verse. There is no reason to doubt the authenticity of *vale, salus patriae* (ML 68) which is contained in a letter by Paul to Theudemar, nor any reason to doubt that the 'PAULUS whose name is spelt out in the acrostic poem *pulchrrior me nullus* (ML 32) is Paul the Deacon. Perhaps the most surprising candidate for inclusion is *Perge, libelle meus* (ML 49). On historical and contextual grounds, both Paulinus of Aquileia and Paul the Deacon are plausible candidates for its authorship but, given Paulinus' decided preference for rhythmical rather than quantitative verse forms and his self-confessed inability to compose hexameters correctly, Paul is by far the more probable composer of a lament in elegiac couplets. Paul cannot be eliminated as the composer of the three fables and it remains uncertain whether *trax puer adstricto* (ML 59) is his own work or a remembered translation of the Greek original, but it is difficult to see how those questions could be resolved. It may be that the case for his authorship of the *titulus, multicolor quali* (ML 43) could be strengthened if the historical connexion with the Lombard court were more firmly established.

I draw two further conclusions from this investigation. The first is that manuscript association is an insufficient foundation on which to base an attribution, even when the poem in question is found in sequence with authentic works of the candidate author. The second is that, while inclusion of the poem in an authentic work of the author, and internal self-ascription are both generally reliable indications of authorship, each of them may, on occasion, be misleading.

879 Barth (1587-1640) was the author of a collection of commentaries on the classics commonly referred to as "Adversaria" which were published under the title *Adversariorum commentariorum libri sexaginta* (Frankfurt, 1624).

880 Citelli, *Opere*/2 408.

881 E. Dümmler, 'Zu den Gedichten des Paulus Diaconus,' *Neues Archiv der Gesellschaft für ältere deutsche Geschichtskunde* 17, (1892), 397-401.

Chapter 5: Paul as hymnographer

5.1: Introduction

This chapter is devoted to the six hymns which have been attributed to Paul. The hymns to S. Benedict, *fratres alacri pectore* (ML 26), S. John the Baptist, *ut queant laxis* (ML 64), the Assumption of the Blessed Virgin Mary, *quis possit amplo* (ML 55), and *Christe, decus mundi* (ML 16)⁸⁸² are collected together under the heading 'Paulus Diaconus' in volume 50 of *Analecta Hymnica*,⁸⁸³ which also lists manuscript sources for each of them. There are no known manuscript sources for the two hymns, *Martir Mercuri, saeculi futuri* (ML 41) and *salve, miles egregie* (ML 57) which commemorate the translation of the relics of S. Mercurius to the church of S. Sophia, founded in Benevento by Paul's patron, Arichis II in 768; the only known source is a book by the seventeenth-century Neapolitan physician, Petrus Pipernus.⁸⁸⁴ *Martir Mercuri* and the first four lines of *salve, miles egregie* are printed elsewhere in *Analecta Hymnica*.⁸⁸⁵

5.2: *Fratres alacri pectore* (ML 26)

This is the only hymn of which Paul is the undisputed author; he included it in book I of the *Historia Langobardorum* (HL) together with the epanaleptic poem *Ordinar unde tuos, sacer* (ML 46). Admittedly there are other poems in HL which are not the work of Paul⁸⁸⁶. However, since Raby considers *fratres alacri pectore* to be

'...a mere paraphrase of the longer poem⁸⁸⁷ and nothing more than a catalogue of miracles from the second book of Gregory's dialogues'⁸⁸⁸

and Heath has observed that

'Paul's interest in the life and thought of Gregory runs like a golden thread through his literary output',⁸⁸⁹

Paul's authorship of the hymn cannot be doubted.

5.3: *Christe, deus* (or *decus mundi*) (ML 16)

882 See E. Dümmler, ed., *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini*, vol. I (Berlin: Weidmann, 1881), where, this composition has the incipit *Christe, deus mundi* and it is printed as a continuous poem of sixteen verses, not divided into stanzas as it is in G. Dreves, ed., *Analecta Hymnica*, vol. 50 (Leipzig: O.R. Riesland, 1909), 124-25.

883 AH, vol. 50, 117-25.

884 Pipernus, *De effectibus magicis libri sex: ac De nuca maga beneventana liber uncius* (Naples: Colligni, 1634).

885 C. Blume, ed., *Analecta Hymnica*, vol. 52 (Leipzig: O.R. Riesland, 1909), 261. For the full text of *salve, miles egregie*, see Bethmann, *Leben und Schriften*, 332.

886 L. Bethmann and G. Waitz ed., *MGH SS. Rer. Lang., Pauli Historia Langobardorum* 12-187. The epitaphs to Droctulft, *Claudatur hoc tumulo* (book III, c.19), and Cedoal, *Culmen, opes, sobolem*, (book VI, c.15).

887 That is, *Ordinar unde tuos, sacer*.

888 F.J.E. Raby, *A History of Christian-Latin Poetry*, 2nd edition, (Oxford: Clarendon Press, 1953), 164.

889 C. Heath, *The narrative worlds of Paul the Deacon* (Amsterdam: Amsterdam University Press B.V., 2017)

Dümmler includes this hymn among the *carmina dubia* in his edition, where the words of the incipit are *Christe, deus mundi*. It is clear that Dümmler did not regard it as a hymn, since he did not divide it into stanzas.⁸⁹⁰ Its manuscript source is Leipzig Staatsbibliothek Rep. I, 74,s. ix or x,⁸⁹¹ where it is the last in a sequence of six poems, all of which Neff attributes to Paul. The two which immediately precede it in the Leipzig codex are the first two of the three epigraphic poems collected by Neff under the heading 'Andere Inschriften'.⁸⁹² Neff did not include it in his edition, and in the commentary to that group of poems he concludes that, having regard to its form and content, the prayer (as he describes it) is not the work of Paul. The text as printed in *Analecta Hymnica*⁸⁹³ is entitled 'Oratio Vespertina', the incipit reads *Christe, decus mundi* (not *deus mundi*) and the hymn is divided into four four-line stanzas. There is no commentary and the critical apparatus does not mention any other source or any alternative reading for 'deus'. However, the commentary in Citelli's edition describes the emendation as 'probably correct'⁸⁹⁴ and states that the reading *Christe, deus mundi* (instead of *decus*) is in a work by Haupt⁸⁹⁵, which does not address the question of the authorship of the hymn.

5.4: *Quis possit amplo fame praepotens* (ML 55)

The authorship of this alcaic hymn for the Annunciation of the Blessed Virgin Mary has attracted some discussion. Bethmann says of *quis possit amplo* that the words of Marus⁸⁹⁶ (whom he does not further identify) to Petrus (presumably Peter the Deacon) are the only notice (*Nachricht*) about it.⁸⁹⁷ I translate them as:

There exists at the same time in an ancient Lombard manuscript of the rite of the Beneventan church a hymn in the Alcaic metre to be sung customarily for the feast of the Assumption of the Virgin mother of God, which is declared to have been written by our Paul.

There is no indication of the identity of 'our Paul'. Dahn firmly denies Paul's authorship, listing this hymn under the heading *ganz unbeglaubigt und abzuprechen sind* (they are insufficiently

⁸⁹⁰ PLAC I, *carm.* xlix, 78; cf. the hymn *fratres alacri pectore, carm.* iii, 41, in sixteen stanzas.

⁸⁹¹ Neff dates it as s. ix, Dümmler as s.x;

⁸⁹² Neff, *Gedichte*, 20.

⁸⁹³ AH, vol. 50, 124-25.

⁸⁹⁴ L. Citelli, ed., *Paolo Diacono Opere/2*, Corpus Scriptorum Ecclesiae Aquilensis vol. IX/II, (Rome: Citta Nuovo Editrice 2014), 381.

⁸⁹⁵ M. Haupt, *Opuscula*, (Leipzig: Impensis Salomonis Hirzelii, 1876), 296.

⁸⁹⁶ Petrus Diaconus, *De viris illustribus casinensibus*, c.8, L.A. Muratori (ed.), *Rerum Italicarum scriptores*, vol.6. (Milan: Muratori, 1725): 10-62.

⁸⁹⁷ L. Bethmann, 'Paulus Diaconus Leben und Schriften,' *Archiv der Gesellschaft für ältere deutsche Geschichtskunde* 10 (1851): 290.

authenticated and to be rejected).⁸⁹⁸ Dümmler includes it among the *dubia*.⁸⁹⁹ Neff ignores it altogether, as do some later commentators.⁹⁰⁰

The strongest support for Paul's authorship is found in the commentary to the hymn in *Analecta Hymnica*⁹⁰¹, which repeats the passage quoted from *De viris illustribus Cassinensis*. I translate it as follows:

This witness, which rests on local tradition, has, in spite of the added '*ut asseritur*', its worth. The hymn, of which Peter speaks, can be only the one mentioned above (that is, *quis possit amplo*). The metrical licences are not such that they can exclude the song from Paul's authorship; the prevailing appearance of the same⁹⁰² in Casinese and Beneventan manuscripts supports the tradition.

It is unfortunate that the editor did not identify either the perceived 'licences'⁹⁰³ or the verses of local origin in which the same 'licences' appeared, but even had he done so, an attribution to Paul would involve circular reasoning, in that the 'licences' of *quis possit amplo* reflect the style of the comparison verses which are attributed, or attributable, to Paul because they exhibit the same 'licences'.

Szövérfy lists this hymn, together with *fratres alacri pectore* (ML 26) and *ut queant laxis*, as hymns which are attributed to Paul included in *Analecta Hymnica*, but rejects their attribution,⁹⁰⁴ He acknowledges that Dreves gave credence to it and connected 'the above place'⁹⁰⁵, presumably Monte Cassino, with this hymn, which had been handed down since the tenth century in various manuscripts. Of the text, he notes that it begins with a rhetorical question and a *topos*; that the account of the Fall of Man (*Sündenfalle*), at v.3 (*hausto maligni primis et occidit*) is complicated and artificial, and that the account of Mary's childhood years (v.8, *hoc signat aedis, ianua non patens*) was in the regular sequence of the popular perception.⁹⁰⁶ It is not apparent how any of this amounts to a reasoned argument for rejection of Paul's authorship.

898 J.S.F. Dahn, *Paulus Diaconus* (Leipzig: Breitkopf and Hartel, 1876): 71.

899 Dümmler, *PLAC I, carm. lv*, 84.

900 M. Manitius, 'Die universalen Schriftsteller: 41, Paulus Diaconus' *Geschichte der lateinischen Literatur des Mittelalters*, vol. 1 (Munich: C.H. Beck, 1911-31): 257-72; F.J. Worstbrock., 'Paulus Diaconus OSB' in *Deutsches Litteratur des Mittelalters Verfasserlexikon, Band 11, Nachträge und Korrekturen*, ed. K. Ruh, (Berlin: Walter de Gruyter, 2004), clm. 1172-86; F. Brunholzl, 'Le Renouveau de Charlemagne, Paul Diacre', in *Histoire de la littérature latine du moyen age*, (Turnhout: Brepols, 1996), 20-29 .

901 *AH*, vol. 50, 123.

902 That is, the metrical licences exhibited by *quis possit amplo*.

903 Presumably, these licences are departures from strict classical rules of versification in Alcaics.

904 J. Szövérfy, *Die Annalen der Lateinischen Hymnendichtung, tom. I-Die Lateinischen Hymnen bis zum Ende des 11. Jahrhunderts* (Berlin: Erich Schmidt Verlag, 1963), 186-88.

905 *Ibid.*, 188, where Szövérfy identifies 'Petrus von Monte Cassino' as the source of Dreves' attribution; therefore, the 'obige Stelle' is Monte Cassino.

906 The word actually used is 'Bild' (picture).

Norberg⁹⁰⁷ has observed that both Prudentius⁹⁰⁸ and Ennodius composed alcaics and that Ennodius used the four-line alcaic strophe in his hymn *Quae lingua possit, quis valeat stilus*. He detects the clearly visible influence of Ennodius in *Quis possit amplo* and states (though without referring to any evidence whatever) that the hymn was written in the Carolingian period and widely known in the south of Italy, both of which statements are consistent with the fact that the earliest manuscript witness is Italian and dates from the ninth century. This source, identified by Dümmler as Rome, BAV Vaticanus 7172, is not mentioned in *Analecta Hymnica*, where the earliest of the thirteen sources listed, Casinensis 506, which also contains *ut queant laxis*, dates from the tenth century. All but one of the witnesses are Italian, their locations being Monte Cassino, Naples and Rome.⁹⁰⁹ Dümmler also notes that the manuscript Rome, BAV Urbinatibus 585, s. xi, contains both *ut queant laxis* and *quis possit amplo*.⁹¹⁰

Notwithstanding Szövérfy's observations, it is possible to argue the case for Paul's authorship. The passage from *De viris illustribus Cassinensis* quoted in *Analecta Hymnica* names the author as 'Paul'. Norberg detects clear influence of Ennodius and Prudentius in the hymn. Dümmler, in his footnotes to *angustae vitae fugiunt*, (ML 9) whose third verse reads '*per rosulenta magis cupiunt sed ludere prata*', draws attention to Prudentius' *Peristephanon III* which reads at verses 199-200 '*floribus ut rosulenta putes / prata rubescere multimodis*'.⁹¹¹ The inference from this apparent borrowing that Paul was acquainted with the *Peristephanon* is supported by Szövérfy's reference⁹¹² to similarities between the poetry of Paul and Venantius Fortunatus, ascribing that to the common influence on them of Prudentius. It is also plausible that Paul would have been acquainted with the works of Ennodius, who was bishop of Pavia (the site of the Lombard court at the time of Paul's education there) in the mid sixth century. There is only one versifier named Paul known to have been influenced by Prudentius and whose works are extant, and that is Paul the Deacon.

907 D.L. Norberg, *An Introduction to the study of Mediaeval Latin Verse*, ed. J. Ziolkowsky, trans. G.C. Roti and J. Skubly, (Washington, D.C : Catholic University Press, 2004): 76.

908 *Ibid.*, 76, n.96, where Norberg cites the *Peristephanon*, 14.

909 Dümmler, *PLAC I*, in the *proemium*, 35. The critical apparatus at *PLAC I*, 84, also refers to a source identified only as *Mo* and this is not identified in the *proemium*.

910 *Ibid.*, 35.

911 *Ibid.*, *carm. v*, n.9, 43. The subject of the poem in *Peristephanon* is S. Eulalia of Merida, a victim of Diocletian's persecution, who was martyred in 304.

912 Szövérfy, *Lateinischen Hymnen*, 171.

5.5: *The S. Mercurius hymns, Martir Mercuri* (ML 41) and *salve, miles egregie* (ML 57).

5.5.1: The initial attribution to Paul

Martir Mercuri is a hymn of ten stanzas, in the sapphic metre. *Salve, miles egregie* is a prayer to the same saint, which consists of six lines in iambic dimeter, two adonic lines and a final hexameter line, followed by the text of a spoken prayer, beginning with the word 'Oremus. The *Martir Mercuri* commemorated by the hymn, originally known as Philopater, was born to Cappadocian parents in 225; he joined the Roman army *ca* 242 and his success as a commander led to him being re-named Mercurius. He is identified as 'Mercurius m. Caesarae Cappadocie, sub Decio',^{913, 914} on whose orders he was executed in 250. The translation of his relics to Benevento has been recounted in both prose and verse.⁹¹⁵

Bethmann mentions *Martir Mercuri* in three places. In the biographical section of his study he suggests the possibility that Paul composed it at the ducal court in Benevento.⁹¹⁶ This reads, in translation:

Paul also made the verses, with which Arichis decorated his palaces and the church of SS. Peter and Paul; and when Arichis in 768 had the bones of the holy S. Mercurius brought to Benevento, Paul wrote for the ceremony a song of praise which is still sung in Benevento throughout the year, as with another (presumably, *Salve, miles egregie*)⁹¹⁷ in the martyrdom of the Saint.

However, in the section devoted to Paul's writings, Bethmann is more equivocal.⁹¹⁸ He states that the only witness is 'the most wonderful book of the physician Petrus Pipernus, *De magicis effectibus*' and (again in translation):

That Paul wrote a hymn for the translation in 768, which his patron Arichis brought about, and which he himself described, is very probable; but whether it was truly that hymn, which is developed with many rich rhymes and mentions Arichis only briefly, appears at least doubtful.

913 *Bibliotheca Hagiographica Latina* 2 vols. (Brussels, Societe des Bollandistes, 1898-1901), vol. K-Z, 866, entries 5933-5939.

914 *Bibliotheca Hagiographica Graecia*, 2nd edn., (Brussels, Societe des Bollandistes, 1909), 177, entries 1271-74.

915 MGH *SS. Rer. lang.* s.VI-IX, 576-78.

916 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 258. Bethmann's text reads: 'Paulus machte auch die Verse, mit denen Arichis in Salerno seinen neuen Palast und die Kirche S Peter und Paul verzierte; und als Arichis in 768 die Gebeine des heiligen Mercurius nach Benevent bringen liess, schrieb Paulus zu dieser Feier einen Lobgesang, der noch jetzt in benevent gesungen wird, so wie einen andern auf das Martyrtum des Heiligem'.

917 My interpolated comment.

918 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 291. His text reads: 'Dass Paulus zu der Translation 768, die sein Gönner Arichis veranstaltete und selbst beschrieb, einen Hymnus gedichtet hat, ist sehr wahrscheinlich: ob es aber grade dieser Hymnus ist, mit seinen vielen ausgebildeten Reimen und der sehr kurze Erwähnung Arichis, scheint wenigstens zweifelhaft'.

Nevertheless, neither of the hymns are mentioned in the sections of Bethmann's study devoted to prose and verse compositions of which Paul's authorship is doubtful (*Zweifelhaft, ob von Paulus, sind*),⁹¹⁹ or wrongly attributed to Paul (*mit Unrecht wurden Paulus zugeschrieben*).⁹²⁰ The text of the hymns is printed, without further comment, in an appendix⁹²¹.

5.5.2: The historical and contextual evidence of authorship

This evidence relates to two aspects of the question whether Paul is the author of these two hymns. The first is the likelihood of Paul choosing S. Mercurius as the subject for a hymn. The second is whether he had the opportunity to do so and how it came about. There is no doubt that the historical and contextual evidence identifies Paul as by far the most probable candidate, but (as discussed in the next sub-section) the stylistic features of *Martir Mercuri* point very decidedly against him, though not towards any other author. Stylistically, there is no feature of its companion piece, the much shorter *salve, miles egregie*, which is alien to Paul; the three metres employed in that short composition are all found in unquestionably authentic works of Paul.⁹²² However, given that both hymns have the same subject and are clearly designed for the same occasion, while Paul may have been the author of both or neither, it is inconceivable that he was the author of only one of them.

Bethmann did not consider the possibility that Paul would have composed a hymn to S. Mercurius independently of any request from Arichis, though that could have accounted for the paucity of references to him in *Martir Mercuri*. Yet it is clear that S. Mercurius had connexions with Benevento dating back to the unsuccessful invasion by the emperor Constans in 663 which S. John the Baptist was also instrumental in repelling, according to the *Historia Langobardorum*.⁹²³ When Constans II invaded Italy after landing at Taranto in 663, he first took the Apulian city of Luceria, then unsuccessfully besieged Benevento. It was at his behest that the relics of this Mercurius were translated to Benevento from the ancient town of Aeclanum (or Quintodecimo, the mediaeval town which arose from its ruins).⁹²⁴ The hymn narrates that Constans II had the relics moved there at or about the time of his unsuccessful attempt in 663 to overrun Benevento. Hence, it is plausible that he did so in order to obtain the spiritual aid of the warrior saint for his campaign. However, if Paul had composed a hymn based on his account of Constans' invasion

919 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 319-20.

920 *Ibid.*, 320-25.

921 *Ibid.*, (Anhang zu Seite 291), 332-33.

922 *Fratres alacri pectore* is written entirely in iambic dimeter; Paul's dedicatory letter to Charlemagne ends with ten adonic verses beginning *utere felix, munere Christe*, and the other metre employed in *salve, miles egregie* is the dactylic hexameter.

923 Peters, ed., Foulke, trans., *History of the Lombards*, book V, c. vi.

924 H. Bloch, *Monte Cassino in the Middle Ages* (Rome: Edizione di Storia e Letterature, 1986), 267.

as recorded in *Historia Langobardorum*, it would be surprising that it was not incorporated into the text, as was the hymn to S. Benedict.

The total lack of manuscript witnesses, and the fact that the hymns came to light only in a book published towards the middle of the seventeenth century which does not state their source, makes any form of dating impossible. The author asserts that:

The prayer to S. Mercurius was composed by Paul the Deacon, a monk of Monte Cassino, of most holy life, one-time secretary to Arichis, prince of Benevento.⁹²⁵

Now Pipernus' description of Paul's role as '*quondam secretarius*' is fully substantiated in Belting's study of the eighth-century Beneventan court.⁹²⁶ That study emphasises Paul's role in the development of the centre of learning at the court,⁹²⁷ and refers to Paul's writings, in particular, his denunciation of iconoclasm when Arichis became embroiled in that controversy,⁹²⁸ and his authorship of the verse *tituli* of the frescos in the palace at Salerno and in the palatine church of SS Peter and Paul.⁹²⁹ However, Belting's account of the consecration of the church of S. Sophia on 26 August 768⁹³⁰ makes no reference to Paul. We may also note that, whereas there was a Beneventan Mass for the Twelve Brothers, who were translated to Benevento in 760, there is no music commemorating the dedication of the altar of St Sophia or the translation of Mercurius' relics to that place in 768, or the saint's feast day.⁹³¹ If no music was commissioned for any of these occasions, it may well be the case that no commemorative hymn was written for them either. We may conclude that although Paul was capable of writing a suitable hymn,⁹³² and was present at the Beneventan court at the time of the consecration of the church and the translation of the relics, there is no evidence that Arichis commissioned him to write any verse for the occasion.

5.5.3. The stylistic evidence about authorship

The occurrence of so many rhymes in *Martir Mercuri* points very strongly against Paul's authorship. The major early Carolingian poets rarely, if ever, resorted to rhyme. Norberg states

925 Pipernus, *De magicis effectibus*, 147. The Latin text reads '*Oratio S. Mercurii composite per Paulus Diaconus sanctissimae vitae monachum montis Casini, quondam secretarium principis Arichis Beneventani*'.

926 H. Belting, 'Studien zum Beneventanischen Hof in 8. Jahrhundert', *Dumbarton Oaks Papers* 16,(1962), 141- 93.

927 *Ibid.*, section IV, Hofschule und Kunst unter Arichis; 1, Das Bildungszentrum am Hof und Paulus Diaconus, 164-68.

928 *Ibid.*, 173 and n.256 thereto.

929 *Ibid.*, section IV.2, Die Kunst unter Arichis, Bauten und Inschriften, 170-72.

930 *Ibid.*, section V, Die Sophiakirche; .2, Das Weihedatum, 175-79.

931 T.F. Kelly, *The Beneventan Chant* (Cambridge: Cambridge University Press, 1989), 12, 22, 72. He refers to Paul as 'a significant presence at the Beneventan court from 763 to 774'. The dedication and translation took place on 18 and 26 August respectively; the saint's feast day is November 25.

932 It has never been asserted that Paul was not capable of writing sapphics; the question is discussed in the next section of this chapter, which is concerned with the much better-known hymn in sapphics, *ut queant laxis*.

that 'the Carolingian renaissance and its efforts to recover classicism brought about a retreat from the use of assonance and rhyme'.⁹³³ His exposition shows that the initial development of rhyme in Carolingian times was in the field of lyric poetry; it was not until the late Middle Ages that rhyme became common in religious poetry.⁹³⁴ However, every stanza of *Martir Mercuri* contains some kind of rhyme scheme. The first contains a rhyme between the syllable immediately before the caesura and the syllable at the end of the line (a Leonine rhyme); thus:

Martir Mercuri | | saeculi futuri
 Perpeti dona | | gloriae corona
 Qui tuam totis | | venerantur votis
 Translationem.

This scheme also occurs in stanzas 5, 6 and 9. Stanzas 2, 3, 4, 8 and 10 contain no Leonine rhymes, but their three hendecasyllabic lines all have disyllabic rhyming terminations, for example, stanza 3:

Quem Cesar Constans | | inter processorum
 Deferens secum | | fines Appulorum
 Praeterit intrans | | more tirannorum
 Cuncta consumens

Finally, stanza 7 displays both Leonine rhymes and end-rhymes, together with an internal rhyme between the first and second lines, as follows:

Caesar *progressus* venit **Beneventum**
 Sed vi *repressus* sibi **resistentum**
 Romam *festinat*, | | Samniam *declinat*
 Bellipotentem

All of this is so uncharacteristic of Carolingian religious poetry as to render it highly improbable that it was written as early as 768.

The argument based on the paucity of references to Arichis is not without force, though it would not be conclusive if it stood alone. The three verse *tituli* composed for Arichis' foundation in Salerno⁹³⁵ all refer to him by name for the purpose of praising him or interceding for him. *Aemula Romuleis consurgunt*⁹³⁶ contains the particularly laudatory passage *Catholicum princeps Arichis, tam corpore pulcher Pectore quamque magis virtute insignis et armis ...Iste pater*

933 Norberg, *Mediaeval Latin Versification*, 33. He lists a series of poets from Alcuin (735-804) to Walafrid Strabo (808-49) who avoided its use.

934 See, for example, P. G. Walsh, ed. and trans., *One Hundred Latin Hymns-Ambrose to Aquinas* (Cambridge, MA: Harvard University Press, 2012) which contains rhymed hymns by Peter Abelard (1079-1142), Adam of St Victor (1112-46) and Philip the Chancellor (1160-1236).

935 Neff, *Gedichte, carm iv* (I-III), 16; these are *aemula Romuleis consurgunt*, *Christe salus, utriusque*, and *haec domus est domini*.

936 *Ibid.*, vv.13-20, 16.

*patriae, lux omne <decusque>*⁹³⁷ *suorum*. This treatment of the dedicatee or addressee of poems is characteristic of Paul; compare, for instance, the concluding adonics of the dedicatory poem accompanying the homiliary which he compiled for Charlemagne '...*luxque decusque Magne tuorum, Carole princeps...arbiter orbis, Dardanidaeque, gloria gentis*'.⁹³⁸ By contrast, *Martir Mercuri* contains but one brief mention of Arichis, though, as with *aemula Romuleis consurgunt*, the name is coupled with the epithet '*insignis*'.⁹³⁹ This choice of epithet may be a faint reminiscence of Paul but may equally well have been dictated by the demands of the rhyme scheme.

5.5.4: Summary

The historical and contextual evidence supporting Paul's authorship of the two hymns is firm, but incomplete. It lacks any indication either that Paul memorialised the events of Constans' invasion of his own accord or that his patron Arichis required him to produce any verse to mark the translation of the saint's relics or his feast day. Without a connection of that nature between Paul and the hymn, the stylistic evidence must prevail. Paul is not known to have composed any other verse containing such an abundance of rhyme, and Leonine rhyme, in particular, is unknown in the early Carolingian period.

5.6 : *Ut queant laxis*

5.6.1 : Description of the hymn

This hymn in the sapphic metre, composed for the feast-day of S. John the Baptist, consists of thirteen stanzas, to which versions of a conventional doxology have been added by some scribes. For liturgical purposes it is divided into three sections, intended to be sung, respectively, at Vespers (stanzas 1-4), Matins (5-8) and Lauds (9-13). Fifteen of the twenty-three manuscript sources listed in *Analecta Hymnica* display some form of division. The hymn achieved widespread popularity, not least because of the use made by the eleventh-century musician Guido d'Arezzo of the initial syllables of the strophes of the first verse (*UT queant laxis REsonare fibris MIRA gestorum FAMuli tuorum SOLve polluti LABia reatum*)⁹⁴⁰ as the basis of the solmization system which, with minor variations and additions, has been used as a teaching aid for singers for almost a millennium. This use was made possible because, in the chant (or a chant) to which *ut queant laxis* was sung, the initial syllables fell on the notes of the so-called 'hard hexachord', in modern parlance, the notes G, A, B, C, D, E, as shown in Figure 1.

⁹³⁷ *Ibid*, 16, where Neff notes in the critical apparatus that '*decusque*' was inserted by Dümmler.

⁹³⁸ *Ibid.*, *carm.* xxxii, 134.

⁹³⁹ In stanza 8, which begins '*Post plures annos Arichis insignis Samniae princeps...*'

⁹⁴⁰ O holy John, release our polluted lips from sin, so that your servants may with loosened [vocal] cords resound the wonders of your deeds.

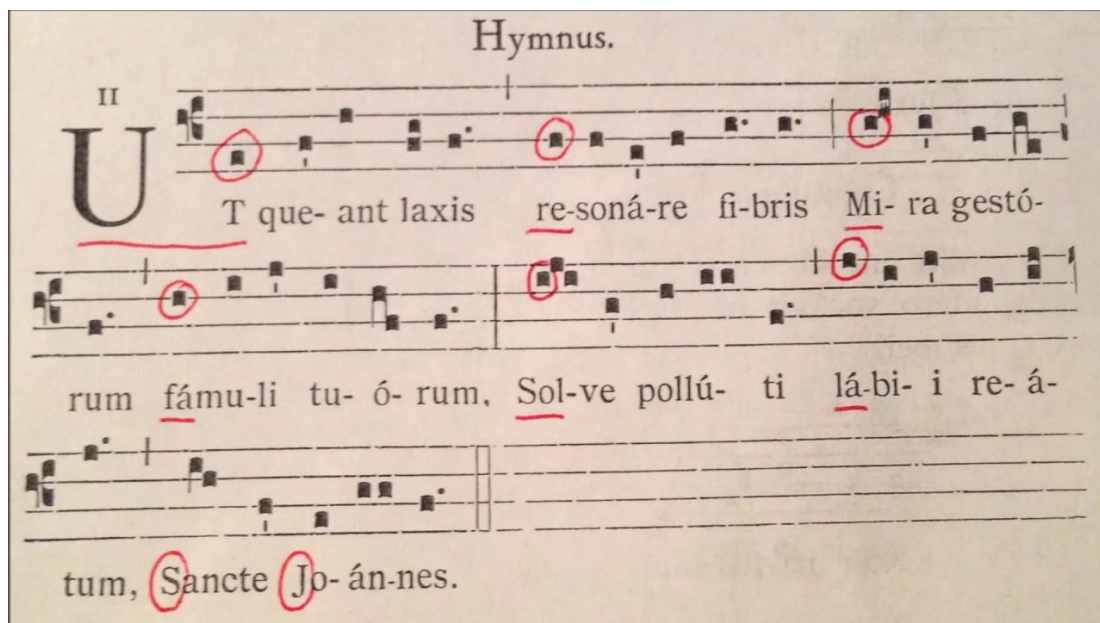


Figure 1: Chant⁹⁴¹, showing the relation between the syllables of the solmization and the progression of the musical scale.

In consequence, the hymn has attracted a good deal of attention from musicologists and other scholars interested in the origin and liturgical uses of the chant rather than the authorship of the text, to which they are indifferent.

⁹⁴¹ From *Liber Usualis, Missae et Officii* (Solesmes: ex Typographeo Sancti Petri, 1896), 868.

5.6.2 : The hymn in context

S. John the Baptist had become an object of veneration in Lombardy during the early seventh century. The basilica dedicated to him in Monza was founded by Queen Theudelinda, the wife of Agilulf (*590-616), and Paul⁹⁴² narrates a story recounting that, when the emperor Constans II⁹⁴³ asked a hermit to prophesy whether he would ever overcome the kingdom of the Lombards, the reply was that 'they could not be overcome in any way, because a certain queen coming from another province⁹⁴⁴ has built the church of S. John the Baptist in their territories, and for this reason S. John himself continually intercedes for them'. There is, therefore, an obvious connexion between the foundation dedicated to the saint and the Lombard royal court, at which Paul received his education at some time during the reigns of Ratchis (744-48), Aistulf (749-56) or both, and at which he was subsequently employed by Desiderius (757-74) during the early part of his reign as tutor to his daughter Adelperga. Paul's poem in praise of the beauties of Lake Como testifies to his knowledge of the area, and Monza is situated roughly half way between Lake Como and Pavia, so he must have been well aware of the existence of the basilica and the legends associated with it.

5.6.3 : The initial attribution and the four major studies of Paul

The earliest attributions to Paul, by Peter the Deacon⁹⁴⁵ and Albericus⁹⁴⁶, date from the twelfth and thirteenth centuries respectively, and the legend of its composition, which is that Paul, having to sing the *Exultet* on Holy Saturday with a sore throat, petitioned for divine aid, as in the restoration of the voice of Zacharias after the birth of his son, John the Baptist, first appears in a late thirteenth century work by Durandus⁹⁴⁷. Of Paul's two biographers, Bethmann⁹⁴⁸ and Dahn,⁹⁴⁹ and the two editors of his verse, Dümmler⁹⁵⁰ and Neff,⁹⁵¹ Bethmann alone makes a case

942 Peters, ed., Foulke, trans., *History of the Lombards*, book V, c.vi., 219. See also book IV, c. xxi at 166, where Paul refers to Theudelinda's dedication of the church which she had built at Modicia (Monza) to the saint.

943 Born 630, he became emperor in 642 and was assassinated in 668.

944 Theudelinda was the daughter of Garibald I (ca 525-96), duke of Bavaria, who married Waltrada, a descendant of the Lething dynasty.

945 Petrus Diaconus, *De viris illustribus casinensibus*, c.8, L.A. Muratori, ed., *Rerum Italicarum scriptores*, vol.6. (Milan: Muratori, 1725): 10-62. He has a well-established reputation as a forger; see H. Bloch, *Monte Cassino in the Middle Ages*, (Rome: Edizione di Storia e Letterature), 977.

946 *Alberici monachi Trium Fontium Chronicon* (Hanover: Leibnitz, 1698): 152.

947 Gulielmus Durandus, *Rationale divinatorum officiorum* (Naples: J. Dura, 1859): 681-82. Durandus, Bishop of Mende, was born ca 1230 and died on 1 November 1296. The story is told in Luke, i, and Zacharias' prophecy following the restoration of his voice is at vv. 67-69.

948 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 258.

949 Dahn, *Paulus Diaconus*, 71, judges Paul's authorship to be inadequately certified (*ungenügend beglaubigt*).

950 *PLAC I* includes *ut queant laxis* in the *Appendix carmina dubiorum*, 83.

951 Neff, *Gedichte*, 152; his words are '*hymnus quoque sancti Iohannis Baptistae* (kann Paulus nicht zugeschrieben werden)'.

for Paul's authorship of *ut queant laxis*. However, Bethmann's argument is not, apparently, based on those early attributions, for he states unequivocally that the document mentioned by Peter the Deacon on which he relies on as evidence in relation to Paul's functions at the Lombard court in the time of Desiderius is false and probably a forgery of Peter's own.⁹⁵² Bethmann is quite unequivocal in his attribution of *ut queant laxis* to Paul; he suggests that Paul perhaps composed it, as well as the Marian hymn *quis possit amplo*, (ML 55) at the ducal court in Benevento,⁹⁵³ stating that the hymn to S. John the Baptist, the patron saint of the Lombards [is] the most famous of his poems, which is still sung throughout the Catholic Church.⁹⁵⁴

However, in his treatment of Paul's works Bethmann states that it is totally unknown when Paul wrote it.⁹⁵⁵ He thus provides no historical context against which the probability of Paul's authorship can be assessed. Dahn, in his survey of the probability of Paul's authorship of a number of prose and verse works, categorises the 'hymnus a S. Johanne' as insufficiently evidenced (*ungenügend beglaubigt*), though he observes that the hymn has an echo of Paul in its language (*doch hat dieser paulinische Anklang in der Sprache*).⁹⁵⁶ Dümmler lists five manuscripts and includes the hymn, together with the alcaic *quis possit amplo*, in the *Appendix carminum dubiorum*.⁹⁵⁷ He dared (as he put it) to attribute both those hymns to more recent authors, but expresses no view as to those authors' identity.⁹⁵⁸ Neff baldly stated that the hymn could not be ascribed to Paul⁹⁵⁹

952 Bethmann, 'Paulus Diaconus Leben und Schriften,' 256; 'die [Urkunden], aber Petrus anführt, ist falsch, und wahrscheinlich von ihm selbst geschmiedet.'

953 *Ibid.*, 258.

954 'Auch sein Lobgesang auf Maria Himmelfahrt mag dieser Zeit angehören; vielleicht auch der auf Johannes der Täufer, den Schutzheiligen der Langobarden, das berühmteste unter seine Gedichten, das noch jetzt von der ganzen katholischen Kirche gesungen wird...'

955 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 290.

956 Dahn, *Paulus Diaconus*, 71.

957 *Ibid.*, *carm. liv*, 83.

958 Dümmler, *PLAC I*, 28. The hymn (*carm. liv*) is at 78 and is followed by the hymn to the Blessed Virgin Mary (*quis possit amplo, carm lv*). 79. It may be that Dümmler took that view because the earliest witness to *ut queant laxis* mentioned by him is urb. lat 532 which, relying on the study by A. Reifferschied, *Bibliotheca Patrum Latinorum Italica* (Vienna: Nachdruck der Ausgabe, 1865-72), he dated to the tenth century.

959 Neff, *Gedichte, carm. xxxvi*, 150-153, at 152. Neff refers to the strong differences of opinion regarding the historical accuracy of the epitaph which, however, are irrelevant to the question of Paul's authorship. The epitaph (containing the acrostic PAULUS LAEVITA, DOCTOR PRAECLARUS ET INSONS) refers to his life and work in general terms but does not identify any particular works or acts.

5.6.4 : Later studies of and views on the authorship of the hymn

In the period since the publication of Dümmler's edition, opinion has been divided. A number of books and anthologies have been compiled in which the hymn is attributed to Paul, but the authors and compilers do not present any evidence or argument in support of that attribution. Duffield referred to it as one of the two hymns bearing Paul Warnefried's name⁹⁶⁰. Dreves, in his article on Paul in *Analecta Hymnica*, found Dümmler's comment that he 'dared to ascribe the hymns to S. John the Baptist and the Assumption of the Blessed Virgin Mary to a more recent author'⁹⁶¹ incomprehensible (*unerfindlich*)⁹⁶² and saw no reason to doubt the earlier attributions or to reject Paul's authorship of this pearl among the Latin hymns. Britt, in his anthology, unequivocally attributed the hymn to Paul.⁹⁶³ Gaselee included it in his edition of the Oxford Book of Mediaeval Latin Verse, stating in his notes that it was almost, but not quite certainly, by Paul,⁹⁶⁴ a view also expressed by Walsh.⁹⁶⁵ Helen Waddell, in the second of her anthologies⁹⁶⁶, stated that among the hymns composed by Paul was the well-known *ut queant laxis* for the festival of St John the Baptist, though she did not include it in the anthology. However, scholarly opinion, from Manitius⁹⁶⁷ onwards, has ranged from cautious to dismissive.

Raby,⁹⁶⁸ referring to the attribution by the twelfth-century author and librarian of Monte Cassino, Peter the Deacon, states that 'it is only a late and uncertain testimony which makes [Paul] the author of a famous hymn in honour of the Baptist'. Szövérfy repeats Raby's comment, observes that the sapphic was one of the favourite verse forms of the Carolingian era, and comments on the poet's special talent for transforming Biblical scenes into classical verse. He remains non-committal and cites opposing views of Paul's authorship, discounting the suggestion that the hymn may have originated in an Irish milieu.⁹⁶⁹ Two subsequent studies

960 S.W.Duffield, *The Latin Hymn Writers and their Hymns*, completed and edited by R.E.Thompson, (New York: Funk and Wagnall, 1889), 365. The other is the undoubtedly authentic *fratres alacri pectore*.

961 Dümmler, *PLAC I*, proemium, 28; which reads '*Hymnus autem de sancto Iohanne Baptista et de assumptione virginis pactos ei vix cum scriptoribus recentioribus attribuere audeo*'.

962 *AH*, vol. 50, 122.

963 Rev. M. Britt, O.S.B., *Hymns of the Breviary and Missal* (London: Burns, Oates and Washbourne, 1922), 254-61. His commentary gives the impression that he took this attribution from the then current edition of the Catholic Encyclopaedia.

964 S. Gaselee, ed., *Oxford Book of Mediaeval Latin Verse* (Oxford: Clarendon Press, 1928), item .23, p.37, and 221, n.23.

965 Walsh, *One Hundred Latin hymns-Ambrose to Aquinas: Introduction*, xiv.

966 H. Waddell (tr.), Dame Felicitas Corrigan, (ed.), *More Latin Lyrics*, (London: Victor Gollancz, 1980), 132.

967 M. Manitius, 'Die Universalen Schriftsteller; 41, Paulus Diaconus' in *Geschichte der Lateinischen Literatur des Mittelalters* (Münich: C.H.Beck, 1911), 257-72. Only two pages (270-71) are devoted to Paul's verse compositions and Manitius refers only to those included in Neff's edition of Paul's poetic works, so there is no discussion of *ut queant laxis*.

968 Raby, *Christian Latin Poetry*, 166. The second footnote to that page refers to the differing views expressed by Dümmler and Dreves on Paul's authorship.

969 J. Szövérfy, *Die Annalen der Lateinischen Hymnendichtung, tom. I*, 186-88; see 187 and n.97 thereto.

express scepticism about Paul's authorship; Brunhölzl⁹⁷⁰ refers to *ut queant laxis* as having in a more recent age been attributed to Paul without sufficient reason; Worstbrock expresses a similar view in the *Verfasserlexikon*.⁹⁷¹ The study by Stella, notwithstanding its title, which, in translation, is "The poetry of Paul the Deacon; new manuscripts and uncertain attributions",⁹⁷² does not attempt to identify any poetic works as being attributable to him. He has found some hitherto overlooked manuscript witnesses for *ut queant laxis*, but as the earliest of these dates from the tenth century, their discovery throws no light on its authorship. Finally, Hornby⁹⁷³ does not offer an opinion about the authorship of the hymn but observes that it is certainly intellectually compatible with the poetic conventions of the late eighth-century Carolingian court.

5.6.5 : Manuscript evidence

Until 1980, no manuscript witness for *ut queant laxis* earlier than the famous Bern, Burgerbibliothek 363, s. ix, had been identified. That manuscript cannot be dated earlier than 836, since it contains the message (composed by Jonas, bishop of Orleans) of the council of Aachen, which was held in February of that year, to King Pippin of Aquitaine.⁹⁷⁴ An earliest date later than 836 for the first witness to *ut queant laxis* would certainly admit as possible authors Hrabanus Maurus (ca 776-856), Walahfrid Strabo (ca 808-49) and Godescalc (ca 805-69), each of whom has composed at least one hymn in the sapphic metre. No earlier witness was thought to exist until, in an article on Guido d'Arezzo in the first edition of the *New Grove Dictionary of Music and Musicians*,⁹⁷⁵ it was stated that 'the text of the hymn *ut queant laxis* is found in an MS of c. 800 (*I-Rvat* Ottob. 532) and by an old tradition is ascribed to Paulus Diaconus'.⁹⁷⁶ Chailley gave more detail about this manuscript in an article published in 1984⁹⁷⁷ which states that the manuscript of *ut queant laxis*, is an endpaper or flyleaf (*page de garde*)

970 F. Brunhölzl, 'Paul Diacre', 20-29.

971 Worstbrock, *Verfasserlexikon*, col. 1183, referring to its attribution to Paul by Dreves in *AH*, vol. 50, 120.

972 F. Stella, La poesia di Paolo Diacono: nuovi manoscritti e attribuzioni incerte, in *Atti del Convegno Internazionale di studi, Cividale del Friuli-Udine, 6-9 maggio 1999*, cur. Paolo Chiesa (Udine: Forum Editrice universitaria udinese 2000), 551-74.

973 E. Hornby, in *The Canterbury Dictionary of Hymnology*, ed. J.R. Watson and E. Hornby, (Norwich: Canterbury Press, 2013) s.v. 'Ut queant laxis'.

974 M. Mostert, *The Library of Fleury : A provisional list of manuscripts* (Hilversum, Verloren Publishers, 1989), entry BF (Bibliotheca Floriacensis), 151.

975 The successor to *Grove's Dictionary of Music*, first published in 1878, compiled by Sir George Grove. It went into six editions before being superseded by the *New Grove*; see the following note for its full citation.

976 C.V. Palisca, 'Guido d'Arezzo' in *The New Grove Dictionary of Music and Musicians*, ed. S. Sadie, (1st edition, 1980) vol. 7, 805. . *I-Rvat* is the siglum used in the *New Grove* to indicate that the manuscript is in the Vatican Library in Rome, Italy.

977 J. Chailley, 'Ut queant laxis et les Origines de la Gamme', *Acta Musicologica* 56, (1984), 48-69.

bound into a manuscript of the thirteenth century.⁹⁷⁸ Chailley's identification of this manuscript (to which he refers as Rome, Vat. Ottob. 532) appears at first sight to be confirmed by the bibliographic references in the BAV manuscripts catalogue,^{979, 980} and by the catalogue of dated manuscripts of nine collections, including the Ottoboni collection, in the BAV.⁹⁸¹ The catalogue entry for Ottobon. 532 (to which it refers as ott.lat 532) states that the manuscript contains 470 folios, is said to originate from Viterbo, is dated 1250, and is entitled 'Biblia sacra cum prologia et argumenta beati HIERONYMI (i.e., St. Jerome), which occupies ff. 7-470 of the manuscript. The entry also includes a footnote entitled 'Precedono' identifying the contents of folios 1v-6, but not 1r. There is no reference to *ut queant laxis* in this footnote but it follows, from the contents as identified from the catalogue entry, that the only place in ott. lat 532 where *ut queant laxis* might have been found is on folio 1r. However, physical examination of the manuscript has established beyond doubt that the text inscribed on folio 1r is not *ut queant laxis*⁹⁸² and, consequently, that ott. lat 532 is not the earliest witness.

However, M. Pierre Chambert-Protat drew my attention to the coincidence that *ut queant laxis* is found in a manuscript in the Vatican Library whose shelf-mark includes the number 532. That manuscript, Rome, BAV urb lat 532, is one of the five which Dümmler mentioned in his *proemium*, though, relying on a then recent study by Reifferscheid,⁹⁸³ he dated it to the tenth century. Subsequent studies have ascribed an earlier date to it. Stornajolo dated it to s. ix-x, identified it as containing a work by Boethius, '*liber contra Eutychem et Nestorium*' and, beginning on f.34, '*Pauli diaconi ode sapphica in laudem s. Ioannis Baptistae*'. He also noted that ff. 35v-39 are blank (*vacua*).⁹⁸⁴ Rand, in his study of the manuscripts of Tours, identified the script as one

978 'A est un page de garde reliée à un ms. du XIII^e siècle', 51.

979 Apart from the reference to Chailley's article (ID 7763), there are three others, one by Marco Palma (ID 67126) confirming the date and place of origin of Ottobon. 532 (the shelf-mark is given in various ways), one by Fossier (ID 126394) confirming that it was a Bible and was in the Ottoboni collection, and one by Garrison (ID 126455) gives the date as 1236 (in agreement with Salmon) rather than 1250 but again states the place of origin as Viterbo. The citations for these articles are given in the next footnote.

980 M. Palma, 'Modifiche di alcuni aspetti materiali della produzione libraria latina nei secoli XII e XIII', *Scrittura e civiltà* 12 (1988), 130; (not 1983, as erroneously given in the Vatican Library bibliographic references); F. Fossier, 'Premières recherches sur les manuscrits latins du Cardinal Marcello Cervini (1511-1555)', *Mélanges de L'École française de Rome, Moyen Age* 91 (1979), 401; E.B. Garrison, 'Random Notes on Early Italian Manuscripts, II', *Bibliofilia, Rivista di storia del libro e di biografia* 91 (1979), 20.

981 J. Ruysschaert, dir., A. Maricchi, ed., *I Codici Latini Datati della BAV*, (Citta del Vaticana: BAV, 1997), 131.

982 I gratefully acknowledge the help of Ilaria Ciolli, a member of the Vatican Library staff, who examined the manuscript on receiving my original request for a photocopy of the text of *ut queant laxis*, and of two scholars, Dr. Francesco Marzella (whose most recent affiliation at that time was as a post-doctoral researcher at the *Università degli Studi dell' Aquila*) and Dr. Pierre Chambert-Protat (at that time, of the *École française de Rome*), both of whom subsequently examined the manuscript and confirmed that it did not include *ut queant laxis* on any flyleaf.

983 A. Reifferscheid, *Bibliotheca Patrum Latinorum Italica* (Vienna: Nachdruck der Ausgabe, 1865-72), 592. Dümmler's edition, in which this study was cited in the *proemium* at p.35, was published in 1881.

984 C. Stornajolo, ed., *Codices Urbinate Latini* tom. II, codices 501-1000 (Rome: Typis polyglottae Vaticanis, 1912), 29.

which came into being before the appointment of Alcuin as abbot of St Martin, Tours (he held that position from 796 till his death in 804) and was the script most employed in the scriptoria there until about 820, after which it was very rarely seen⁹⁸⁵. Rand says, of Stornajolo's study:⁹⁸⁶

I should rather say *saec.* VIII/IX...Possibly the cases of [the abbreviations of the syllable *-tur*] compel a later dating (c.820, but the character of the script seems to me against it.

It might have been written shortly after the appearance of the Reform⁹⁸⁷.

Bischoff's catalogue contains the entry MS urb. lat 532 (Boethius).⁹⁸⁸ It cites Rand, Tours I,⁹⁸⁹ S.101 Nr 20, Tafel 32-33, and Mostert, Nr 1535,⁹⁹⁰ and adds the annotation [Wohl Paris, IX Jh., ca Mitte]. The catalogue does not explain why that annotation dates the manuscript to the mid-ninth-century when the entry cites Rand's study dating it to 820 at the latest.

I have two comments on Rand's dating. The first is that my own examination of a digitised reproduction of Rome, BAV urb. lat 532 shows the syllable *-tur* to be very rarely abbreviated in the manuscript. Of the 177 words ending in that syllable, there are only six instances of the word being abbreviated and they all occur in the tract by Boethius. There is only one word ending in *-tur* in the hymn, that is, *dignetur* in the concluding stanza and *-tur* is not abbreviated. Six abbreviations in a manuscript of thirty-five folios is very slender evidence of its date and must be outweighed by the evidence of the script itself. The second is the possibility, noted by Bannister,⁹⁹¹ that the manuscript originally contained only the tract by Boethius and that *ut queant laxis* was a later addition. However, he considered the writing to be so similar to that of the *corpus libri*⁹⁹² that the addition could be considered, if not just coeval, certainly not much later.

He states it to be earlier than the Bern manuscript, Burgerbibliothek 363, and conjectures that it may have been written when Alcuin was in charge of the scriptorium at Tours, which would date it to 804 at the latest.

Second, if Rand is correct in his dating of Rome BAV urb. lat 532, that would eliminate Walahfrid Strabo (ca 808-49) and Godescalc (ca 805-69) from consideration, though not Hrabanus Maurus. However, it is worth noting that neither any of them, nor any other of the

985 E.K. Rand, *Studies in the Script of Tours I: A survey of the manuscripts of Tours*, vol I (text) (Cambridge, MA: Mediaeval Academy of America, 1929), 38-41.

986 *Ibid.*, 101

987 This is a reference to the programme of reform of the writing of manuscripts instituted by Charlemagne, in which Alcuin, according to Rand, was Charlemagne's chief assistant.

988 B. Bischoff, *Katalog der festländischen Handschriften des neunten Jahrhunderts (mit Ausnahme der wisigotischen, Teil III, Padua-Zwickau)*. Aus dem Nachlass herausgegeben von Birgit Ebersperger (Wiesbaden: Harrasowitz Verlag, 2014), entry 6815.

989 E.K. Rand, *Studies in the Script of Tours- I: A survey of the manuscripts of Tours* (Cambridge, Mass., The Mediaeval Academy of America, 1929).

990 M. Mostert, *The Library of Fleury : A provisional list of manuscripts* (Hilversum: Verloren Publishers, 1989), entry BF (Bibliotheca Floriacensis) 151.

991 H.M. Bannister, 'La piu antica dell' Inno "Ut queant laxis;"' Note ed Appunti, *Liturgia, Rassegna Gregoriana* XI (1912), 272.

992 That is, the original content of the manuscript.

early Carolingian poets, has been proposed as the (or a possible) author of *ut queant laxis*. The doubters have been content to deny Paul's authorship without offering any more plausible attribution.

5.6.6 : Paul's ability to compose in sapphics

The question whether a candidate author is capable of composing in a particular manner is one that sometimes arises in attribution studies. That question arose over the authorship of *Ad Fidolium* and other quantitative poems, which was discussed in chapter 2⁹⁹³. That study also illustrates the limitations of self-ascription as a criterion of authorship, since the rival candidates were Columbanus of Bobbio (563-615) and Columbanus of St Trond who flourished in the early Carolingian era. The existence of an acrostic poem spelling out COLUMBANUS HUNALDO could not resolve that difficulty. The dispute about authorship centred on the ability of Columbanus of Bobbio to write in quantitative metres and on whether, notwithstanding the attribution to him of the *planctus* on the death of Charlemagne, *a solus ortis usque ad occasum*, Columbanus of St Trond ever wrote any poetry at all.

Paul's ability to compose in sapphics has never been directly questioned, but the question is raised indirectly by Licht's expressed doubts on the question whether any of the early Carolingian poets had studied Horace,⁹⁹⁴ and Raby's observation that the author of *ut queant laxis* had given close study to the sapphics of Horace.⁹⁹⁵ Whatever the value of Licht's observations as a generalisation, there is evidence of Paul's knowledge of Horace. Examination of the *apparatus fontium* in both Dümmler's and Neff's editions shows that although the exemplars by which Paul was most strongly influenced in the composition of poems in hexameters and in elegiac couplets were Virgil and, to a lesser extent, Ovid, there are indications of occasional borrowings not only from Horace, but Prudentius, another composer of sapphics. Indeed, Prudentius, like his fourth-century near-contemporary Hilary of Poitiers, had employed the metre in religious poetry,⁹⁹⁶ and its use in hymnody persisted through the Carolingian and into the Ottonian age.⁹⁹⁷

993 M. Lapidge, 'The authorship of the adonic verses "Ad Fidolium" attributed to Columbanus', *Studi mediaevali ser 3*, 18:2, (1977), 249-314; M. Lapidge, 'Epilogue: did Columbanus compose metrical verse? in *Columbanus: Studies on the Latin writings*, ed. M. Lapidge (Woodbridge: Boydell Press, 1997), 274-87; M. W. Herren 'Quantitative Poems attributed to Columbanus of Bobbio', in *Poetry and Philosophy in the Middle Ages*, ed. J. Marenbon (Leiden: Brill, 2001) 99-112.

994 T. Licht, 'Horazüberlieferung in Frühmittelalter', in *Ex Praeteritis Presentia. Sprach-, literatur- und kulturwissenschaftliche Studien zu Wort- und Stoffgeschichten, Festschrift zum 70. Geburtstag von Theo Stemmeler*, ed. M. Eitelmann und N. Stritzke (Heidelberg: Winter 2006): 109-34.

995 F.J.C Raby, *Christian Latin Poetry*, 166; see also stanzas 3 (...*genitus peremptae Organa vocis*) and 4 (...*meritus uterque Abdita pandit*); the capital letters mark the beginning of the last line of the stanza.

996 Hilary of Poitiers (d. 367) and Prudentius (ca. 348-405).

997 P. S. Diehl, *The Mediaeval European Religious Lyric*, (Berkeley: University of California Press, 1985), 67 and 191. Hymns in that metre are attributed to Alcuin, his pupil Hrabanus Maurus (780-856) and Ratpert

Whether or not Raby is correct in stating that the author of *ut queant laxis* had given close study to the sapphics of Horace, the facts on which he relies in so stating are not conclusive. The first is that *ut queant laxis* admits hiatus at the end of stanzas,⁹⁹⁸ and the second is that the caesura is placed after the fifth syllable of each hendecasyllabic line. An example of these characteristics in Horace is the seventh stanza of Ode xii, Book I, which reads:-

defluit saxis | | agitatus umor
 concidunt venti | | fugiuntque nubes
 et minax quod sic | | voluere ponto
unda recumbit

The same characteristics are seen, not only in the second stanza of *ut queant laxis*

nuntius celso | | veniens Olympo
 te patri magnum | | fore nasciturum
 nomen et vitae | | seriem gerendae
ordine promit

but in Prudentius' hymn to the martyrs of Saragossa, in his *Peristephanon*

orbe de magno | | caput excitata
 obviam Christo | | properanta ibit
 civitas quaeque | | pretiosa portans
 dona canistris

Dümmler, in his footnotes to *angustae vitae fugiunt*, (ML 9) whose third verse reads '*per rosulenta magis cupiunt sed ludere prata*', draws attention to Prudentius' *Peristephanon III* which reads at verses 199-200 '*floribus ut rosulenta putes/prata rubescere multimodis*'.⁹⁹⁹ The inference from this apparent borrowing that Paul was acquainted with the *Peristephanon* is supported by Szövérfy's reference¹⁰⁰⁰ to similarities between the poetry of Paul and Venantius Fortunatus, ascribing this to the common influence on them of Prudentius. It follows, therefore, that even if Licht is correct about ignorance of Horace among early Carolingian poets,¹⁰⁰¹ Paul could have written *ut queant laxis* without ever having read a line of Horace, much less having made a close

of St. Gallen, (ca. 865-911).

998 Occurrences of such hiatus are indicated by the vowels in bold type.

999 *PLAC I, carm.v, n.9, 43*. The subject of the poem in *Peristephanon* is S. Eulalia of Merida, a victim of Diocletian's persecution, who was martyred in 304.

1000 J. Szövérfy, *Die Annalen der Lateinischen Hymnendichtung* vol. I, 130, 171.

1001 Dümmler notes one apparent borrowing from Horace, '*securus iam carpe viam*'; cf Horace *Satires II, 6, 93, 'carpe viam*'. It occurs in line 19 of the epitaph to Ansa, *PLAC I, carm. viii, n.6 46*.

study of him. Consequently, the case for Paul's authorship of *ut queant laxis* cannot be dismissed on the basis that he did not have the knowledge to enable him to compose sapphics.

5.6.7 : Can *ut queant laxis* properly be attributed to Paul ?

Those who have doubted Paul's authorship have reasonable grounds on which to do so. The original attribution originates from a chronicle compiled by the unreliable Peter the Deacon at least three centuries after the hymn was composed, and the legend of Paul's petitioning for divine assistance to restore his voice is a clear borrowing from the Gospel story of Zacharias recovering his voice on the occasion of John's birth.¹⁰⁰² There is nothing in the text of the hymn which gives any clue to its authorship or its place and context of composition. Unlike two of the other hymns, and several of the epitaphs and dedicatory verses which account for a substantial part of his verse output, it is not incorporated in any other work by Paul. There is no corpus of verse firmly attributable to Paul with which it can be stylistically compared and if, contrary to the stylistic evidence, Paul had been the author of the other hymn in the sapphic metre, *Martir Mercuri*, any comparison, by statistical testing or otherwise, would inevitably lead to the conclusion that the two poems could not conceivably be the work of the same author.

However, the absence of direct evidence of the nature discussed above does not eliminate Paul from consideration. The author of *ut queant laxis*, whoever he may have been, must satisfy the following three conditions:

- (a) he must have been aware of the particular veneration for the saint
- (b) he must have been able to compose in the sapphic metre
- (c) given the dating of the earliest manuscripts, he must have flourished during the eighth or early ninth century

Paul satisfies all three of those conditions. He was a Lombard patriot who, as the anecdote recounted in *Historia Langobardorum* about Constans' invasion of Italy shows¹⁰⁰³, venerated S. John the Baptist as the Lombards' patron saint and protector, and knew that the religious foundation dedicated to him was created by a Lombard queen. He was an able composer of poems in quantitative metres and, although all the quantitative poems firmly attributable to him are in dactylic metres, he was acquainted with the works of Prudentius, and possibly those of Horace, both composers of sapphics. If Rand's dating of the manuscript Rome, BAV urb. lat 532 to the period 780-820 is correct, he is one of a very small group of possible authors, and that group is not greatly increased in number even if the date of the manuscript is mid-ninth

1002 Luke, i, vv. 12-18, 64-80.

1003 *HL*, Book V, c.6.

century. Further, none of the other composers of verse who satisfy that condition also satisfy the other two.

In relation to the first condition, it is reasonable to assume that it was only the Lombards who had a particular veneration for the saint, and the only other identifiable Lombard versifiers of the period are Peter of Pisa, Paulinus of Aquileia and Fardulf. If Peter ever wrote any hymns, they have not survived; his known poetic corpus consists of his addresses to Paul (*nos dicamus, Christo, lumine purpureo*, and *Paule, sub umbroso*), to Charlemagne, (*Hoc opus, exiguo* and *culmina se regum*), and, if Neff is correct, the abecedarian grammatical poem *adsunt quattuor in prima*. Three of those poems are in dactylic hexameters, one is in elegiac couplets and two are rhythmical. Of the sixteen poems firmly attributed to Paulinus of Aquileia all but two are in rhythmical forms and, in the letter appended to the longer of his two compositions in hexameters, Paulinus acknowledges his own prosodic inaccuracies. Little is known of Fardulf, who was captured when Charlemagne overthrew the Lombard ruler in 774 and was rewarded with the abbacy of S. Denis after uncovering a plot against Charlemagne in 792. Unsurprisingly, the greater part of his minimal output¹⁰⁰⁴ has Charlemagne as its subject. On any view, all of these are infinitely less likely candidates for authorship of *ut queant laxis* than Paul.

Turning to the non-Lombard versifiers of the period, the poetic output of the Anglo-Saxon Wynfrith (or Boniface) consists almost entirely of *Aenigmata* and does not include any dedicatory poems. The small poetic output of the Irishman Josephus Scottus, (d. ca 791-804), at one time a pupil of Alcuin, and subsequently a member of Charlemagne's court consists mainly of acrostic poems but includes one addressed to Liudger,¹⁰⁰⁵ and two relating to Isaiah, on whom he wrote a commentary. There is nothing in the poetic output of two of the other members of the court circle, the Frankish Angilbert (Homer) and Moduin (Naso) which suggests them as likely authors of a hymn to S. John the Baptist. Angilbert appears to have been more concerned with praising his earthly superiors, while Moduin wrote, in accordance with his poetic nickname of Naso, what Dümmler categorises as Eclogues.

The two major poets of the early Carolingian era were the Spaniard, Theodulf of Orléans (ca 760-821) and the Northumbrian Alcuin (ca. 735-804). Of the seventy-three poems firmly, and the six doubtfully attributed to Theodulf in a recent translation of his collected poems,¹⁰⁰⁶ not one is a hymn or is dedicated to a saint, and examination of the *Theodulfi carmina* in Dümmler's

1004 Dümmler, *Fardulfi Abbatis Carmina*, PLAC I, 352-54. For the other minor poets mentioned in the next paragraph, see PLAC I, *Bonifatii carmina* (1-23); *Iosephi Scotti carmina* (149-59); *Angilberti (Homeri) carmina* (355-65); *Nasonis (Muadwini) ecloga* 382-90, *Appendix Ad Nasonem* (391-92).

1005 Subsequently Bishop of Münster (d.809) and, as S. Liudger, known as the Apostle of Saxony.

1006 T.M. Anderson, trans., in collaboration with A. Ommundsen and L.S.B. MacCoull, *Theodulf of Orleans : The Verse* (Tempe, Arizona: Arizona Center for Mediaeval and Renaissance Studies, 2014).

edition¹⁰⁰⁷ shows that only three of the seventy-nine (one of which is considered by both Dümmler and Andersson to be doubtfully attributable to Theodulf) are in sapphics, and King Louis is the subject of all of them. Theodulf, therefore, is a highly unlikely candidate for authorship of *ut queant laxis* both on grounds of his origin and the nature of his preferred subject-matter. Alcuin is a slightly more likely candidate since, although his Northumbrian origins and later employment at Charlemagne's court would not have imbued him with any particular veneration for S. John the Baptist, nine hymns have been attributed to him by Dümmler and by Dreves.¹⁰⁰⁸ Two of Alcuin's hymns are in sapphics, the hymn to S. Vedast, *Christe, salvator hominis*, and the so-called Hymnus Vespertinus, *luminis fons, lux et origo lucis*.¹⁰⁰⁹

Of the early and mid-ninth century hymnographers who would be candidates for authorship of *ut queant laxis* if the earliest witness was dated later than 836,¹⁰¹⁰ three have composed in the sapphic metre. Of the hymns attributed to them in *Analecta Hymnica*, four of the eleven by Walahfrid Strabo,¹⁰¹¹ five of the twenty-six by Hrabanus Maurus¹⁰¹² (one of which is to S. John the Baptist) and one of the six by Godescalc¹⁰¹³ are in that metre.

Even if Stornajolo's dating of Rome, BAV urb. lat. 532 to s. ix-x is to be preferred to Rand's dating as s. viii-ix and not later than 820, so that Bern, Burgerbibliothek 363 would be the earliest witness, none of the writers of hymns who flourished in the ninth century would be a more credible candidate for the authorship of *ut queant laxis* than Paul.

In summary, there is nothing to suggest that any of the fourteen poets discussed in this section is anywhere near as credible a candidate as Paul for the authorship of *ut queant laxis*. I therefore propose that, in the present state of the evidence, Paul should be provisionally accepted as its author, as being the only candidate who satisfies the three conditions of awareness of the particular veneration of S. John the Baptist, ability to compose in Sapphics and having flourished before the date of the earliest witness.

5.7: Conclusion: the authorship of the hymns discussed in this chapter.

It has never been doubted that Paul is the author of *fratres alacri pectore* (ML 26). Scholars from Neff¹⁰¹⁴ onwards have rejected Paul as the author of the other three hymns (namely *Christe, decus mundi*, ML 16, *quis possit amplo*, ML 55 and *ut queant laxis*, ML 64) credited to him

1007 Dümmler, *PLAC I*, 437-576 (*carm. i-lxxv*), followed by an appendix (577-81) of *carmina dubia* (*carm. lxxvi-lxxix*).

1008 J. Szövérfy, *Die Annalen der Lateinischen Hymnendichtung, tom. I*, 189; see *PLAC I*, Alcuini carmina, 160-351, and *AH*, vol. 50, hymns 108-116, 153-159.

1009 Dümmler, *PLAC I*, Alcuini carmina, 160-312; see *carm. lxxxix*, (*Christe, salvator hominis*), 313; *carm. cxxi*, (*luminis fons*), 349.

1010 This is the earliest possible date for the manuscript Bern, *Burgerbibliothek 363*; see section 5.6.5.

1011 *AH*, vol. 50, 167-79.

1012 *Ibid.*, 180-209.

1013 *Ibid.*, 219-28.

1014 Neff, *Gedichte*, 152.

in *Analecta Hymnica*¹⁰¹⁵. However, none of them have either provided a reasoned explanation for rejecting Paul's authorship, or proposed any other candidate. I conclude, on the basis of the matters discussed in this chapter, that Paul is the only known author who is a credible candidate for the authorship of *ut queant laxis* and that he cannot be eliminated from consideration as the author of *quis possit amplo* or *Christe, decus mundi*.

No-one since Dahn has commented on the authorship of the two S. Mercurius hymns, *Martir Mercuri* (ML 41) and *salve, miles egregie* (ML 57). Bethmann considered, but doubted, whether *Martir Mercuri* could be attributed to Paul¹⁰¹⁶, but Dahn totally rejected Paul as author of that hymn and of *salve, miles egregie*.¹⁰¹⁷ As explained above, the extensive use of rhyme (which has not been previously considered in detail) in *Martir Mercuri* eliminates Paul as its author. The author of the two S. Mercurius hymns remains unidentified.

1015 *AH*, vol. 50, 117-124.

1016 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 291.

1017 Dahn, *Paulus Diaconus*, 72.

Chapter 6: Principles of statistical analysis and its use in attribution studies

6.1 : Introduction:

6.1.1 : Authenticity criteria and the identification of style

This introduction to chapters 6-8 builds on chapter 2 of the thesis, in which four types of study of Latin literature dating from the period *ca* 650-820 were reviewed; that period encompassed the whole of Paul's life. Those studies address, in various ways, the problem of identifying the features which characterise the style in which a particular author (A) composes. The aim of that process of identification is to assess, with a reasonable degree of certainty, the likelihood that an unattributed work is the work of A. If there are others (B, C, etc.) who might be considered as possible authors on the basis of non-stylistic evidence, the process must also assess, for each of them, the likelihood that the work can properly be attributed to him, or whether he can be definitely eliminated from consideration.

So the question which arises is, by what process or processes of 'nice examination and comparison with others'¹⁰¹⁸ are the characteristics of the authorial fingerprint¹⁰¹⁹ referred to in section 2.2 to be established? To some extent, it may be possible in a particular case to base an attribution on distinctive features of the style of the candidate author, without resorting to any form of quantitative analysis. The investigator may begin from an intuitive apprehension of the candidate author's style. However, such intuitions need to be tested by a systematic examination of the characteristic features of the style, otherwise there is a danger of falling into the kind of circular reasoning which is liable to lead to erroneous attributions.

The situation now discussed illustrates the difficulties created where attributions are based on a perception (whether arising from 'intuitive apprehension' or otherwise) of the putative author's style:

- (1) a perception of the style of author A has led to a received opinion that a body of work consisting of (say) twenty compositions ($W_1 \dots W_{20}$) is authentically the work of A ('the canon');
- (2) that opinion creates a further perception that a hitherto unattributed work (X) is the work of A;
- (3) non-stylistic evidence comes to light which demonstrates that (say) work W_{13} is not, or is highly unlikely to be, the work of A.

1018 The full quotation from *Boswell's Life of Johnson*, as given in section 2.2, is "Why, Sir, I think every man whatever has a peculiar style, which may be discovered by nice examination and comparison with others: but a man must write a great deal to make his style obviously discernible".

1019 M. Eder, 'Style markers in authorship attribution: a cross-language study of the authorial fingerprint,' *Studies in Polish Linguistics* 6, (2011): 99-114.

Such non-stylistic evidence would cast doubt not only on the inclusion of X in the canon, but on whether each of the other nineteen works has been justifiably included, and whether there was any basis on which the perception of A's style could have been properly founded.

Similar situations arise in other cultural fields, and an essay whose subject is the very large number of works erroneously attributed to the Renaissance composer Josquin des Près (b. ca 1450, d. 1521) on stylistic grounds provides a valuable commentary on the dangers of over-reliance on stylistic arguments for authorship¹⁰²⁰. A study which contradicted the received opinion on a particular attribution is discussed in the following terms:

The crucial aspect ...is that of Josquin's style—or rather, the current perception of it. No musicologist would endorse an attribution to Josquin without at least considering its stylistic plausibility. Yet the modern notion of what is 'typical' of him must necessarily be based on works already accepted as his—or rather, works which have not been called into question. Hence we are continually in danger of accepting works on a stylistic basis that might itself have to come under review. For instance, we might decide to accept work X because of its stylistic similarity to works W₁₂ and W₁₃¹⁰²¹, and might see no problem because the latter are central Josquin works, firmly backed by the scholarly consensus. Yet our decision...would have to be reviewed as soon as W₁₂ and W₁₃ themselves came under suspicion.¹⁰²²

The discussion continues with the observation that the evidence for Josquin as the composer of the motet *Absalon, fili mi* is alarmingly weak in spite of the fact that it has featured very prominently in the received picture of Josquin. That attribution first appeared in a German print from 1540¹⁰²³ compiled by an editor known to have been responsible for several other questionable ascriptions. All later attributions have been conclusively shown to be based on that print, yet the music displays distinctive notational features more plausibly pointing to Josquin's Franco-Flemish contemporary, Pierre de la Rue (1452-1518), in whose circle the earliest and most authoritative copy was written. And yet, in spite of the absence of any substantive evidence of Josquin's authorship, *Absalon, fili mi* has been recorded and marketed as one of Josquin's compositions and widely accepted as 'a cornerstone in the present-day perception of Josquin's musical genius'.

1020 Adapted from R.C. Wegman, 'Who was Josquin?', in *The Josquin Companion*, ed. R. Sherr, (Oxford: Oxford University Press, 2000), 29.

1021 Wegman's notation, changed to correspond to that of the illustrative situation.

1022 J. Rifkin, 'Problems of Authorship in Josquin: Some Impolitic Observations, with a postscript on *Absalon, fili mi*', *Josquin Proceedings* (1986), 46-7.

1023 That is, nineteen years after Josquin's death.

In this context it is pertinent to recall that the attribution to Paul the Deacon of the hymn to S. John the Baptist, *ut queant laxis*, actually originated from the unreliable pen of Peter the Deacon, was embellished many years later with a legend lifted from the Gospel story of the restoration of the voice of the saint's father, Zacharias, and has nevertheless been accepted by several commentators and anthologists despite the total lack of any direct evidence of authorship.¹⁰²⁴ The purpose of that comment is not to deny Paul's authorship but to emphasise the need to base attributions on reasoning based on evidence, whether direct or indirect, rather than uncritically accepting previous attributions.

Such situations can be avoided by assembling a body of work which can be securely attributed to A by non-stylistic evidence, examining that body of work and identifying its distinctive lexical, metrical or other stylistic features. Such a body of work is referred to in what follows, as a 'comparison sample', designated C. Other candidate works for attribution to A can then be examined by comparing their lexical, metrical or other stylistic traits with those of the group C, all of whose members meet one or more non-stylistic criteria of authenticity. This approach was adopted in two of the major studies reviewed in Chapter 2, those by Schaller on Theodulf of Orleans¹⁰²⁵ and by Burghardt on Alcuin¹⁰²⁶. Schaller's study¹⁰²⁷ contains a section devoted to authenticity criticism (*Echtheitskritik*)¹⁰²⁸, and he attributes a poem to Theodulf if it meets any one of his selected authenticity criteria. In that way, Schaller identified twenty-four of the seventy-nine poems included in Dümmler's edition¹⁰²⁹ as meeting one of those criteria, and concluded that twenty-nine of the remainder had sufficient resemblances of style and content to the comparison sample to be safely attributable to Theodulf, and a further thirteen to be highly probably attributable to him. Burghardt's study of Alcuin adopts the same approach, though his authenticity criteria differ somewhat from those selected by Schaller. This is partly because Alcuin, unlike Theodulf, included verse compositions in some of his prose works, and many others were preserved with his letters; Burghardt accepted such inclusion or preservation as a valid authenticity criterion. Chapter 3 contains a discussion of the authenticity criteria used in this study. Table 3.1 identifies the selected authenticity criteria and Table 3.2 lists the criteria met by the twenty-eight poems which are attributed to Paul by both Dümmler and Neff.

1024 The attribution is discussed in detail in Chapter 5, section 5.6.

1025 D. Schaller, 'Philologische Untersuchungen zu den Gedichten Theodulf von Orleans', *Deutsches Archiv für Erforschung des Mittelalters*, 18, no. 1 (1962), 13-91. This study is referred to subsequently by the short title Schaller, 'Theodulf'.

1026 H.-D. Burghardt, *Philologische Untersuchungen zu den Gedichten Alcuins*, (Diss. Phil., Heidelberg, 1960).

1027 Schaller, 'Theodulf', is discussed in chapter 2, study 2.2, section 2.3.4.

1028 *Ibid.*, 15-31.

1029 E. Dümmler, ed., *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini*, vol. I (Berlin: Weidmann, 1881), 437-576.

6.1.2 : Stylistics, stylometry and statistical analysis; an overview

The term 'stylistics' embraces all non-quantitative methods of examination, for instance, the rejection of a candidate author because the text contains features recognisable as being foreign to his style, or acceptance due to recognition of a combination of features known to be characteristic of his style.¹⁰³⁰ Examples of such stylistic features are word lengths, the use or avoidance of certain words or phrases, techniques for forming compound words and preferences for particular word orders, sentence structures, or rhetorical devices.

When the study is not confined to recognition of alien or characteristic features of the examined text, but involves the quantitative measurement, tabulation and analysis of those features, the investigator has entered the realm of stylometry. The history of stylistic and stylometric studies has been recounted in the extremely useful general texts by Love, Williams, Morton and Kenny¹⁰³¹, each of which provides some insight into various numerical and statistical techniques. This study makes that distinction because not all previous investigations have involved the calculation of statistical parameters. In this study, 'numerical' refers to simple counting and tabulation of the occurrence of relevant features, whereas 'statistical' is used to describe studies which involve the calculation of parameters that define, for example, the average (mean) occurrence of stylistic features, the variability of their occurrence (standard deviation), the order of frequency (rank) in which they occur, or the extent to which the features in question are observed to occur differs from that in which they would be expected to occur in the event that the hypothesis tested by the investigator was true (goodness of fit or homogeneity, for which the χ^2 test is employed).

Each of the four studies cited provides a blend of insight into numerical and statistical techniques and a review of studies which had been carried out before, or which were in progress at, the time of their writing. The selected studies portray the then current state of the stylistic art and stylometric science, and illustrate the stylometric methods which had been employed. They clearly show that the great majority of such studies were concerned with prose works, and that the stylistic features most frequently studied were word and sentence length, and aspects of vocabulary which included the frequency of occurrence of selected words and the relative proportions of various parts of speech in the works investigated. A similar picture emerges from two comprehensive bibliographies contained in papers published in 1994¹⁰³² and

1030 H. Love, 'Stylistic evidence', chapter 6, in *Attributing Authorship*, (Cambridge: Cambridge University Press, 2002), 99-101.

1031 H. Love, *Attributing Authorship*; C.B. Williams, *Style and Vocabulary: Numerical Studies* (London: Charles Griffin & Co. Ltd., 1970); A.Q. Morton, *Literary Detection* (New York: Charles Scribner's Sons, 1978); A. Kenny, *The Computation of Style* (Oxford: Pergamon Press, 1982).

1032 D.I. Holmes, 'Authorship Attribution', *Computers and the Humanities*, 28 no. 2 (1994): 87-106.

2007.¹⁰³³ A generally recognised starting-point for the use of numerical methods in attribution studies is the suggestion of the English mathematician Augustus de Morgan in 1851 that the problem of authorship of the Epistle to the Hebrews could be solved by comparing the average number of letters per word in the Greek text of that epistle with that of the other Pauline epistles though, as Love observes, he did not actually carry out those calculations himself¹⁰³⁴; the work was carried out almost a century later by Wake.¹⁰³⁵ Tabular and graphical methods of representing features of style, in particular, word-lengths, became more common in the 1880s, with the American professor Thomas Mendenhall at the forefront of this development,¹⁰³⁶ which he attempted to apply to the question whether plays attributed to Shakespeare were written by either Bacon or Marlowe.¹⁰³⁷ Particularly significant developments in stylometry, using statistical methods, were made during the mid-twentieth century by Yule¹⁰³⁸.¹⁰³⁹ and by Mosteller and Wallace¹⁰⁴⁰ in their important study on the disputed authorship of the Federalist Papers.

While the stylometric studies summarised above were largely devoted to prose works, numerical methods had also been employed by the German scholar, Wilhelm Drobisch, in a comparative study of the use of hexameters by Latin poets, as long ago as 1866¹⁰⁴¹ and continued in 1868.¹⁰⁴² In the first, he studied samples of works by Virgil and fourteen other poets, six of whom he described as Virgilian poets¹⁰⁴³, and eight as non-Virgilian poets.¹⁰⁴⁴ In that study, he calculated the percentage of occurrence of each of the sixteen possible combinations of dactyls (D) and spondees (S) in the first four feet of a hexameter line and it appears from his data that all the poets, with the exception of Ennius,¹⁰⁴⁵ most frequently

1033 J. Grieve, 'Quantitative authorship attribution: an evaluation of techniques', *Literary and Linguistic Computing*, 22 no.3 (2007): 251-70.

1034 Love, 'Craft and science', chapter 8, in *Attributing authorship*, 132-33.

1035 W.C. Wake, 'The Authenticity of the Pauline Epistles: A contribution from statistical analysis', *Hibbert Journal* 47 (1950), 50-55.

1036 T.C. Mendenhall, 'On the characteristic curves of composition', *Science* 214 (1887): 237-49.

1037 T.C. Mendenhall, 'A mechanical solution to a literary problem', *Popular Science Monthly* 60 (1901): 97-105.

1038 G.U. Yule, 'On sentence-length as a statistical characteristic of style in prose, with application to two cases of disputed authorship' *Biometrika* 30 (1938): 363-390.

1039 G.U. Yule, *The Statistical Study of Literary Vocabulary* (Cambridge: Cambridge University Press, 1944).

1040 F. Mosteller and D.L. Wallace, 'Inference and disputed authorship', *Journal of the American Statistical Association* 58 (1963): 275-309.

1041 W.M. Drobisch, 'Ein statistischer Versuch über die formen des lateinischer Hexameters' *Berichte über die Verhandlungen der Königl-Sächsischen Gesellschaft der Wissenschaften, Philologische-Historische Klasse* 18, (1866), 75-139.

1042 W.M. Drobisch, 'Weiter Untersuchungen über die formen des Hexameters des Vergil, Horaz und Homer,' *Berichte über die Verhandlungen der Königl-Sächsischen Gesellschaft der Wissenschaften, Philologische- Historische Klasse* 20, (1868), 16-53.

1043 Lucretius, Horace, Manilius, Persius, Lucan and Juvenal.

1044 Ennius, Cicero, Catullus, Ovid, Horace, Statius, Silius Italicus and Claudianus.

1045 His most favoured combination is SSSS, and two of the next three also begin with a spondee.

employed patterns in which the first foot was a dactyl, particularly favouring the combinations DSSS, DSDD and DDSS. Williams¹⁰⁴⁶ has summarised and analysed Drobisch's data, but it is not immediately apparent either from the original data or Williams' analysis whether metrical patterns can provide a sound basis for distinguishing works of the poets considered by Drobisch to be Virgilian from those he considered to be non-Virgilian. Indeed, a subsequent study by Altmann¹⁰⁴⁷ led to the conclusion that Drobisch was incorrect in assuming that there was a group of 'Virgilian' poets distinguishable from the others by the homogeneity of their style.

More recent specialist studies have been concerned with statistical analysis of prose rhythms and of metrical patterns in quantitative verse. Studies of prose rhythms include Tore Janson's survey of the field of mediaeval Latin prose,¹⁰⁴⁸ Neil Wright's study of the *Epistulae* of Columbanus,¹⁰⁴⁹ and Tunberg's study of *clausulae* in the works of Lorenzo Valla.¹⁰⁵⁰ Janson's study is relevant to the present work in that he had pioneered the approach of comparing the observed frequency (O) of a rhythmical pattern in an author's work with its expected frequency (E), and had argued that chance could be ruled out if O significantly exceeded E. This argument is discussed in Wright's study, which embraces vocabulary, sentence structure, the use of rhetorical figures and of hyperbaton, and includes data on the occurrence of various types of *cursus*. Wright addresses the question whether the percentage occurrence of various *cursus* rhythms in the *Epistulae* of Columbanus could have come about by chance, and expresses scepticism about the validity of Janson's method of calculating expected frequencies of occurrence. He also remarks that he has found the use of the method inconclusive in distinguishing between Columbanus and authors whose works have final *cursus* similar to those of Columbanus.¹⁰⁵¹ Tunberg's study is of interest since his analysis includes calculations of χ^2 for expected and observed occurrences of *clausulae* in the selected works of Valla. It is also appropriate to mention a recent statistical study¹⁰⁵² of one poem, *angustae vitae fugiunt* (ML 9). However, that study is not an attribution study; its authors assume that the poem is the work of Paul. It proceeds on the basis that traditional philology suggests connexions to Catullus,

1046 Williams, *Style and Vocabulary: Numerical Studies*, 116-20.

1047 G. Altmann, 'The Homogeneity of Metric Patterns in Hexameter', in *Hexameter Studies*, R. Grotjahn, (ed.), *Quantitative Linguistics* (11) (Studienverlag Brockmeyer: Bochum, 1981), 137-150.

1048 T. Janson, *Prose Rhythms in Mediaeval Latin from the 9th to the 13th Century* (Stockholm: Almqvist and Wiksell, 1975).

1049 N. Wright, *Columbanus's Epistulae*, in *Columbanus: Studies on the Latin Writings*, ed. M. Lapidge, (Woodbridge, Boydell Press, 1997), 29-92.

1050 T.O. Tunberg, 'A study of *clausulae* in selected works of Lorenzo Valla,' *Humanistica Lovaniensis* 41 (1992), 104-33.

1051 N. Wright, *Columbanus' Epistulae*, 55-57.

1052 C. Forstall, S. Jacobson and W. Scheirer, 'Evidence of Intertextuality: Investigating Paul the Deacon's *Angustae Vitae*', *Literary and Linguistic Computing*, 26(2) (2011), 285-96. Pre-print version accessed 18/4/2016 from <http://llc.oxfordjournals.org/content/26/3/285.abstract>.

identified in the text of the poem. The abstract of the study states that it uses computational methods to evaluate and quantify philological evidence that the poem was influenced by Catullus, which is an interesting suggestion given that he is not mentioned in the critical apparatus to the poem in either Dümmler's¹⁰⁵³ or Neff's¹⁰⁵⁴ edition. The features evaluated were words, characters (i.e., letters) and metrical quantities, and the character-based features¹⁰⁵⁵ were found to be the most reliable. Word-based features had secondary value as refining tools, but metrical data were not found to improve classification.

In 1951, Platnauer published a landmark study of the metrical features of Latin elegiac poetry,¹⁰⁵⁶ and in 1987 his data were re-worked by Greenberg,¹⁰⁵⁷ who subjected them to more detailed analysis, which involved the use of the χ^2 test. As Drobisch had done, Platnauer presented his data in terms of the percentage occurrence of each of the sixteen possible metrical patterns in the hexameter lines of the poets studied, but he also gave the data for the four possible metrical patterns of the first segment of the pentameter lines. The conclusions which he drew were not very far-reaching. He observed a preference for beginning both the hexameter and the pentameter lines with a dactyl in all three poets, with the tendency to do so being strongest in Ovid, less so in Tibullus and weakest (but still over 50% in both types of line) in Propertius. He went on to say that nothing very striking emerged from these observations, except perhaps the comparative 'lightness of the Ovidian openings'¹⁰⁵⁸ (85.4 % dactyls in the openings of the hexameter lines, 83.3% in the pentameters¹⁰⁵⁹).

Greenberg's re-working of Platnauer's data addressed the question whether the fact that a particular foot was dactylic or spondaic had any influence on the metrical form of the contiguous feet, and he applied the χ^2 test to the hypothesis that there was no statistically significant association between the metrical forms of the first and second feet of a line. He found that in Propertius, there was a tendency to metrical alternation in the first two feet of a hexameter line—that is to say, if the first foot was a dactyl, there was a tendency for the second to be a spondee, and vice versa. He found that tendency to exist in a lesser degree in Tibullus and Ovid. Repetition of this test with other contiguous feet of the hexameter line showed that the tendency towards metrical association became weaker towards the end of the line. Finally, he

1053 Dümmler, *PLAC I, carm. viii*, 45-46.

1054 Neff, *Gedichte, carm. viii*, 38-40.

1055 These are what are termed 'n-grams' in the study, that is, strings of letters. So, for example, the sequence of characters 'er' is a bi-gram.

1056 M. Platnauer, *Latin Elegiac Verse: A Study of the Metrical uses of Tibullus, Propertius and Ovid*, (Cambridge: Cambridge University Press, 1951).

1057 N.A. Greenberg, 'Metrics of the Elegiac Couplet,' *The Classical World*, 80, no.4 (1987), 233-241.

1058 M. Platnauer, *Latin Elegiac Verse*, 36.

1059 The data are taken from the table in Platnauer's work, reproduced in Greenberg 'Metrics of the Elegiac Couplet, 233.

applied the χ^2 test to the hypothesis that there was metrical association within couplets; that is to say, whether there was a tendency for a hexameter line beginning with a dactyl or a spondee to be followed by a pentameter line beginning with the same foot. He found no such association in Propertius and very little in Tibullus, but it was somewhat more pronounced with Ovid. However, he did not, apparently, visualise these metrical features as a basis for an attribution study, and his work concludes with the statement that 'analysis of formal characteristics like meter cannot replace critical judgment but it may help to define the boundaries within which criticism takes place'¹⁰⁶⁰.

A recent advance in computational stylometry, to which its originators have given the name 'lexomic analysis',¹⁰⁶¹ differs from more traditional methods in that the analysis is not confined to subsets of words but embraces the entire vocabulary of the text. Instead of searching for similarities among complete texts, a text is divided into segments and the analysis is focused on the relationships between those segments, as expressed by the relative frequencies of occurrence of words in each segment. The authors' stated desideratum is to choose segment boundaries that are approximately consistent with the underlying structure of the text, and they have established, empirically, that the optimum size of a segment is between 750 and 1250 words. Taking smaller segments leads to too many low frequencies of occurrence and a consequent reduction in the reliability of the test, while larger segments can obscure the similarities which the analysis aims to discover. The authors have applied the method to the analysis of Latin hexameter poems of substantial length.¹⁰⁶² However, it is clearly inapplicable to a collection of poems such as those of Paul, where very few contain as many as 500 words.

Stylometric methods have not, so far, been employed in any study of the authorship of poems attributed to Paul, but there is no reason, in principle, why they cannot play a useful part in such a study. This thesis is the first study to apply such methods in the identification of the authentic corpus of Paul's verse, and would be incomplete if it did not do so. However, it is necessary to be conscious of the limitations of those methods. A general limitation is that such methods can never provide certainty in the same way as, for instance, the existence of unchallengeable evidence of commissioning (as in Paul's epitaphs to the members of Charlemagne's family)¹⁰⁶³ or of historical facts which eliminate the candidate author from consideration (as in the events related in the poem *dux, via, vita, tuis* (ML 24) which took place

1060 Greenberg, 'Metrics of the Elegiac Couplet,' 241.

1061 S. Downey, M.D.C. Drout, V.E. Kerekes and D.C. Rattle, 'Lexomic Analysis of Medieval Latin Texts,' *Journal of Medieval Latin* 24 (2014), 225-275.

1062 For instance, the ninth-century poem *Waltharius*, in K. Strecker, ed., *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini* 6.1 (Weimar: Hermann Bohlaus Nachfolger, 1951): 1-85. The poem consists of 1456 verses, and was analysed in eleven 750-word segments, and *De planctu naturae*, edited with an introduction by N.M. Häring in "Alan of Lille, 'De planctu Naturae,'" *Studi medioevali*, ser. 3, 19 (1978), 797-879. The work is in alternating prose and verse sections and was analysed in twenty-two 750-word segments.

after Paul's death)¹⁰⁶⁴. They can only provide a probability that the hypothesis tested, which is usually that the candidate is the author of the work in question,¹⁰⁶⁵ is true. The more specific limitations of such studies are discussed in section 6.3.

6.1.3 : The body of work and the metrical data to be analysed in this study

In this thesis, the subject of Chapter 7 will be a statistical study of the metrical characteristics of the twenty-three poems in dactylic metres attributed to Paul by both Dümmler and Neff. As will be explained in section 6.2, the chosen metrical characteristic is the occurrence of spondees and dactyls in the first four feet of hexameters, and in the first two feet of pentameters. In the corpus of verse associated with Paul, there is no other group of a sufficient size in any other metre to permit meaningful statistical analysis. Those twenty-three poems constitute the comparison samples against which the likelihood of Paul being the author of a questioned work in the same metre is tested. Eight of them are composed in hexameters and fifteen in elegiac couplets; of these, three are epanaleptic and are analysed separately from the twelve which are not.

That distinction is a necessary consequence of the rules of prosody for a dactylic pentameter. The pentameter line consists of two hemistichs, each of two and a half feet. Designating the four complete feet as F1-F4, in the first hemistich, F1 and F2 may each be either a spondee (S) or a dactyl (D), so there are four possible metrical combinations, SS, SD, DS and DD, but F3 and F4 must both be dactyls (DD). In a hexameter line, the same four combinations of F1 and F2 are permitted, since any of the first four feet may be either a dactyl or a spondee. However, in an epanaleptic elegiac couplet, the first hemistich of the hexameter line is replicated in the second hemistich of the pentameter line, and so the only permissible metrical pattern for F1 and F2 of the hexameter line of the couplet is DD, as in the following example from the opening of Paul's poem in praise of S. Benedict:

F1		F2		F3		F4		F5		F6	
-- u u		-- u u		-- u u		-- u u		-- u u		-----	
Ordia		unde tu		os// sacer		O Bene		dicte, tri		umphos	
F1		F2		F3		F4					
-- --		-- u u		--		-- u u		-- u u		--	
Virtu		tum cumul		os//		ordiar		unde tu		os	
											?

The total amount of data provided by those twenty-three poems is small. The eight poems composed in hexameters have a total length of 174 verses, while the fifteen poems in elegiac

1063 These appear in the *Liber de Episcopis Mettensibus* commissioned by Charlemagne's archchaplain and bishop, subsequently archbishop of Metz, Angilram.

1064 Included among the *Carmina Pauli* by Migne, *PL*, vol. 95.

1065 The so-called 'null hypothesis of authenticity'; see Kenny, *Computation of Style*, 109.

couplets consist, in total, of 234 couplets made up of a hexameter followed by a pentameter. Of those, the epanaleptic poems account for ninety-nine and the remainder, 135. Very few of the poems doubtfully attributed to Paul are of a length sufficient to justify statistical analysis. The longest hexameter poems are *qui sacra vivaci* (sixty-two verses) and *hausimus altifluo* (thirty). Only three of the poems in elegiac couplets are of thirty or more couplets, these being the non-epanaleptic *aegrum fama fuit* (thirty-four)¹⁰⁶⁶ and two epanaleptics, *dux, via, vita, tuis* (seventy-two) and one poem to S. Scholastica, *sponsa decora Dei* (forty). Although the other S. Scholastica poem, *O Benedicta soror*, is of only twenty-two couplets, it has been included in the analysis because of the disagreements as to whether Paul was the author of either, and whether both are the work of the same author.

In the dactylic hexameter, any of the first five feet (F1-F5) may be a dactyl or a spondee, but it is almost invariably the case that F5 is a dactyl. Consequently, the data used in previous studies of metrical patterns in hexameter poems is the frequency of occurrence of dactyls and spondees in the first four feet of the hexameter, F1-F4^{1067, 1068}.

There are sixteen possible combinations of dactyls and spondees in F1-F4; viz.:

SSSS (8)¹⁰⁶⁹; SSSD, SSDD, SDSS, DSSS (9); SSDD, SDDS, SDSD, DSDD, DSSD, DDSS (10)
 DDDS, DDSD, DSDD, SDDD (11); DDDD (12)

In the studies by Drobisch and by Orchard, the analyses were carried out on large samples of the hexameter verses of the authors studied. Drobisch analysed samples of between 400 and 650 verses of the work of classical Latin poets, and Orchard analysed the metrical patterns in the entire corpus of Aldhelm's hexameter poems, amounting to 4,170 verses, and of other Anglo-Latin poets ranging from 213 to 796 verses, as well as samples of 500 verses from Bede, Wulfstan and Alcuin. However, as explained in sub-section 6.2.3, below, it is questionable whether a reliable conclusion could be reached by an analysis of the distribution of the much smaller amount of data provided by the hexameter poems of Paul among the sixteen categories corresponding to the permitted metrical patterns. The same considerations apply to the hexameter verses of the poems composed in elegiac couplets. A reduction in the number of

1066 If the three fables are taken together as a composition by one author, the inclusion of *quaerebat maerens* (seven couplets) and *temporibus priscis* (five) brings the total up to forty-six couplets.

1067 W.M. Drobisch, 'Ein statistischer Versuch über die formen des lateinischer Hexameters,' 75-139.

1068 A. Orchard, 'A statistical survey of Anglo-Latin Verse', in *The Poetic Art of Aldhelm* (Cambridge: Cambridge University Press, 1994), Appendix 5.2, 293-98.

1069 Numbers in brackets are the number of syllables in feet F1-F4 corresponding to the metrical patterns.

categories from sixteen to five (corresponding to the possible number of syllables in F1-F4) has the potential to improve the reliability of the test.

It is also possible to study the metrical patterning of the pentameter verses of the elegiac couplets, but the scope of the analysis is more restricted because spondees are permitted only in F1 and F2 and, as noted above, there are only four permissible metrical patterns, SS (four syllables), SD and DS (five) and DD (six). The potential improvement in reliability achievable by analysing the data in terms of syllable count instead of metrical pattern count is small, since the number of categories among which the data are distributed is reduced only from four to three.

6.2: The statistical method employed in this study

Note on statistical terminology.¹⁰⁷⁰

6.2.1: Introduction

The early studies by Drobisch did not involve the calculation of any statistical parameters, but Williams, in his discussion of those studies, suggested two approaches to the statistical analysis of metrical patterns.¹⁰⁷¹ One was to calculate the extent to which the percentage frequencies of occurrence of each of the sixteen metrical patterns in the hexameter verses of the selected authors differed from the value of 6.25% which would be observed if each of the sixteen patterns occurred with the same frequency. He concluded that 'the standard deviation¹⁰⁷² of the different sequence percentages becomes a standard measure of the extent to which a poet distributes his choice evenly or unevenly among the alternative rhythmic sequences'¹⁰⁷³ but does not suggest that a verse composition could be attributed to a specified poet or group of poets on the basis of any such calculations.

The other approach was to compare the rank, that is, the order in which the metrical patterns appear in the verse samples from the authors studied. Such data are known as 'ordinal data'. Although procedures had been devised to test whether differences between sets of ordinal data from different sources were significant,¹⁰⁷⁴ Williams did not employ them, and his conclusion is that poets may be distinguishable from one another by the rank of the sequences which are in the middle of the ranking order rather than at the extremes. Poets, he says, 'appear to resemble each other more closely in their loves and their hates than in their indifferences'¹⁰⁷⁵. Similarly, in a more general discussion of the theory of stylometry, Morton has said 'Authors are identified not by the habits in which they resemble each other but by the habits in which they differ from each other'.¹⁰⁷⁶

Drobisch's data were also re-worked by Altmann.¹⁰⁷⁷ Although Altmann acknowledged that the usual method of computing homogeneity was the chi-square test, the test criterion which he employed was the *minimum discrimination information statistic*, designated by the symbol 2I. He

1070 All statistical terms used in the text are defined when they first occur. The definitions are also collected together in section 1.1 of the Glossary.

1071 Williams, 'Verse, Rhyme and Rhythm', *Style and Vocabulary: Numerical Studies*, 117-121.

1072 This is a measure of dispersion, that is, the extent to which individual values of the data differ from their mean or 'average' value.

1073 *Ibid*, 120.

1074 F. Wilcoxon, 'Individual comparisons by ranking methods,' *Biometrics Bulletin* 1 (1945), 80-83; F. Wilcoxon, *Some Rapid Approximate Statistical Procedures*, 1957. Revised, with R.A. Wilcox, 1964 (Pearl River, N.Y: American Cyanamid, 1957).

1075 Williams, 'Verse, Rhyme and Rhythm', *Style and Vocabulary: Numerical Studies*, 121.

1076 Morton, *Literary Detection*, 74.

1077 Altmann, 'The Homogeneity of Metric Patterns in Hexameter,' 137-150.

apparently saw the advantage of the method as being the simplicity of the calculation of $2I$, since he states that 'The computation consists merely of additions since extensive tables are available'.¹⁰⁷⁸ The test is credited to him by Orchard,¹⁰⁷⁹ but the bibliography in Altmann's article clearly shows that he was applying a statistical test which had been in use in other types of investigation for over twenty years,¹⁰⁸⁰¹⁰⁸¹ However, it may well be that he was the first person to use it in a study of metrical homogeneity. In his article, he uses that term in two senses, which are referred to in what follows as *internal homogeneity* and *composite homogeneity*.

Complete internal homogeneity (*total stereotypy*, in Altmann's phrase) would occur if the work being analysed displayed only one of the possible metrical patterns. However, if the question is whether the distribution of metrical patterns in a questioned work (q) indicates a high or a low probability that q is the work of the author with whose authentic work it is being compared, the test is a test of composite homogeneity between q and the comparison sample, C. Altmann's article contains a series of worked examples of the tests for both types of homogeneity. His test of internal homogeneity of an extract from the *Georgics* led him to conclude that the extract was not internally homogeneous, and he concluded, from his tests of composite homogeneity, that two works by the same author (Horace's *Epistulae* and *Satires*) were metrically homogeneous, but that a selection of extracts from the range of classical Latin authors considered by Drobisch to be 'non-Virgilian' were not metrically homogeneous¹⁰⁸². From the latter test he also concluded that the assumption of Drobisch that there is a group of 'Virgilian' authors identifiable by the homogeneity of their metrical styles was not borne out.¹⁰⁸³ This conclusion reinforces that drawn from the less quantitative approach of Williams, from whose tabulated data it is apparent that the standard deviations do not fall into distinct 'Virgilian' and 'non-Virgilian' ranges.¹⁰⁸⁴ Neither of these approaches to the use of metrical

1078 *Ibid.*, 139. The tables are the tables of natural logarithms and of the quantity $2n \ln n$ which are required in order to calculate Altmann's minimum discrimination information statistic.

1079 Orchard, *Aldhelm*, 89.

1080 H.H. Ku, 'A note on contingency tables involving zero frequencies and the $2I$ test,' *Technometrics* 5 (1963), 398-400.

1081 S. Kullback, M. Kuppermann and H.H. Ku, An application of information theory to the analysis of contingency tables, with a table of $2n \ln n$, $n = 1-10,000$, *Journal of Research, National Bureau of Standards*, section B, 66b (1962), 217-243.

1082 Altmann, 'The Homogeneity of Metric Patterns in Hexameter', at 139-140 (*Georgics*) and 142-43 (*Horace*),

1083 Drobisch, 'Ein statistischer Versuch über die Formen des Lateinischen Hexameters,' 73-139. The authors in question are Virgil, Horace, Lucretius, Manilius, Persius, Juvenal and Lucan.

1084 The range for the 'Virgilians' is 2.50 (Manilius) to 4.88 (Persius) and, for the 'non-Virgilians' is 3.51 (Silius Italicus) to 7.80 (Catullus), with two others (Statius and Ovid) having standard deviations within the 'Virgilian' range.

pattern data in authorship studies has gained any general currency. There is a single published example which uses calculations of the type employed by Altmann,¹⁰⁸⁵ but, despite the claimed simplicity of its calculation, the *minimum discrimination information statistic* (2I) is not mentioned as an alternative to the χ^2 test in standard textbooks on statistics.¹⁰⁸⁶

6.2.2 : The χ^2 (chi-squared) test

In an attribution study which employs statistical analysis of stylistic characteristics, the issue to be determined is whether the observed frequencies of occurrence (O) of the selected characteristics of the questioned work (q) are those which would be expected (E) if q was the work of the candidate author (A). Such a study can be attempted only if there is a body of work established by non-stylistic evidence as the authentic work of A, (referred to in this study as the comparison sample, and designated C) with which the questioned individual work (q) or body of work (Q) can be compared, and there are quantifiable characteristics common to both. Examples of such quantifiable characteristics which could be used in attribution studies of verse compositions are the frequencies of occurrence of certain words or phrases, particular grammatical constructions, hiatus, elision or metrical patterns. The χ^2 test may be employed, using those frequencies of occurrence, as a test of either goodness of fit or homogeneity. A goodness of fit test measures how well a single population, such as q (or Q) conforms to a predicted distribution (in this case, the distribution of C) of frequencies of occurrence of the selected categories. A test of homogeneity addresses the question whether two samples, such as C and q (or Q) belong to the same population. The test has been generally used in authorship studies as a test of homogeneity, the null hypothesis, sometimes referred to as 'the hypothesis of authenticity', and designated H_0) being that C and q belong to the same population. That epithet must be used with caution, because it conflates the result of the test with the inference which it is permissible to draw from the result.

In testing the null hypothesis (H_0) that C and q belong to the same population, the question being addressed is whether the differences between the observed frequencies of occurrence of the characteristics being analysed and the frequencies to be expected if H_0 were true are so substantial (or significant) that it must be rejected. The value of χ^2 calculated from those differences is a measure of the probability that H_0 is true. The significant results are those which

1085 Orchard, *Aldhelm*, 88-89, n.62, where he concludes that Aldhelm's *Carmina Ecclesiastica* and *Carmen de Virginitate* are metrically homogeneous with each other but that neither is metrically homogeneous with the group of his poems known as *Enigmata*.

1086 See, for example, G.W. Snedecor and W.G. Cochran, *Statistical Methods* (Ames, Iowa: Iowa State University Press, 7th edn., 1980); T.H. Wonnacott and R.J. Wonnacott, *Introductory Statistics* (New York: John Wiley, 5th edn., 1990); S. Boslaugh, *Statistics in a Nutshell* (Sebastopol, CA: O'Reilly Media, 2nd edn., 2013). This is a very substantial 'Nutshell' since the main text runs to 472 pages.

lead to the conclusion that H_0 is false, from which we may properly infer that, as C and q do not belong to the same population, the author of C (who will be the candidate author) is not the author of q. It is not permissible to infer, from a test result which fails to reject H_0 , that the author of C is the author of q; consequently, the test of the so-called 'hypothesis of authenticity' reveals with certainty only the cases in which q is not the authentic work of the author of C.¹⁰⁸⁷

We may distinguish between two types of quantifiable characteristics; they may be, in statistical language, either categorical variables or continuous (sometimes called numerical) variables. The physical characteristics of (say) the adult inhabitants of a particular town provide an illustration of the distinction. If those inhabitants are classified by eye-colour (say, blue, green, grey, brown and 'other'), we have divided them into five categories. If they are classified by height, there is a continuous range of heights from (say) 130 to 190 centimetres, though those data could be divided into categories corresponding to (say) 10cm ranges of height. The χ^2 test, first devised by Pearson,¹⁰⁸⁸ is one of the tests most frequently used in the study of relationships between categorical variables. There are several variations of it, involving various adjustments and corrections¹⁰⁸⁹ but this study does not employ any of them.

It appears to be accepted that, over a wide variety of situations in which such testing is employed, the null hypothesis should not be rejected unless the test indicates a probability of less than 0.05 that it is true. Subject to one important exception, this level of significance is generally thought appropriate in literary studies. Kenny has said that:

If one is attempting to prove the inauthenticity of a work widely attributed to an author, it will clearly be important to make one's case as strong as possible and to disregard any evidence which might be attributed by critics to mere coincidence; an 0.01 α ¹⁰⁹⁰ under a null hypothesis of authenticity will therefore be more suitable than a 0.05 one¹⁰⁹¹.

That statement must be treated with caution for two reasons. The first is that if the wide acceptance is simply due to a general perception of the author's style, it may more readily be discounted.¹⁰⁹² However, if it is founded on firm non-stylistic evidence, then the test must yield a very high level of stylistic difference (quantified by a significance level of 0.01) in order to displace the hypothesis of authenticity. The second is that any chosen probability level should

1087 This is discussed in section 6.3.1.

1088 K. Pearson, 'On the criterion that a given system of deviations from the probable in the case of a correlated system of variables is such that it can be reasonably supposed to have arisen from random sampling', *Philosophical Magazine*, series 5, 50 (1899), 157.

1089 See, e.g., Boslaugh, *Statistics in a Nutshell*, 127-138.

1090 Kenny uses this symbol to designate the significance level, that is, the level of probability at which the null hypothesis is to be rejected.

1091 Kenny, *The Computation of Style*, 109-110.

1092 See sub-section 6.1.1, above.

not be treated as a bright line which dictates the decision whether or not to attribute q or Q to the candidate author, according to the side of the line on which the probability falls.¹⁰⁹³

6.2.3 : The choice of metrical data

In the studies by Drobisch on the classical Latin poets, and by Orchard on the Anglo-Latin poets discussed in sub-section 6.1.3, the data collected were the frequencies of occurrence of the sixteen possible combinations of dactyls and spondees in the first four feet (F1-F4) of a hexameter line. Neither study had the object of attributing a work, or body of work, to a particular author. Altmann's analysis of Drobisch's study led him to conclude that the authors described by Drobisch as 'Virgilian' did not constitute a homogeneous group, though he did not rule out the possibility that a differently constituted group might do so¹⁰⁹⁴. Orchard concluded that, of the three bodies of Aldhelm's hexameter verse, *Carmen de Virginitate*, *Carmina Ecclesiastica* and *Enigmata*, the first two were metrically homogeneous, but *Enigmata* was not metrically homogeneous with either. Although he discussed some poems of doubtful authorship,¹⁰⁹⁵ he did not use the statistical data to investigate whether any of them might be attributed to any of the Anglo-Latin poets whom he studied.

Of the sixty-eight poems associated with Paul, only twenty-eight have been securely attributed to him.¹⁰⁹⁶ The existing evidence of the authorship of the other forty does not include any form of statistical study, and the questions which this and the following chapter addresses are whether, and, if so, how the analysis of metrical data might be employed as an aid to attribution and the extent to which reliance may be properly placed on such analysis.

The χ^2 test involves the calculation of expected frequencies of occurrence. A good deal of attention has been paid to the effect of low expected frequencies of occurrence on the reliability of the test and a number of so-called 'expected count conditions' have been proposed which are required to be satisfied if the χ^2 test is to be used. In particular, there is a considerable body of opinion which maintains that the test is not appropriate where any cell (that is, any entry in a table of expected frequencies of occurrence) has an expected value of less than one, or more than 20% have a value of less than five. However, that requirement does not appear to have any theoretical basis¹⁰⁹⁷, and an expected count condition is sometimes referred to as a rule of

1093 This is discussed in detail in sub-section 6.3.3, below.

1094 Altmann, 'The Homogeneity of Metric Patterns in Hexameter,' 144-45. The authors whose verse he analysed were Virgil, Horace, Lucretius, Manilius, Persius, Juvenal and Lucan.

1095 See Orchard, *Aldhelm*, for the epitaph to Bugga, the daughter of Centwine, a seventh-century king of Wessex, at 243-48.

1096 See section 4.7, above.

1097 Morton, *Literary Detection*, 25, has proposed a theoretical basis for the condition, but it is not generally accepted,

thumb¹⁰⁹⁸ or a working rule.¹⁰⁹⁹ The debate about the validity of χ^2 tests which do not meet such conditions, and the correct formulation of such conditions, remains unresolved.¹¹⁰⁰

Where a relatively small set of data is distributed among a large number of categories, it is very likely that expected count conditions will not be met. If categories are combined, the distribution of the data among that reduced number of categories will avoid or minimise that likelihood. Kenny has suggested that if a problem of this kind arises, it can usually be overcome by combining categories.¹¹⁰¹ However, the manner in which categories are to be combined must take account of the nature of the data. It might, in any given case where the data are initially distributed among sixteen categories (1-16) be acceptable to combine them arbitrarily into four larger categories (I-IV) such that I contains 1-4, II contains 5-8, and so on, but that would not be appropriate for metrical patterning data; the combined categories must in some way reflect or preserve the structure of the original data. The treatment of the data devised for this study is to analyse the occurrence of syllable counts, rather than full metrical patterns, in F1-F4. If all four feet are spondees, those feet will contain eight syllables in total. Each spondee that is replaced by a dactyl increases the syllable count by one, until we reach the pattern of four dactyls, when there are twelve syllables. Thus, sixteen categories of metrical pattern are combined into five categories of syllable count, and, as the worked examples in the next sub-section show, it is possible to reduce the number of categories even further.

6.2.4 : An illustration of the use of the χ^2 test as an aid to attribution

The illustrative calculations relate to the authorship of the verse history, composed in hexameters, of the bishops of Metz, *qui sacra vivaci*, (ML 54). The principal reason for attributing it to Paul is that he is indisputably the author of the prose history, the *Liber de Episcopis Mettensibus*. The authorship of the poem has been much disputed; Dümmler included it among the *Carmina Petri et Pauli*,¹¹⁰² but Neff denied Paul's authorship at some length, attributing it to Angilram, bishop of Metz and archchaplain to Charlemagne during Paul's stay at the court

1098 Kenny, *The Computation of Style*. 117.

1099 Snedecor and Cochran, *Statistical Methods*, 77, propose, as a working rule, the condition that no expected count should be less than 1 but that two extreme expectations may be close to 1 provided that most of the expected values exceed 5.

1100 D. Lewis and C.J. Burke, 'The use and misuse of the chi square test', *Psychological Bulletin*, 46 (1949), 433-489; W.G. Cochran, 'Strengthening the chi-square test', *Biometrics* 14(1954), 480; K.L. Delucchi, 'Use and misuse of chi square test: Lewis and Burke revisited', *Psychological Bulletin* 94 (1983), 166-176; K.L. Delucchi, 'On the Use and Misuse of chi-square' in G. Keren and C. Lewis (eds.), *A Handbook for Data Analysis in the Behavioral Sciences: Statistical Issues*, (Hillsdale, New Jersey: Laurence Erlbaum Associates, 1993): 295-318.

1101 Kenny, *The Computation of Style*. 117-18.

1102 Dümmler, *PLAC I*, 27-86, *carm. xxv*, 60-61.

(782-786/7), who commissioned the prose history.¹¹⁰³ The arguments for and against Paul's authorship were discussed, above, in sub-section 4.7.3 of this thesis.

Fortunately, this poem is the longest of the hexameter poems which have been doubtfully attributed to Paul. Accordingly, it is the most suitable as the subject of illustrative calculations. The test data for the first of these is the observed frequencies of occurrence (O) of each of the sixteen possible metrical patterns for the questioned poem (q), *qui sacra vivaci* (ML 54), and comparison sample (C) consisting of the poems composed in hexameters which are securely attributable to Paul. Table 6.1 presents those observed frequencies of occurrence and the results of all the calculations necessary to determine the value of χ^2 for the null hypothesis (H_0) that the questioned poem (q), *qui sacra vivaci* (ML 54) belongs to the same population as the comparison sample (C) consisting of the poems composed in hexameters which are securely attributable to Paul. The commentary which follows Table 6.1 explains the calculation process.

1103 Neff, *Gedichte, Anhang, carm.v*, 186-90.

Table 6.1: Full metrical pattern data for *qui sacra vivaci* (q) and the comparison sample of Paul's authentic hexameter compositions (C), and calculation of χ^2

Note:

- (1) In Tables 6.3-6.5, q and C have the same meanings as in Table 6.1.
- (2) Although, in reality, an expected value would be a whole number, the expected values calculated have not been rounded up or down to the nearest whole numbers. The effect on the calculated value of χ^2 is minimal.

	(O)			(E)		O-E ¹¹⁰⁴	O-E ² /E	
	q	C	t1	q	C		q	C
Pattern								
SSSS	3	6	9	2.327	6.763	0.763	0.250	0.087
SSSD	2	9	11	2.845	6.155	0.845	0.251	0.087
SSDS	4	11	15	3.879	12.121	0.121	0.004	0.001
SDSS	7	14	21	5.431	15.569	1.569	0.453	0.158
DSSS	9	17	26	6.724	19.276	2.276	0.770	0.269
SSDD	0	4	4	1.034	2.966	1.034	1.034	0.373
SDSD	4	2	6	1.552	4.448	2.448	3.861	1.348
SDDS	1	6	7	1.810	5.190	0.810	0.362	0.127
DDSS	6	32	38	9.827	28.173	3.827	1.490	0.520
DSDS	8	21	29	7.499	21.501	0.501	0.033	0.012
DSSD	6	13	19	4.913	14.087	1.087	0.240	0.084
DDDS	1	13	14	3.620	10.380	2.620	1.896	0.662
DDSD	1	11	12	3.104	8.896	2.104	1.426	0.498
DSDD	5	8	13	3.362	9.638	1.638	0.798	0.279
SDDD	1	3	4	1.034	2.966	0.034	0.001	0.000
DDDD	2	2	4	1.034	2.966	0.966	0.902	0.315
t2	60	172	232				13.071	4.820
χ^2							17.891	

The steps in the calculation of χ^2 are as follows:

- 1) Tabulate the observed frequencies of occurrence (O) of each of the sixteen possible metrical patterns in q, C and their total (T), which is the number in bold italic in column t1 and row t2 of the table. The tabulated values of O (in bold type) are a contingency table. It is usual to include the row and column totals in a contingency table but they are not part of it.
- 2) Calculate the frequencies of occurrence which would be expected if H_0 is true. This requires two steps:
 - (a) Calculate the fraction of T attributable to each of the two sets of data which are being compared; in this case, q and C. The respective column totals are 60 and 172 (these being the total numbers of verses in q and in C). In this case, the

¹¹⁰⁴ This will be the same for q and C; one will have a positive and the other, a negative value.

fractions attributable to q and C are, respectively, $60/232 = 0.259$ and $172/232 = 0.741$.

(b) For each category of data, multiply the row total (given in column t1) by 0.259 to get the expected value (E) for q and by 0.741 to get the expected value for C.

For example, there are thirty-eight occurrences of the pattern DDSS. The expected value for q is $0.259 \times 38 = 9.287$ and for C it is $0.741 \times 38 = 28.173$.

3) Calculate $|O-E|$ for each category, square it, and divide it by the expected value for that category. $|O-E|$, so written, is its modulus, that is, the magnitude of the difference irrespective of whether it is positive or negative. The table does not contain separate columns for q and C because (subject to very small rounding errors in the calculation), O will exceed E for either q or C by the same amount as it falls short for the other.

4) Calculate χ^2 , which is the sum of the values of $|O-E|^2/E$ over all the categories.

5) To find the probability (P) that H_0 is true, compare the calculated value of χ^2 with the tabulated value of χ^2 for the appropriate number of degrees of freedom (df). A high calculated value of χ^2 indicates a low probability that H_0 is true. Table 6.2 shows the values of χ^2 for a range of probabilities (P).

Table 6.2: Values of χ^2 for 1, 2, 3, 4, 5 and 15 degrees of freedom for a standard range of probabilities (P)

P	.995	.99	.975	.95	.90	.50	.20	.10	.05	.025	.01	.005
1	<0.0001		<0.001	0.004	0.015	0.455	1.642	2.705	3.841	5.024	6.635	7.879
2	0.010	0.020	0.051	0.103	0.211	1.386	3.219	4.605	5.991	7.378	9.210	10.597
3	0.072	0.015	0.216	0.352	0.584	2.366	4.642	6.251	7.815	9.348	11.345	12.838
4	0.207	0.297	0.484	0.711	1.064	3.387	5.989	7.779	9.488	11.143	13.277	14.860
5	0.412	0.554	0.831	1.145	1.160	4.351	7.289	9.236	11.070	12.833	15.086	16.750
15	4.601	5.229	6.262	7.621	8.547	14.139	19.311	22.307	24.996	27.488	30.578	32.801

The number of degrees of freedom is the number of independent variables, which is related to the number of rows and columns in the contingency table, excluding the row and column for the totals. In this case (see step 1)) the contingency table consists of the values of O for sixteen categories, from each of two data sets, so there are thirty-two values of O. However, there are not thirty-two independent variables. For each column, there are only fifteen independent variables, since the value for any one category must equal the difference between the column total and the sum of the values for the other fifteen categories. Similarly, for each row, there is only one independent variable, since each value for q (or C) must be equal to the row total less the value of C (or q). Therefore, the number of degrees of freedom (df) for this contingency

table is $(16-1) \times (2-1) = 15$. That result is general: if a contingency table has r rows and c columns, $df = (r-1) \times (c-1)$.

Table 6.2 shows that the calculated value of 17.891 for χ^2 with fifteen degrees of freedom corresponds to a probability somewhat greater than 0.2 ($\chi^2 = 19.311$) that H_0 is true. This is an inconclusive result which cannot be remedied by repeating the test with a larger sample because the sample sizes are fixed. Even the availability of a larger comparison sample (if new authentic works of Paul came to light) would not solve the problem because *qui sacra vivaci* consists of 60 verses¹¹⁰⁵ and nothing can alter that. However, the reliability of the result may be doubted because, as Table 6.1 shows, none of the expected count conditions discussed in subsection 6.2.3 are met. Exactly half of the expected values are less than five (twelve in q, and four in C) so the condition that not more than twenty percent of the expected values should be less than five is not met, nor is the alternative condition which permits two expected values close to unity if most of the rest are greater than five..

Table 6.3 shows that if the data are re-worked by syllable count, they come near to meeting the condition that not more than twenty per cent of the expected values are less than five; there are two such values for q and one for C. They do meet the condition that no expected value should be less than unity, so the reliability of the test should be improved, but at the cost of the loss of discrimination which is the consequence of reducing the number of categories into which the data are divided.

Table 6.3: Syllable count data for q and C, and calculation of χ^2

		(O)			(E)		O-E	O-E ^2	O-E ^2/E	
		q	C	t1	q	C			q	C
Count										
8	I	3	6	9	2.327	6.763	0.763	0.582	0.250	0.087
9	II	22	51	73	18.907	54.093	3.093	9.567	0.506	0.177
10	III	25	78	103	26.677	76.323	1.677	2.812	0.105	0.037
11	IV	8	35	43	11.137	30.702	3.137	9.841	0.884	0.321
12	V	2	2	4	1.034	2.966	0.966	0.933	0.902	0.315
t2		60	172	232					2.647	0.937
χ^2									3.584	

The contingency table has five rows and two columns, so there are four degrees of freedom. The calculated value of 3.584 for χ^2 corresponds to a probability close to 0.5 ($\chi^2 = 3.357$) that H_0 is true.¹¹⁰⁶ This increased (but still inconclusive) estimate of that probability reflects the fact that

1105 That is, not counting vv. 45 and 48 which have been excluded from the analysis because they contain personal names whose correct scansion is uncertain.

1106 This is an addition to the information given in Table 6.2, which does not include values of χ^2 for $P = 0.5$.

combining the categories will often smooth out differences which are revealed when the data are distributed among a larger number of categories. Comparing the data in Table 6.3 for a syllable count of ten with the data in Table 6.1 for the six metrical patterns which have that syllable count illustrates this smoothing out. In Table 6.3, the syllable count of ten contributes 0.142 (4%) to the total value of χ^2 , which is 3.584, whereas in Table 6.1 the six metrical patterns with syllable count of ten contribute, in all, 8.484 (47.4%) to the total value, which is 17.891. This smoothing-out arises because the expected values of q are greater than the observed values in three cases (SDSD, DSSD and DSDS) and less in three (DDSS, SSDD and SDDS).

The categories can be reduced to three by combining the spondee-heavy categories I and II, leaving category III (equal numbers) to stand alone, and combining the spondee-light categories IV and V. Table 6.4 shows the results of re-working the data with that categorisation.

Table 6.4: Combined dominant type count data for q and C, and calculation of χ^2

	(O)			(E)		O-E	O-E ^2	O-E ^2/E	
	q	C	t1	q	C			q	C
Dominant type									
Spondaic	25	57	82	21.238	60.762	3.762	14.153	0.666	0.233
Equal	25	78	103	26.677	76.323	1.677	2.812	0.105	0.037
Dactylic	10	37	47	12.173	34.827	2.173	4.722	0.388	0.136
t2	60	172	232					1.159	0.406
χ^2								1.565	

This table has two degrees of freedom. The calculated value of χ^2 corresponds to a probability slightly greater than 0.5 (χ^2 for two degrees of freedom = 1.386) that H_0 is true. This further reduction in the number of categories has not yielded a significantly different result.

The final re-working of the data is the reduction to two categories, which are the numbers of spondaic and dactylic feet.

Table 6.5: Numbers of spondees and dactyls in q and C, and calculation of χ^2

	(O)			(E)		O-E	O-E ^2	O-E ^2/E	
	Q	C	t1	q	C			Q	C
Foot									
S	136	368	504	130.54	373.46	5.46	29.81	0.228	0.080
D	104	320	424	109.82	314.18	5.82	33.87	0.308	0.108
t2	240	688	928					0.536	0.188
χ^2								0.724	

The contingency table has two rows and two columns and there is therefore $(2-1) \times (2-1) =$ one degree of freedom. The calculated value of χ^2 lies between the values for $P = 0.3$ ($\chi^2 = 1.07$)¹¹⁰⁷ and 0.5 ($\chi^2 = 0.455$) and thus indicates a probability similar to that calculated by categorising the data by syllable count or by dominant type of foot. Such a crude test is very

¹¹⁰⁷ Additional to the information given in Table 6.2.

unlikely to throw light on the question whether the author of C is also the author of q. However, as discussed in the next section of this chapter, the ratios of spondaic to dactylic feet in C and q may provide a diagnostic test of the likelihood that analysis of metrical data will be of value in determining whether the author of C is also the author of q.

6.3 : Using the χ^2 test in attribution studies

6.3.1 : Selection and categorisation of data

As the illustrative calculations set out in the previous sub-section show, the χ^2 test involves the calculation of the difference between the observed and expected frequencies of occurrence of the categories into which the data for the questioned work (q) and the comparison sample (C) are distributed. If small amounts of data are distributed among a large number of categories, the reliability of the test may be compromised because a substantial number of categories have very low expected frequencies of occurrence. This can be avoided if there is a substantial corpus, so that C can be made larger, or if C can be compared with a larger extract from q. But in this study, those options are not available. The body of authentic work from which C is drawn is small. All the questioned poems are relatively short, and the majority are not capable of providing a data set which meets the expected count conditions, even when distributed among the smallest possible number of categories. However, *sample size* is one of only four factors which govern the selection and categorisation of the data; I refer to the other three as *independence of categories*, *representativeness* and *distinctiveness*.

The importance of *independence of categories* is that a χ^2 test will give a misleading result if the frequency of occurrence of one category is correlated with the frequency of occurrence of another. An extreme example of such a correlation would be a nine-syllable verse being invariably followed by its opposite, for instance, SSSD being always followed by DDDS, SSDS by DDSD, and so on. In that case the frequencies of occurrence of nine- and eleven-syllable verses would not be independent, and the four degrees of freedom of a contingency table such as Table 6.3 would be reduced to three. This would be an example of what Greenberg has called 'a statistical association',¹¹⁰⁸ though of a different type to those which he was investigating.

Table 6.2 shows that, as the number of degrees of freedom increases, the χ^2 value for any given probability also increases. This means that if, as in the example discussed, a contingency table appears to have four degrees of freedom when, because of the correlation between two categories, it has only three, the probability of H_0 being true will be over-stated. Suppose that a χ^2 test on a data sample displaying that correlation gave the value 8.0. For four degrees of freedom, that would be an inconclusive result, being well below the value of 9.488

¹¹⁰⁸ Greenberg, 'Metrics of the Elegiac Couplet,' 236.

corresponding to $P = 0.05$, but slightly above the value of 7.779 corresponding to $P = 0.1$. However, for three degrees of freedom that value would indicate that H_0 should be rejected, since χ^2 corresponding to $P = 0.05$ is 7.815.

The remaining two factors concern not the size or categorisation of the data, but the characteristics of the comparison sample. The starting point for a discussion of *representativeness* is that the χ^2 test, as used in this study and in the previous studies discussed in this chapter, is a test of homogeneity. If H_0 is that the questioned work (q) belongs to the same population as the comparison sample (C), the test is a test of *composite homogeneity*¹¹⁰⁹ between them. It is therefore important, in selecting the comparison sample, to ensure so far as possible that in testing whether it and the questioned work belong to the same population, that like is being compared with like. Authors write in a variety of genres, on a range of subjects, addressing different audiences in different registers, and their styles may vary over time. Consequently, there will often not be composite homogeneity between the works of a given author. An example already mentioned is the lack of homogeneity between Aldhelm's *Enigmata* and either his *Carmina Ecclesiastica* or his *Carmen de Virginitate*, between which there is homogeneity; Orchard explains this as being due to a gradual refinement of style, referring to Aldhelm's description of himself as 'inexperienced' in the verse prologue to the *Enigmata*.¹¹¹⁰ Another example is found in Duckworth's comprehensive study of Latin hexameter verse. He comments on the unusual metrical structure of *Eclogue IV*, which has been widely regarded as a prophecy of the birth of Christ, as compared with the other nine *Eclogues*.¹¹¹¹ He describes it as unique not only for its theme, style and subject-matter, but for its unusual metrical structure. One further example is the metrical inhomogeneity found by Altmann in Virgil's *Georgics*.¹¹¹²

A lack of homogeneity may also be observed within a single work by a given author. Thus, Duckworth has noted the metrical peculiarities of Books X-XII of the *Aeneid*. However, he does not ascribe these to those three books being composed at a different time or stage of the author's development from the other nine, but from a process of revision involving the elimination of excessive repetition and the introduction of additional variety which had not been completed when Virgil died in 19 BC.¹¹¹³ On a smaller scale within a work, there may be inhomogeneity due to the author using a variety of metrical patterns within a relatively short passage to express various states of mind or to describe various persons or events. Thus, an unusual

1109 The terms 'internal homogeneity' and 'composite homogeneity' were introduced in section 6.2.1.

1110 Orchard, *Aldhelm*, 88-89.

1111 G. Duckworth, *Virgil (sic) and classical hexameter poetry* (Ann Arbor: University of Michigan Press, 1969), 50.

1112 Altmann, 'The Homogeneity of Metric Patterns in Hexameter,' at 139-140.

1113 Duckworth, *Virgil (sic) and classical hexameter poetry*, 50.

preponderance of spondees depicting, for instance,¹¹¹⁴ stately progress, repetitive action, fear, or anxiety will, if juxtaposed with dactylic expressions of (say) swift movement or musical sounds, create a particularly inhomogeneous section of a work.

These considerations require the investigator to exercise great care to ensure that not only the size, but the composition of the comparison sample is suitable. As Grieve has said:

It is not a trivial matter to define the variety of language in which an author writes. Most authors interact with multiple readers, at multiple times, and in multiple registers, and so one must decide which of an author's many varieties the author-based corpus¹¹¹⁵ will represent. When attributing an anonymous work¹¹¹⁶... [because] the anonymous text is the product of a single situation, each author-based corpus should be composed of texts produced in the most similar register, for the most similar audience, and around the same point in time as the anonymous text. Otherwise, the investigator might get false negatives when the anonymous text is compared to the writings of its author; they may not match because of variation that is the product of differences in audience or register¹¹¹⁷ or time¹¹¹⁸.

The above analysis, though valuable, posits a situation in which the investigator is in a position to select from a substantial quantity of the author's work. Aldhelm's hexameter compositions run to 4,170 verses and the *Aeneid* alone has 9,876. By contrast, among the authors of the early Carolingian era, only Alcuin and Theodulf produced substantial amounts of verse composition. The others were much less prolific, and in this study it has been necessary to resort to a comparison sample (or in Grieve's words, an 'author-based corpus') that represents¹¹¹⁹ [rather than attempting to represent] 'the variety that encompasses all the author's written utterances' because, otherwise, it will not be possible to assemble a comparison sample that, even combining categories, comes anywhere near satisfying the expected count conditions.

The final factor is *distinctiveness*. If the null hypothesis is that q is the work of candidate author A, the data must be such that their analysis will be capable of rejecting H_0 in the event that it is false; in other words, they must be selected with a view to avoiding false positives. This may be difficult to achieve if the author of q is not A, but a contemporary of A with a similar cultural background. Further, if the test gave a very high probability (say, 0.95, or

1114 *Ibid.*, 4-5.

1115 The term 'author-based corpus' is equivalent to the term 'comparison sample' (C) used in this study.

1116 This is the equivalent of the 'questioned work' (q) of this study.

1117 On these differences, see J.N. Adams, 'Introduction: "Vulgar Latin" and social variation', in *Social Variation and the Latin Language* (Cambridge: Cambridge University Press, 2013).

1118 J. Grieve, 'Literary Authorship Attribution,' *Literary and Linguistic Computing* 22, no.3, (2007), 250-270, at 255.

1119 Grieve's actual words are 'attempts to represent' but that implies a larger corpus from which it is possible to make a selection.

greater), that A was the author of q, rather than giving a low probability of, say, 0.1, which would merely fail to reject H_0 , and there was another credible candidate author, B, it would be incumbent on the investigator to test the null hypothesis that B was the author, otherwise the question of authorship would remain unresolved. This is a situation very likely to occur in attribution studies involving early Carolingian authors because, not only were there shared cultural backgrounds, among the Lombards in particular, but the possible candidate authors were all connected with the court of Charlemagne, where poetic dialogue between each other and with Charlemagne (or whoever was the author of any poetic work ostensibly by him) was in a relatively uniform style.

That is shown clearly by Neff's attributions of some of the poems doubtfully attributed to Paul.¹¹²⁰ Thus, he attributes *qui sacra vivaci* (ML 54) to Angilram, who was a contemporary of Paul at Charlemagne's court; *hausimus altifluo*¹¹²¹ (ML 30) to Paul's fellow-countryman and contemporary, Paulinus of Aquileia; *hausimus altifluam* (ML 29) is unattributed but said to belong to the time when Paul and Peter were at Charlemagne's court; the grammatical poem *adsunt quattuor in prima* (ML 4) is attributed to another fellow-countryman and court contemporary, Peter of Pisa, and *funereo textu scribuntur* (ML 27) to an unidentified pupil of Peter of Pisa. Dümmler included *qui sacra vivaci* and *adsunt quattuor in prima* among Paul's works,¹¹²² and all five of these poems could plausibly have been attributed to Paul on the basis of general stylistic resemblance.

6.3.2. Hypothesis testing: Type I and Type II errors

Although hypothesis testing is applied widely in the physical, biological and social sciences, in comparison with which the extent of its use in literary studies is modest, it has attracted a considerable volume of criticism in those areas,¹¹²³ of which the following passage is an example:

After four decades of severe criticism, the ritual of null hypothesis significance testing (NHST), i.e. mechanical dichotomous decisions around a sacred .05 criterion, still persists. This article reviews the problems with this practice, including its near-universal misinterpretation of P as the probability that H_0 is false, the misinterpretation that its

1120 The possible authorship of the *dubia* is discussed in Section 4.7

1121 The statistical test on *hausimus altifluo*, discussed in chapter 7, does not reject the hypothesis that it is the work of Paul, although, as discussed in section 4.7, it has been firmly attributed to Paulinus of Aquileia not only by Neff but by Norberg.

1122 See Dümmler, *PLAC I, carm. xxv*, 63, and the *Appendix Ad Paulum*, 625.

1123 K. Rothman, 'Curbing Type I and Type II errors,' *European Journal of Epidemiology*, 25 (2010), 223-24; A. Stang, C. Poole and O. Kuss, 'The ongoing tyranny of statistical significance testing in biomedical research,' *European Journal of Epidemiology*, 25 (2010), 225-230.

complement is the probability of successful replication, and the mistaken assumption that if one rejects H_0 one thereby affirms the theory that led to the test.¹¹²⁴

Much of Cohen's criticism of NHST is directed towards what he saw as its misapplication in psychological research, but it is the case that, regardless of the purpose for which it is employed, hypothesis testing is intrinsically prone to two types of error, and that the 0.05 level of probability, conventionally adopted in literary as well as other studies as the dividing line between rejecting and not rejecting H_0 , is arbitrary. Fisher, who was immensely influential in the development of significance testing,¹¹²⁵ adopted the 0.05 level as a convenient criterion for deciding whether the null hypothesis that two groups belonged to the same population should be rejected, but he did not dictate it to be a firm criterion, nor consider it necessary to state the criterion in advance.¹¹²⁶ Indeed, its acceptance appears to have grown informally from a general perception that an event which occurs only once in twenty trials is rare enough to be regarded as significant,¹¹²⁷ and institutionalised by the selection of levels of probability chosen in most χ^2 tables.¹¹²⁸ As Morrison and Henkel state,

The problem whether a given finding is rare enough to warrant rejection of the null hypothesis is a matter of inference and interpretation for the researcher after he has performed the test.¹¹²⁹

Smith¹¹³⁰ has stated the following general principles as being relevant to that process of inference and interpretation in attribution studies:

- (i) The onus of proof lies entirely on the person making the attribution;
- (ii) The argument for adding something to an author's canon has to be vastly more stringent than [the argument] for keeping it there;
- (iii) If doubt persists, an anonymous work must remain anonymous;
- (iv) Avoidance of a false attribution is far more important than failing to recognise a correct one;

1124 J. Cohen, 'The Earth is Round ($p < .05$),' *American Psychologist* 49 (1994), 997-1003.

1125 R. A. Fisher, *Statistical Methods for Research Workers*, (Edinburgh: Oliver and Boyd, first published in 1925; fourteen editions had been published before his death in 1962.

1126 D.E. Morrison and R.E. Henkel, eds., *The Significance Test Controversy*, 1970. Reprint edition (New Brunswick, USA: Aldine Transaction, 2007), 4-5.

1127 S.M. Stigler, 'Fisher and the 5% level,' *Chance*, 12, no. 4, (2008), 12.

1128 Of twenty χ^2 tables found by a Google search, all had values for $P = 0.05$, four had no values for P between 0.05 and 0.01, thirteen had values for $P = 0.025$, two for $P = 0.02$, one for both of those, but none had values for P between 0.05 and 0.1.

1129 Morrison and Henkel, eds., *The Significance Test Controversy*, 5.

1130 M.W.A. Smith, 'Attribution by Statistics: A Critique of Four Recent Studies,' *Revue, Informatique et Statistique dans les Sciences Humaines*, 26 (1990) 223-251.

(v) Only works of known authorship are suitable as a basis for attributing a disputed work; to this we may add Holmes' comment, which precedes his enumeration of Smith's principles, that:

Because authors are influenced by subject-matter and because their powers develop with maturity and experience, attribution methods are likely to be most reliable when the texts of known authorship are of the same date and genre as the anonymous work.¹¹³¹

(vi) There are no short cuts in attribution studies.

A researcher, before embarking on a null hypothesis test in the course of investigating whether q and C are the work of the same author, will reasonably be expected to have formed an evidence-based view of the likelihood that the hypothesis is true. Null hypothesis significance testing is not a bright-line decision-making process which compels the researcher to accept or reject the hypothesis according to whether the calculated value of χ^2 falls, by whatever margin, on one or the other side of the value corresponding to a conventional or otherwise arbitrarily selected level of probability, and to rely on it for that purpose would be an inadmissible short cut. The purpose of carrying out the null hypothesis test is, as Rozeboom put it in a more general context 'to make an appropriate adjustment to the degree to which one accepts, or believes, the hypothesis being tested'.¹¹³² Smith's principles (i)-(iv) are very relevant to the process of arriving at that degree of acceptance or belief.

These considerations suggest that a more nuanced appraisal of the outcome of a null hypothesis test is appropriate. The probability, or the range within which the probability falls, that H_0 is true, as determined from the calculated value of χ^2 , should be considered together with all the other evidence, and given its appropriate weight in the decision whether to attribute q to the author of C.

Table 6.6: Possible outcomes of hypothesis testing in an attribution study where H_0 is that C and q belong to the same population

Actual state of population consisting of C + q		H_0 true	H_0 false
Decision based on test	Fails to reject H_0	Correct	Type II error (false positive)
	Rejects H_0	Type I error (false negative)	Correct

¹¹³¹ D.J. Holmes, 'Authorship Attribution', *Computers and the Humanities*, 28, no.2 (1994), 87-106, at 104.

¹¹³² W.W. Rozeboom, 'The Fallacy of the Null Hypothesis Significance Test', in D.E. Morrison and R.E. Henkel (eds.), *The Significance Test Controversy*, 1970. Reprint edition (New Brunswick, USA: Aldine Transaction, 2007), 216-31.

Section 6.3.1 identified two potential sources of error in testing the hypothesis that the author of the comparison sample is also the author of the questioned work. If the comparison sample is not *representative*, in the sense discussed above, the test may throw up a false negative. If the data characteristics lack *distinctiveness*, so that the questioned work appears to belong to the same population as the comparison sample although they are not the work of the same author, H_0 will not be rejected and the test will have thrown up a false positive. If that is likely to occur, there is no purpose in testing the null hypothesis. The next sub-section proposes an approach, which has not been applied in any previous study of metrical data, to the decision whether to carry out such a test, and if the decision is to do so, the level of discrimination at which to carry out the test.

6.3.3: The applicability of NHST based on metrical data in an attribution study

The data used in the following illustrative calculations are taken from Orchard's study of the Anglo-Latin poets,¹¹³³ with his data, which were expressed in percentages, re-worked to show the number of verses displaying each of the sixteen possible metrical patterns. The poets studied by Orchard are, in alphabetical order, 1, Aedilulf (AE); 2, Alcuin (A1) ; 3, Aldhelm (A2); 4, Bede (BD); 5, Boniface (B); 6, Eusebius (E); 7, MNE¹¹³⁴; 8, Tatwine (T); 9, Wulfstan (W).

1133 Orchard, *Aldhelm*, 'A statistical study of Anglo-Latin Verse', Appendix 5.2, Table A7, 296-98.

1134 MNE is Orchard's designation of the compilation known as the *Miraculi Nynie Episcopi*, which he describes as 'a cut-and-paste pastiche': *Aldhelm*, 260.

Table 6.7: Metrical data for the Anglo-Latin poets, showing frequencies of occurrence in F1-4 of metrical patterns and syllable counts, and number of spondaic and dactylic feet

Poet	1	2	3	4	5	6	7	8	9	
Designation	AE	A1	A2	BD	B	E	MNE	T	W	
Pattern	No									
SSSS	1	46	11	530	11	48	7	34	25	12
SSSD	2	10	7	56	12	9	2	14	15	10
SSDS	3	31	13	104	21	30	3	17	15	31
SDSS	4	60	55	547	34	36	23	45	19	39
DSSS	5	145	94	1232	55	90	41	76	37	43
SSDD	6	10	4	20	7	5	6	4	3	12
SDDS	7	14	19	68	17	6	18	12	6	26
SDDSD	8	25	25	111	17	14	8	22	13	26
DDSS	9	169	82	793	76	60	60	100	21	53
DSDS	10	82	49	243	54	25	24	49	17	63
DSSD	11	27	32	137	44	20	16	30	17	40
DDDS	12	99	33	144	40	18	17	45	7	38
DDSD	13	34	46	75	53	11	32	25	10	33
DSDD	14	22	9	49	22	9	18	13	2	34
SDDD	15	7	8	19	10	4	6	5	3	12
DDDD	16	15	13	42	27	3	1	13	3	28
Syllable counts										
8 (pattern 1)		46	11	530	11	48	7	34	25	12
9 (2-5)		246	169	1939	122	165	69	152	86	123
10 (6-11)		327	211	1372	215	130	132	217	77	220
11 (12-15)		162	96	287	125	42	73	88	22	117
12 (16)		15	13	42	27	3	1	13	3	28
Total verses		796	500	4170	500	388	282	504	213	500
Feet										
Spondees (S)		1738	1069	10968	965	989	572	1116	534	976
Dactyls (D)		1446	931	5712	1035	563	556	902	318	1026
Total feet		3184	2000	16680	2000	1552	1128	2016	852	2000
Ratio, S:S+D		.547	.535	.658	.483	.641	.504	.554	.627	.488
Ratio, S:D		1.20	1.15	1.92	0.93	1.76	1.03	1.24	1.68	0.95

Arranging these nine poets in increasing order of preponderance of spondees over dactyls, we have Bede (S:D =0.93), Wulfstan (0.95), Eusebius (1.03), Alcuin (1.15), Aedilulf (1.20), MNE (1.24),¹¹³⁵ and then the highly spondaic Tatwine (1.68), Boniface (1.76) and Aldhelm (1.92).¹¹³⁶ However, re-working of the data from Orchard's investigations of metrical patterning in the

¹¹³⁵ This range of S:D ratios is very similar to that exhibited by the poets classed by Drobisch as 'Virgilian' poets (Lucan, 1.19, being the lowest and Manilius, 1.43, the highest).

¹¹³⁶ Compare the 'non-Virgilian' Cicero (1.72) and Catullus (1.92). However, this group also includes the predominantly dactylic Ovid (0.82) and G. Valerius Flaccus (0.88).

three components of Aldhelm's work shows the much greater preponderance of spondees in *Carmina Ecclesiastica* (2.01) and *Carmen de Virginitate* (2.03) than in the *Enigmata* (1.53)¹¹³⁷.

Consideration of those S:D ratios suggests that if the difference between the ratios for two poets (X and Y) was large, a null hypothesis test at a low level of discrimination would be sufficient to determine whether samples from their works belonged to the same population; that, with smaller differences only the test at the highest level of discrimination would suffice; and, with very small differences, even the highest-level test available would be inadequate. Alternatively, the quotient of the S:D ratios for the two poets could be used, with closeness to unity of the quotient replacing the difference between the ratios as the determining factor.

Accordingly, a series of calculations has been carried out at various levels of discrimination, to test the null hypothesis (H_0) that the works (or samples of the works) of pairs of poets (X and Y) selected from Table 6.7 belong to the same population. The pairs have been selected so as to show a wide range of differences between S:D ratios. Table 6.8 shows that, as the differences decrease, a higher level of discrimination is required in order to reject the null hypothesis, and, as the S:D ratios approach equality, the test fails to reject H_0 at any level, notwithstanding the fact that it is comparing the works of two different authors. Thus, the danger is that the lack of distinctiveness between the metrical characteristics of poets X and Y, and consequent failure to reject H_0 , founds the false inference that the two *corpora* are the work of the same author.

1137 Orchard, *Aldhelm*, Table 4, The distribution of metrical patterning in Aldhelm's hexameter verse, 83.

Table 6.8: Tests of the hypothesis that the *corpora* (or samples from the *corpora*) of two Anglo-Latin poets belong to the same population

B = Boniface, E = Eusebius, MNE = Miraculi Nynie Episcopi, W = Wulfstan, BD = Bede, AE = Aediluulf

Poet		S: D ratio			Quotient of S:D ratios	χ^2	P (H_0 true)	χ^2 for P value
X	Y	X	Y	X-Y				
Test data I		Numbers of spondees and dactyls						df
B	E	1.76	1.03	0.73	1.63	45.499	<<0.001	10.828
B	MNE	1.76	1.24	0.52	1.42	25.973	<<0.001	10.828
MNE	E	1.24	1.03	0.23	1.20	6.017	< 0.025	5.024
							> 0.01	6.635
E	BD	1.03	0.93	0.10	1.11	1.745	< 0.2	1.642
							> 0.1	2.706
Test data II		Syllable counts						4
E	BD	1.03	0.93	0.10	1.11	13.591	~ 0.001	13.277
MNE	AE	1.24	1.20	0.04	1.03	2.847	< 0.75	1.923
							> 0.5	3.357
W	BD	0.95	0.93	0.02	1.02	0.326	< 0.99	0.293
							> 0.975	0.484
Test data III		Full metrical patterns						15
MNE	AE	1.24	1.20	0.04	1.03	18.994	< 0.25	18.245
							> 0.2	19.311
W	BD	0.95	0.93	0.02	1.02	21.106	< 0.2	19.311
							> 0.1	22.307

The group of results under the sub-heading Test data I shows that, where the S: D ratios for the two poets differ by more than 0.20, or the quotient of their S:D ratios is more than 1.20, even the counting of the numbers of spondees and dactyls, which is the crudest possible analysis of the metrical data, is sufficient to reject H_0 . No two of Boniface, Eusebius and MNE are metrically homogeneous. In the test of Eusebius and Bede, that analysis fails to reject H_0 . Their S:D ratios differ by only 0.1 (less than half the difference between the S:D ratios for MNE and Eusebius) and the quotient is 1.11. Consequently, the test must be applied at the next level of discrimination, where the test data are the frequencies of occurrence of the five possible syllable counts. At that level, the test decisively rejects H_0 . However, the detailed calculation of χ^2 shows that almost the whole of the divergence between observed and expected syllable counts arises from a single factor, which is Bede's liking for, and Eusebius' aversion from, the metrical pattern DDDD which is the only pattern resulting in a syllable count of twelve. That pattern appears once in 282 lines of Eusebius and twenty-seven times in 500 lines of Bede, and that difference accounts for 88.4% (12.014) of the value of χ^2 .

As the S:D ratios become closer and the quotient approaches unity, the test based on syllable count not merely fails to reject H_0 , as with MNE and Aedilulf, but appears to affirm it decisively in the test on Wulfstan and Bede, which is the pair whose S:D ratios differ by the smallest

amount (0.02) and whose quotient (1.02) is closest to unity. Even at the highest level of discrimination, where the full metrical data are used, the test fails to reject H_0 in both cases. This result might be thought surprising, since Wulfstan was writing some three centuries after Bede, whose influence had waned during that time, and his style might have been influenced by Aldhelm, who, as Table 6.9 shows, is more metrically different from Bede than any other Anglo-Latin poet. The possibility of that influence arises from a tentative attribution to Wulfstan by Lapidge of a lengthy poem, stating that it 'clearly betrays some acquaintance with at least Aldhelm's *Carmen de Virginitate*'¹¹³⁸.

In summary, the above analysis of Orchard's metrical data in his study of the works of some Anglo-Latin poets¹¹³⁹ suggests that:

- (i) Where the works of two poets whose S:D ratios differ by more than 0.2, or the quotient of those ratios is greater than 1.2, even the crudest test, requiring only the counting of the number of spondees and dactyls (Test data I) will be capable of distinguishing between them;
- (ii) Where the S:D ratios differ by more than 0.1, or the quotient of those ratios is more than 1.1, the test in which the distribution of the data among the five categories of possible syllable counts is analysed (Test data II) will be capable of distinguishing between them;
- (iii) Where the S:D ratios differ by less than 0.1, or the quotient of those ratios is less than 1.1, the test in which the distribution of the data among the sixteen possible metrical patterns in F1-F4 is analysed (Test data III) might be capable of distinguishing between them, but as the ratios approach equality or their quotient approaches unity, even that test will be unable to do so.

The utility of these criteria is considered in the next chapter, in which NHST is employed in the study of the poetic corpus attributed to Paul for the following purposes:-

- (i) to detect any tendency to throw up false positives or false negatives
- (ii) as an aid to determining whether:
 - (a) certain *dubia* can be reasonably attributed to Paul
 - (b) it provides any support for denying the generally (but not universally) accepted attribution of the Lake Como poem, *ordiar unde tuas laudes*, to Paul.

1138 M. Lapidge, Three Latin Poems from Aethelwold's school at Winchester, *Anglo-Saxon England* 1 (1972), 85-137, at 126-27, cited by Orchard, *Aldhelm*, 69.

1139 Orchard, 'A statistical survey of Anglo-Latin verse', *Aldhelm*, Appendix 5.2, 293-98. The data in that Appendix are presented as percentages but have been re-worked in this study, where they are presented as actual numbers of verses.

(iii) whether Paul is the author of either of the two poems to S. Scholastica, and whether they are the work of the same author

6.4. Conclusions

1. NHST is an established technique in literary attribution studies, and may be applied, subject to certain conditions, to test the hypothesis (H_0) that two bodies of verse are metrically homogeneous. If H_0 is not rejected, that result may found an inference that the two bodies of verse are the work of the same author. The strength of any inference drawn must be evaluated in the light of all other available evidence.
2. When testing the hypothesis that the author of a questioned work (q) and the author of the comparison sample (C) are one and the same, those conditions are that:
 - 2.1 there should be sufficient data to meet expected count conditions; it may be necessary to combine categories of data in order to achieve that, though that may reduce the discriminatory power of the test;
 - 2.2 The categories into which the data are divided must be independent, not correlated;
 - 2.3 Ideally, C should be chosen so as to be in the same genre, register and, if relevant, stage of the author's development, as q; and
 - 2.4 It must be possible to distinguish q from C by the analysis of the metrical data; if not, the test is purposeless.
3. The simple procedure of counting the number of spondaic and dactylic feet in q and C will assist in deciding whether condition 2.4 is met and, if so, the level of discrimination at which H_0 should be tested.
4. There is no need to specify in advance a level of probability below which H_0 is to be rejected or above which it is not to be rejected. The question is whether the value of χ^2 calculated from the test corresponds to a level of probability which changes the researcher's evidence-based estimate of the likelihood that H_0 is true.

Chapter 7: A statistical study of the probability of Paul's authorship of some poems composed in dactylic metres.

7.1 : Introduction

Chapter 6 was concerned with the principles of statistical analysis and, in particular, the analysis of metrical data, as an aid to attribution studies. The previous studies surveyed in Chapter 6 characterised the styles in which classical Latin and Anglo-Latin poets composed poems in hexameters,¹¹⁴⁰ but none of them were concerned with the attribution of any poem to any of the poets studied. The four principal studies of Paul's poetic output, by Bethmann, Dahn, Dümmler and Neff refer, in all, to sixty-five poems. Of these, fifty-one are in dactylic metres. Nineteen are composed entirely in hexameters. Thirty-two are in elegiac couplets, which are composed in alternate hexameter and pentameter lines; eight of those twenty-four are epanaleptic. In that form, the last seven syllables of the pentameter line, which consists of two dactyls and a *syllaba anceps*, replicate the opening of the hexameter line. The remaining fourteen poems, not all of which are quantitative, are in a variety of other styles, namely sapphic, alcaic, adonic, and two rhythmical forms. None of those non-dactylic poems provide a body of verse of a sufficient size to permit meaningful statistical analysis, which is therefore confined in this study to the poems in dactylic metres. In this chapter I shall undertake the first ever application of statistical analysis of metrical characteristics in the investigation of the authorship of poems doubtfully attributed to Paul.

There is a general consensus, discussed in Chapter 1, that Paul composed about thirty poems, but that discussion exposes the lack of agreement about the content of what may conveniently be called the 'canon'. For the purpose of this study, the 'provisional canon' is taken to consist of the twenty-eight poems which are accepted as the work of Paul, and so published, in Dümmler's and Neff's editions. Twenty-three of those are in dactylic metres, eight being in hexameters and fifteen in elegiac couplets, of which three are epanaleptic. No new edition was published until 2014, when both Paul's prose and verse works were published in a two-volume edition as volumes IX.I (the *Historia Langobardorum*) and IX.II (the remaining prose works and the *Carmina/Poesie*) of the *Corpus Scriptorum Ecclesiae Aquiliensis*.¹¹⁴¹ The edition includes commentary on, but not the text, of three further poems, one of which, *Vale, salus patriae*, consisting of a single elegiac couplet, is certainly the work of Paul, since it is contained in a letter undoubtedly written by him. It was not considered to be worth re-working the statistical

1140 The study by A. Orchard, *The Poetic Art of Aldhelm*, (Cambridge: Cambridge University Press, 1994), contains a chapter dealing with his octosyllabic poems, but as Paul is known to have composed only one poem in octosyllabics (the hymn *fratres alacri pectore*, in iambic dimeter), the present work does not refer to that part of Orchard's study.

1141 L. Citelli (ed.), 'Carmina/Poesie', *Paolo Diacono Opere/2*, *Corpus Scriptorum Ecclesiae Aquiliensis* Vol. IX/II, (Rome, Citta Nuovo Editrice, 2014), 337-451.

analysis for the authentic poems in elegiac couplets so as to include that minimal addition. The other two are *rustice lustrivage*, a poem of nine hexameter lines, addressed to the god Pan, and *olim Romulea sanctus*, a poem in elegiac couplets in the form of a debate by four participants about the Gregorian and Ambrosian liturgies. Each of these has been tentatively attributed to Paul, but in neither case has that attribution found general acceptance, and there is no case for including either in the analysis of the poems taken as constituting the 'canon'.

The remainder of Chapter 6 addressed the process of carrying out the statistical analysis, its range of applicability, the selection of test data and the errors to which the process is subject. The analysis of one of the poems doubtfully attributed to Paul was worked through at all levels of discrimination. The conclusion summarised the conditions under which such analysis should be carried out and the manner in which its results should be interpreted.

The purpose of this chapter is to apply those principles and procedures in testing for error and in estimating the probability that a number of works of doubtful authorship are the work of Paul. I shall discuss those estimates of probability in the context of any other available evidence which is relevant to the question of Paul's authorship.

7.2: Testing for error using syllable count data

This is a novel approach, which I have devised for the purpose of this study. Chapter 6 shows that all previous analyses have employed full metrical patterning data. This had been possible because both the classical Latin poets and the Anglo-Latin poets studied composed very substantial bodies of poetry. This enabled tests to be carried out on samples large enough to avoid any loss of reliability due to inability to meet expected count conditions. The reason for using syllable count data rather than full metrical patterning data in this work is that, given the paucity of Paul's poetic output and the shortness of the *dubia*, the amount of data available for both the comparison sample and for any one questioned work is small and, if the distribution of the data among sixteen categories is tested, expected count conditions will not be met. The data in Table 6.3 for the illustrative test on the questioned poem *qui sacra vivaci* (which, at sixty-two verses, is the longest of the *dubia* composed in hexameters) show that very clearly. By combining categories of data so as to reduce the sixteen categories of metrical pattern to five categories of syllable count, the data comply, or more nearly comply, with expected count conditions and the reliability of the test thus improved, albeit at the cost of some loss of discrimination.

7.2.1 : Testing for false positives.

The poem *cartula, perge cito* is composed in hexameters. It is found in the ninth-century manuscript Paris, BnFr, lat. 528, f. 133-133^v immediately after the poem in praise of S. Benedict, *ordiar unde tuos sacer* (ML 46) which is undoubtedly by Paul. However, *cartula, perge cito* is printed among the *Alcuini carmina* in Dümmler's edition¹¹⁴² and is firmly attributed to Alcuin by Burghardt on the ground that the text contains an indirect reference to Alcuin as its author.¹¹⁴³ More recently, the poem has been studied by Schaller¹¹⁴⁴ and the journey which it describes is the subject of an article by Sinisi¹¹⁴⁵.

The calculated value of χ^2 using the syllable count data is 2.198,¹¹⁴⁶ which is about halfway between the values for $P = 0.9$ ($\chi^2 = 1.094$) and $P = 0.5$ ($\chi^2 = 3.357$) for four degrees of freedom. The test has failed to reject H_0 , viz., that *cartula, perge cito* belongs to the same population as the comparison sample composed of the hexameter poems of Paul. Given the very firm attributions of *cartula, perge cito* to Alcuin by Dümmler and Burghardt, and the improbability of many of the persons named in the poem being known to Paul,¹¹⁴⁷ there must be a strong suspicion that the test has thrown up a false positive.

This may be because the test using syllable count data is too coarse to detect a significant difference between the metrical characteristics of *cartula, perge cito* and the comparison sample of Paul's authentic hexameter compositions. Accordingly, χ^2 was recalculated using the full metrical pattern data. The calculated value of 13.046¹¹⁴⁸ corresponds to a probability between 0.75 ($\chi^2 = 11.037$) and 0.5 ($\chi^2 = 14.339$) for fifteen degrees of freedom). Since that test also fails, by a very considerable margin, to reject H_0 , analysis of the metrical characteristics of *cartula, perge cito* cannot assist in its attribution. But the fact that the test fails to reject the possibility of Paul's authorship of a poem which is unanimously attributed to Alcuin raises the question whether, although they received their early education in different countries, they drew on common exemplars of verse composition, which were reflected in metrical styles so similar that samples of their hexameter verse would be shown by null hypothesis significance testing at any level to belong to the same population. That question is considered in sections 7.4 and 7.5.

1142 E. Dümmler, ed., *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini*, vol. I (Berlin: Weidmann, 1881), in *Alcuini carmina*, *carm. iv*, 220.

1143 H.-D. Burghardt, *Philologische Untersuchungen zu den Gedichten Alkuins*, (Diss. Phil., Heidelberg, 1960), 15-16.

1144 D. Schaller, 'Vortrags- und Zirkulardichtung am Hofe Karl des Grossen,' *Mittelalterlichen Jahrbuch* 6 (1970), 14-36.

1145 L. Sinisi, 'From York to Paris: Reinterpreting Alcuin's Virtual Tour of the Continent,' ed. H. Sauer and J. Story, assisted by G. Waxenberger, *Anglo-Saxon England and the Continent* (Tempe, Arizona: Arizona Centre for Medieval and Renaissance Studies, 2011), 275-92.

1146 For the detailed calculation, see Table A7.1.

1147 E.g., Hadda, Raefgot, Bassinus.

1148 For the detailed calculation, see Table A7.16.

The other poem tested as a possible false positive is the epanaleptic poem *Dux, via, vita, tuis*, (ML 24). That poem is found in the Casinese manuscript Vat. lat 1202 which also contains the questioned poem *O benedicta soror* (ML 44). Unlike *cartula, perge cito*, the reason for denying Paul's authorship is not that it has been firmly attributed to another author, but that it recounts matters which occurred between half a century and two centuries after Paul's death in or shortly before 799. The poem, entitled *Vita sancti Mauri abbatis*, was attributed to Paul in a work by Prospero Martinengo published in 1590,¹¹⁴⁹ and it appears that Martinengo relied on Peter the Deacon's twelfth-century chronicle *De viris illustribus Casinensibus* for that attribution.¹¹⁵⁰ Although Mabillon¹¹⁵¹ had already doubted Paul's authorship of the poem because of the mention of Anaguareth in the text (which in his view dated the poem to the year 845 at the earliest), it is included among the poems attributed to Paul in Migné's *Patrologia Latina*.¹¹⁵² Anaguareth (or Anowereth), apparently of Breton origin, saw a vision at the tomb of Maurus¹¹⁵³ in the church of St Pierre-des-Fosses (later renamed St Maur-des-Fosses), to which his body had been translated after the sacking of Glanfeuil by Vikings in 862. The appearance of this vision is dated to 868.¹¹⁵⁴

Bethmann, in including the poem among those wrongly attributed to Paul, adopted Mabillon's view, and raised the additional possibility that its date might be as late as 1000.¹¹⁵⁵ That possibility arises from the indirect reference in the poem to the translation of the arm of the holy Maurus to Monte Cassino by the abbot Odilo.¹¹⁵⁶ However, a date *ca* 1000 would fit far better if the Odilo in question were not the ninth-century Odo or Eudo who was abbot at the time of the destruction of Glanfeuil, and successor to abbot Gauzlin who is said to have discovered the relics of Maurus in 845,¹¹⁵⁷ but the more famous Odilo of Cluny (963-1049), who was abbot of Cluny from 995 until his death. Be that as it may, the reference to Anaguareth in

1149 P. Martinengo, *Pia quaedam poemata et theologica odaeque sacrae diverso carminum generae conscriptae* (Rome: F. Zanetti, 1590), 250-55.

1150 See the commentary to that poem in Citelli, *Opere*/2, 399.

1151 J. Mabillon, *Acta Sanctorum ordinis S. Benedicti*, 4/2 (Venice: S. Coleti and J. Bettinelli, 1738): 185.

1152 Migne, *PL*, vol.95, clm. 1594-97.

1153 Footnote b to Migne, *PL*, vol.95, at clm. 1596, reads 'Anaguareth Brito mira ad S. Mauri sepulcrum vidit, ex eodem Historia' The Historia referred to is the history of the destruction and restoration of the abbey of Glanfeuil.

1154 See J. Mabillon, ed., *Acta Sanctorum Ordinis S. Benedicti in saeculorum classes distributa, Pars Secunda* which gives an account of the translation of S. Maurus to that location. The incident is recounted at c.20, 185-86, where Anowareth is referred to as '*cuidam seruo Dei nomine Anowareth, de genere Brittonum*'.

1155 L. Bethmann, 'Paulus Diaconus Leben und Schriften,' *Archiv der Gesellschaft für ältere deutsche Geschichtskunde* 10 (1851): 247-334, at 324.

1156 See A. Butler, *Lives of the Fathers, Martyrs and other Principal Saints*, vol.1 (London: John Murphy, 1812), 188-90f, citing the entry relating to S. Odilo in Leo of Ostia's *Chron. Casin.* Book 2, c.55., to the effect that 'an arm of this saint was translated with great devotion to mount Cassino in the eleventh century'.

1157 This, rather than the reference to Anaguareth, might explain the view that the earliest possible date for the poem was 845, rather than 868.

the poem is inexplicable on the basis that it was composed by Paul the Deacon or anyone contemporary with him.

As *dux, via, vita, tuis* (ML 24) is in elegiac couplets, the test can be carried out on the syllable counts in the hexameter and the pentameter verses. In the contingency table for the hexameter verses, there are only four categories of syllable count because neither the questioned poem nor the comparison sample of epanaleptic poems contains any eleven-syllable hexameter verses. The reduction of the number of categories from five to four reduces the number of degrees of freedom to three.¹¹⁵⁸ The calculated value of χ^2 is 14.341,¹¹⁵⁹ corresponding to a probability of less than 0.005 ($\chi^2 = 12.838$ for three degrees of freedom). Thus, in accordance with the historical evidence, the test decisively rejects the hypothesis of Paul's authorship.

Since the poem consists of alternate hexameters and pentameters, it is appropriate also to test H_0 using the data from the pentameter verses. The value of NHST would be called into question if the tests on hexameter and pentameter data led to differing conclusions. Only the syllable counts in F1-F2 of the pentameter line are variable; as already explained, F3 and F4 must be dactyls. There are only three possible syllable counts in F1-F2, four (SS), five (SD and DS) and six (DD). The contingency table will have only two degrees of freedom. The calculated value of χ^2 is 7.672,¹¹⁶⁰ corresponding to a probability slightly greater than 0.025 ($\chi^2 = 7.378$ for two degrees of freedom) that H_0 is true. Although less decisive than the test on the hexameter data, this is still a clear rejection of H_0 .

7.2.2 : Testing for false negatives

In the test for false positives, the two chosen test pieces were poems which were highly unlikely to have been the work of Paul. Conversely, in the test for false negatives, the test pieces chosen are two poems which cannot sensibly be attributed to anyone other than Paul. The first, (*cynthius occiduas*, ML 21), is addressed to Charlemagne, as part of the exchanges in the poetic circle of the court, and the other (*lugentum lacrimis*, ML 40) is the epitaph composed by Paul for his Beneventan patron, Arichis.

The test is carried out in the same way as before, though there is one important difference in the nature of the data. When testing for false positives, H_0 was that a questioned poem (q) was the work of the author of a comparison sample (C) consisting of the corpus of works securely attributable to him. The test involved calculation of the expected frequencies of occurrence of the syllable counts of q and C on the hypothesis that they both belong to a single population consisting of q + C. Now in testing for false negatives, H_0 is that the test poem belongs to the

1158 That is, $(4-1) \times (2-1)$.

1159 For the detailed calculation, see Table A7.2H.

1160 For the detailed calculation, see Table A7.2P.

same population as the remainder of the securely attributable corpus, which is (C-q). The expected frequencies to be calculated are those of q and C-q, H_0 being that they belong to a single population consisting of C.

In testing for false negatives, it is generally accepted that a higher level of significance is required to reject the so-called 'hypothesis of authenticity' in cases where the work is widely attributed to the candidate author. Kenny has proposed that in such circumstances H_0 should not be rejected unless the probability of its being true is less than 0.01. It is submitted here that a better formulation is that the hypothesis of authenticity (H_0) should not be rejected where there is strong historical, contextual or other non-stylistic evidence that the work is that of the candidate author unless P is very low. This formulation is congruent with Rozeboom's observation, quoted in Chapter 6, that the purpose of carrying out the null hypothesis test is 'to make an appropriate adjustment to the degree to which one accepts, or believes, the hypothesis being tested.'¹¹⁶¹ The stronger the other evidence that H_0 is true, the lower probability the test must show in order to reject it.

Cynthius occiduas (ML 21) is composed in hexameters. It is part of the exchange of riddles between Paul, Peter of Pisa and Charlemagne¹¹⁶² and towards its end there is an expression of wonderment that the riddle which he himself had posed had not been solved.¹¹⁶³ The test for false negatives correctly fails to reject the hypothesis of authenticity, as the calculated value of 2.064¹¹⁶⁴ for χ^2 corresponds to a probability substantially greater than 0.5 that H_0 is true.

Lugentum lacrimis (ML 40), an epitaph for Paul's patron, Arichis II of Benevento, is composed in elegiac couplets. Given its subject-matter and the identity of its dedicatee, there can be no possibility of anyone other than Paul being its author. The test has been carried out using both the hexameter and pentameter syllable counts.¹¹⁶⁵ For the hexameter verses, the calculated value of 2.019 corresponds to a probability between $P = 0.9$ ($\chi^2 = 1.094$) and $P = 0.5$ ($\chi^2 = 3.357$) for four degrees of freedom. For the pentameter verses, the calculated value of 3.002 corresponds to a probability somewhat greater than 0.2 ($P = 3.219$ for two degrees of freedom) that the null hypothesis is true. As there is no doubt that Paul is the author of *lugentum lacrimis*, the test has correctly failed to reject the hypothesis of authenticity.

In summary, this set of tests indicates some likelihood that NHST which employs metrical data will throw up false positives because of similarities in the styles of composition between

1161 W.W. Rozeboom, 'The Fallacy of the Null Hypothesis Significance Test', in *The Significance Test Controversy*, D.E. Morrison and R.E. Henkel, eds., 1970. Reprint edition (New Brunswick, USA: Aldine Transaction, 2007): 221.

1162 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 295, describes it as 'Antwort auf eine Botschaft Karls über einen Wettkampf mit Petrus (von Pisa)', that is, an answer to a message from Charlemagne about his competition with Peter (of Pisa)

1163, K. Neff, *Die Gedichte des Paulus Diaconus: Kritische und erklärende Ausgabe* (Munich: C.H. Beck, 1908), *carm.* xviii, 88.

1164 For the detailed calculation, see Table A7.3.

1165 For the detailed calculations, see Tables A7.4H and A7.4P.

the candidate author (A) and the author of the questioned work, if that is someone other than A. The tests did not throw up any false negatives.

7.3 : *Study of selected dubia using syllable count data*

7.3.1 : The objectives of the study and the selection of the poems studied

The principal objectives of this statistical study are:

- (i) to resolve a number of controversies; in particular, those involving:
 - (a) the disagreements between Dümmler and Neff about the content of the authentic corpus of Paul's work;
 - (b) Dahn's rejection of Paul as the author of the Lake Como poem: and
 - (c) the authorship of the two epanaleptic poems in praise of S. Scholastica.

A further objective is to establish, as far as possible, whether significance testing of the remaining *dubia* could throw any light on the question whether they could be realistically attributed to Paul.

Unfortunately, the pursuit of these objectives is limited because of the very short length of some of the *dubia* whose authorship it was desirable to investigate. That eliminates the four poems considered authentic by Neff but not by Dümmler, three of which (*Adam per lignum*, ML1, *multicolor quali*, ML 43 and *O una ante omnes*, ML 47)¹¹⁶⁶ are *tituli* of less than ten verses. The fourth, the acrostic riddle poem *pulchrior me nullus*, ML 52¹¹⁶⁷ consists of six verses whose initial letters spell out the name PAULUS, but, apart from its brevity, it is rhythmical, not quantitative, and is therefore unsuitable for the method of metrical data analysis used in this study. However, the five poems accepted as authentic by Dümmler but rejected by Neff, which are identified in the next subsection, are all testable. The study also includes two poems not attributed to Paul by either Dümmler or Neff. One is the epitaph to Dombercht, *funereo textu scribuntur*, ML 27, consisting of eighteen elegiac couplets, attributed by Dümmler to Boniface¹¹⁶⁸ and by Neff to an unidentified pupil of Peter of Pisa.¹¹⁶⁹ The other is the hexameter poem *hausimus altifluo*, ML 30, thirty verses in length and attributed by Neff¹¹⁷⁰ and Norberg¹¹⁷¹ to Paulinus of Aquileia.

1166 Neff, *Gedichte, carm.v* (I-III), 20-22.

1167 *Ibid.*, *carm xvi*, 83.

1168 Dümmler, *PLAC I, Bonifatii carmina vii*, 19.

1169 Neff, *Gedichte, Anhang carm iii*, 178.

1170 *Ibid.*, *Anhang carm. viii*, 202.

1171 D.L. Norberg, *L'oeuvre poetique de Paulin d'Aquileia*, (Stockholm: Almqvist & Wiksell, 1979), 35.

7.3.2 : Conditions governing the selection of the poems studied

Excluding the three poems listed in Citelli's edition but not mentioned in any previous edition¹¹⁷², the *corpus* which is the subject of this study consists of twenty-eight poems which are accepted as authentic and thirty-seven for which Paul's authorship is questioned or rejected. However, not all of those thirty-seven are possible candidates for a significance test based on metrical patterns. The chosen method of testing necessarily excludes all those not written in dactylic metres, and that eliminates eight poems, of which four are rhythmical and four are in non-dactylic metres.¹¹⁷³

The majority of the remaining twenty-nine poems are too short for any realistic conclusion to be drawn from a significance test of the nature employed in this study. No other form of metrical testing is feasible, and the brevity of the poems is also fatal to any form of analysis based on (for instance) vocabulary, word placement or grammatical features. While there is no way of drawing a bright line between those which are, and are not, of sufficient length to be worth testing, the selection of test poems in this study has been made so as to conform as nearly as possible to the expected count conditions discussed in sub-section 6.2.3.

Of the poems which were the subjects of the tests for false positives and false negatives, the selected hexameter poem, *cynthius occiduas* (ML 21) has twenty-four verses, and the selected poem containing both hexameters and pentameters, *lugentum lacrimis*, (ML 40) consists of twenty-six elegiac couplets. These poems provide very small data sets and even with the data divided into five categories rather than the sixteen which would be required for a full metrical pattern analysis, there are several very low expected frequencies of occurrence. Adopting their lengths as a guide to the minimum length of the *dubia* to be selected for analysis reduces the number of candidates for testing to seven, consisting of two hexameter poems and five in elegiac couplets. The two S.Scholastica poems are epanaleptic and are considered separately from the other three.¹¹⁷⁴ The five poems attributed to Paul by Dümmler but not by Neff make up the total of seven. They include the three fables, composed in elegiac couplets, of which only *aegrum fama fuit* (ML 5) is of substantial length (thirty-four couplets); *quaerebat maerentes* (ML 53) and *temporibus priscis* (ML 63) consist, respectively, of five and seven couplets, but on the assumption that all three have the same author, they have been treated as a single item in this

1172 *Olim Romulea sanctus* (ML 66), *Rustice lustrivage* (ML 67) and *Vale, salus patriae* (ML 68). Citelli provides only commentary on *Olim Romulea sanctus* and *Rustice lustrivage*, at 413 and 431, respectively, and gives the text of *Vale, salus patriae* at 449.

1173 One in iambic dimeter, two sapphics, and one alcaic.

1174 In this test, the three fables, *aegrum fama fuit* (34 couplets), *quaerebat maerens* (five) and *temporibus priscis* (seven) are treated as one composition of forty-six couplets.

study. The other two are *qui sacra vivaci*, (ML 54)¹¹⁷⁵ (sixty-two hexameter verses,¹¹⁷⁶)and the epitaph to Lothar, *hoc satus in viridi*(ML 34)¹¹⁷⁷ (twenty-three elegiac couplets). The epanaleptic *ordiar unde tuas laudes*, ML 45, consisting of fifteen elegiac couplets and regarded as authentic by all scholars other than Dahn, is also tested, with a view to ascertaining whether the test offers any support for Dahn's denial of Paul's authorship.

1175 Dümmler, *PLAC I, carm. xxv*, 60-61; Neff, *Anhang, carm v*, 186-90.

1176 The analysis is based on sixty verses; vv. 45 and 48 have been omitted as they contain personal names whose correct scansion is uncertain.

1177 Dümmler, *PLAC I, carm. xxxix*, 71; Neff, *Anhang, carm i*, 170-75.

7.3.3 : Test results and discussion

The evidence of authorship of the selected *dubia* was discussed in detail in Chapter 4¹¹⁷⁸ and is only briefly referred to in the discussion which follows.

Table 7.1: Syllable count test results for hexameter verses of the selected *dubia*

	Verses		χ^2 ¹¹⁷⁹	df ¹¹⁸⁰	P
	q	C			
Poem and metre					
Hexameter					
Hausimus altifluo	30	172	1.399	4	> 0.75 ($\chi^2 = 1.923$) < 0.9 ($\chi^2 = 1.064$)
Qui sacra vivaci	60	172	2.991	4	> 0.5 ($\chi^2 = 3.357$)
Elegiac couplet (non-EP) ¹¹⁸¹					
The three fables	46	135	4.177	4	> 0.2 ($\chi^2 = 5.989$), < 0.5
Hoc satus in viridi	23	135	1.446	4	> 0.75, < 0.9
Funereo textu scribuntur	18	135	3.551	4	~ 0.5
Elegiac couplet (EP)					
Sponsa decora Dei	40	99	8.121	3	> 0.025 ($\chi^2 = 9.348$) < 0.05 ($\chi^2 = 7.815$)
O benedicta soror	22	99	5.353	3	> 0.1 ($\chi^2 = 6.251$) < 0.2 ($\chi^2 = 4.642$)
	q	C-q			
Ordinar unde tuas laudes	15	84	5.115 ¹¹⁸²	2	> 0.05 ($\chi^2 = 5.991$) < 0.1 ($\chi^2 = 4.605$)

Table 7.2: Syllable count test results for pentameter verses of the selected *dubia*.

	Verses		χ^2	df	P
	q	C			
Poem and metre					
Elegiac couplet (non-EP) ¹¹⁸³					
The three fables	46	135	0.558	2	> 0.5 ($\chi^2 = 1.386$)
Hoc satus in viridi	23	135	1.956	2	> 0.2, ($\chi^2 = 3.219$), < 0.5, ($\chi^2 = 1.386$)
Funereo textu scribuntur	18	135	2.866	2	> 0.2, < 0.5
Elegiac couplet (EP)					
Sponsa decora Dei	40	99	9.229	2	~0.01 ($\chi^2 = 9.210$)
O benedicta soror	22	99	4.099	2	> 0.1 ($\chi^2 = 4.605$) < 0.2 ($\chi^2 = 3.219$)
	Q	C-q			
Ordinar unde tuas laudes	15	84	3.759	2	~0.2 ($\chi^2 = 3.219$)

1178 Section 4.7, *Authorship of the dubia*, particularly sub-sections 4.7.4-4.7.6.

1179 For the detailed calculations of χ^2 , see Tables A7.5-A7.13.

1180 df = degrees of freedom

1181 EP = epanaleptic.

1182 The contingency table for this poem has only two degrees of freedom

1183 EP = epanaleptic.

The tables show that the test, both on the hexameter and the pentameter verses, has rejected H_0 for only one poem, *sponsa decora dei* (ML 62). The correct interpretation of those results is not that Paul is the author; it is that they give no reason to alter any view of the likelihood of Paul's authorship which is based on other evidence existing at the time that the test was carried out.¹¹⁸⁴ This accords with Rozeboom's formulation of the purpose of NHST, that is, 'to make an appropriate adjustment to the degree to which one accepts, or believes, the hypothesis being tested.'¹¹⁸⁵ Thus, the authorship of all of the *dubia* continues to remain unresolved. By the same reasoning, the failure of the test to reject H_0 for *ordiar unde tuas laudes* (ML 45) provides no grounds for altering the view, accepted by everyone but Dahn, that it is the work of Paul.

Hausimus altifluo (ML 30) is a poetic letter addressed to an Italian cleric named Zacharias on the occasion of his departure for Ireland to engage in pastoral work there. Zacharias was a friend of Paulinus of Aquileia and there is no reason to doubt the attribution of the poem to Paulinus.¹¹⁸⁶ The calculated value of χ^2 does correspond to a probability of more than 0.75 that H_0 is true, but given the absence of any evidence that Paul even knew of the existence of Zacharias, the test result is not strong enough to displace the firm attributions of *hausimus altifluo* to Paulinus.

Qui sacra vivaci (ML 54) is a verse history of the bishops of Metz. Paul is undoubtedly the author of the prose *Liber de Episcopis Mettensibus*, and it seemed plausible to Bethmann,¹¹⁸⁷ against that background, to identify Paul as the most likely candidate for the authorship of the poem. Dahn categorised it as being highly probably by Paul¹¹⁸⁸ and Dümmler included it among the *Pauli et Petri carmina*¹¹⁸⁹ in his edition. However, Neff, while accepting Paul as the author of the prose history, comments quite unequivocally that, nevertheless, Paul is not the author of the poem, and he argues that Angilram, at whose behest the prose history was composed, was himself the author. The calculated value of 4.077 for χ^2 corresponds to a probability of between 0.2 and 0.5 that H_0 is true, which is inconclusive. There is no extant poetry attributed to Angilram with which the metrical characteristics of *qui sacra vivaci* can be compared, and indeed Neff does not adduce any evidence that Angilram ever wrote any poetry

1184 The available evidence of the authorship of the *dubia* is discussed in section 4.7 and tabulated in Table A4.

1185 W.W. Rozeboom, 'The Fallacy of the Null Hypothesis Significance Test,' 221. See also sub-section 6.3.1., above.

1186 By Norberg as well as by Neff; see Norberg, *L'oeuvre poetique de Paulin d'Aquileia*, where the poem is given the sub-title *Ad Zachariam*.

1187 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 294.

1188 Dahn, *Paulus Diaconus*, (Leipzig, Breitkopf and Hartel, 1876): 71.

1189 Dümmler, *PLAC, I, carm xxv*, 60.

and refers to his attribution as a conjecture.¹¹⁹⁰ The test has not thrown any light on the authorship of the poem.¹¹⁹¹

The three fables, *aegrum fama fuit*, *querebat maerentes* and *temporibus priscis*, (ML 5, 53 and 63) are treated in this study as a single composition, since there is no suggestion in any published edition or study that they are not the work of the same author. Dümmler included them among the *Pauli et Petri Carmina*,¹¹⁹² the principal reason being that they occur together in the tenth-century manuscript St Gallen, Stiftsbibliothek 899, p.6-7, among a group of other poems written either by Paul or other members of the poetic circle at the Carolingian court.¹¹⁹³ Neff includes them in his edition as item VI of the *Anhang*.¹¹⁹⁴ He considers it unlikely (*unmöglich*)¹¹⁹⁵ that Paul is their author, principally because they lack the familiar turns of phrase (*Wendungen*) which occur in others of Paul's poems. He also rejects the occurrence of the phrase '*servulus ecce tuus*' in the final couplet of *aegrum fama fuit* as evidence of Paul's authorship because, although Paul has used similar phrases in other dedications, they are used by others, including Angilbert¹¹⁹⁶ and the authors of some poems included in the collection which Dümmler entitled *Versus Libris Saeculi Octavi Adiecti*.¹¹⁹⁷ The syllable count tests are inconclusive; the calculated values of χ^2 correspond to probabilities of H_0 being true of between 0.2 and 0.5 for the hexameter verses and somewhat greater than 0.5 for the pentameter verses. While the tests do not eliminate Paul as a possible author, they do nothing to dispel the uncertainty surrounding the authorship of the three fables.

Hoc satus in viridi, (ML 34) the epitaph to Lothair, the infant son of Charlemagne and Hildegarde, and twin brother of Louis the Pious, is the subject of conflicting views among the four major studies. This epitaph appears, anonymously, in the ninth-century manuscript Paris, Bibliotheque Nationale, lat. 528 f. 135-135^v which includes a sequence of seven of the poems composed during Paul's stay at Charlemagne's court, followed by his plea to Charlemagne, *verba tui famuli* (ML 65). Bethmann includes it in a list of poems doubtfully attributed to Paul and states that it could just as well have been the work of Peter of Pisa or Alcuin.¹¹⁹⁸ Dahn is

1190 Neff, *Gedichte*, 187 states that 'Die Vermutung, dass Angilram selbst der Verfasser sei, gewinnt dadurch noch an Wahrscheinlichkeit, dass er dichterisch tätig war' (The conjecture that Angilram himself might be the author, gains [credence] only through the probability that he was poetically capable).

1191 See section 4.7 for the argument, based on the manner in which Angilram is mentioned in the poem, that Paul was not the author.

1192 Dümmler, *PLAC I, carm. xxvii-xxix*, 59-62.

1193 Those poems include *ordiar unde tuos laudes*, (ML 45), *iam puto nervosis*, (ML 37) and *Paule sub umbroso*. which is by Peter of Pisa.

1194 Neff, *Gedichte*, 193-98.

1195 The primary meaning is "impossible", but the entry in the Beolingus German-English dictionary gives the translation as "unlikely" if the word precedes a noun. Neff's text at 192 reads "Die stilistische Untersuchung ergab jedoch, dass Paulus unmöglich der Verfasser ist".

1196 Dümmler, *PLAC I, Angilberti carm. iii*, 363.

1197 *Ibid.*, 94-96.

1198 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 319.

critical of a number of Bethmann's conclusions, and he gives a list of ten works, including *hoc satus in viridi*, of which he says that:

If one examines the works which Bethmann has stated to be doubtful, it emerges that for many, the grounds for their Pauline origin are just as good, indeed to some extent better than many of those which he has placed in his list of those undoubtedly by Paul.¹¹⁹⁹

Unfortunately, he does not explain what those grounds are.

It is not always obvious from the way that a poem is presented in Dümmler's edition whether he attributes a particular item included in the *Pauli et Petri carmina* to Peter or to Paul. Dümmler does not refer to the conflicting views discussed above, but in the case of *hoc satus in viridi* (ML 34) he seems to express differing views in the *proemium*¹²⁰⁰ and in the notes to the poem. The footnote to the *proemium* is to the effect that he may now judge the epitaph to be the work of Peter (of Pisa) rather than Paul, because Paul had not journeyed to France at the time of the infant's death, nor is there any mention of his epitaph in the *Liber de Episcopis Mettensibus*. The first point is of no consequence, since Adelheid, the subject of *perpetualis amor* (ML 50), which is undoubtedly by Paul, died in 774, but the second has significant weight, because the five epitaphs to members of Charlemagne's family which are undoubtedly Paul's work all appear in *Liber de Episcopis Mettensibus*. Although Paul does mention Lothair briefly in the *Liber*,¹²⁰¹ it does not include *hoc satus in viridi*. Nevertheless, in his notes to *hoc satus in viridi*¹²⁰² Dümmler draws attention to a similarity of phrase with the Lake Como poem,¹²⁰³ which surely indicates that he accepts the possibility of Paul's authorship. Neff contradicts Dümmler on two counts; he does not accept Peter as a possible author, and he excludes Paul's authorship on both historical and stylistic grounds. The historical ground arises from the words appended to the poem which identify the date of Lothar's death as VI Id. Feb in the tenth year of Charlemagne's reign, that is, 8 February 778.¹²⁰⁴ This date is wrong, since Lothair and his twin brother Louis were born on 16 April 778, and Neff remarks that Paul, who was very well acquainted with the chronology of Charlemagne's family, would not have made that error.

1199 Dahn, *Paulus Diaconus*, 72. "Mustert man die von Bethmann für 'zweifelhaft' erklärten, so ergiebt sich, dass bei manchen die Gründe für ihren paulinischen Ursprung ebenso gut, ja zum Theil besser sind, also bei manchen von ihm in die Reihe der zweifellosen gestellten."

1200 Dümmler, *PLAC I*, 29, n.8. "Epitaphium Hlotharii, Hludowice pii gemini fratris, a 780 defuncti, nunc a Petro potius quam Paulo conditum esse consuerim, quia neque tempore, quo puer ille obit, Paulus iam in Francia peregrinabatur, neque in Gestis Episcoporum Mettensis titulus huius ullam mentionem facit".

1201 "Natorum sane eius quos ei Hildegard peperit...tertius Lodobich qui cum Hlothario, qui biennies occubuit, uno partu est genitus".

1202 Dümmler, *PLAC I*, *carm. xxxix*, 71, under the title *Epitaphium Chlodarii pueri regis*.

1203 v.33, *vernali cespite pollet*; cf. v.7 of the Lake Como poem, *viridi dum cespite polles*; see n.6, 71.

1204 These words do not appear in either of the other two manuscripts (St Gallen, Stiftsbibliothek 899, s.x and London, British Library, Harley 3685, s.xv).

As with the three fables, neither test is conclusive; the test on the hexameter verses gives a high, though by no means significant probability that H_0 is true, but the χ^2 value for the test on the pentameter verses gives a probability between 0.2 and 0.5. It is not possible to carry out a test of the hypothesis that *hoc satus in viridi* and the poems of Peter of Pisa in the same metre belong to the same population, as the only known poem in elegiac couplets by Peter¹²⁰⁵ is *hoc opus exiguo*, which is indeed exiguous as it consists of only ten couplets.

Funereo textu scribuntur (ML 27) is an epitaph of eighteen elegiac couplets, dedicated to one Dombercht, an ecclesiastic of Anglo-Saxon origin and a pupil of Boniface, to whom Dümmler attributes the poem.¹²⁰⁶ Once again, Neff disagrees with Dümmler,¹²⁰⁷ attributing the poem to an unidentified pupil of Peter of Pisa. What little historical context exists¹²⁰⁸ does not assist in resolving this disagreement, though it does show that if Dombercht was Boniface's pupil, he may well have been a contemporary of Paul and Peter of Pisa. That the epitaph to him is the work of a pupil may be inferred from the request, *rogo te, domine pater, ut emendas et corrigas* which forms the concluding line, separate from the main text of the poem.

The tests on the hexameter and pentameter verses are consistent, but inconclusive. The calculated values of χ^2 correspond to probabilities of approximately 0.5 that H_0 is true for the hexameter verses and between 0.2 and 0.5 for the pentameter verses. No comparison with any other putative author is possible, since none has been identified.

Sponsa decora dei (ML 62) and *O Benedicta soror* (ML 44) are epanaleptic poems dedicated to S. Scholastica, the sister of S. Benedict. Initially, *sponsa decora dei* was accepted by Bethmann as Paul's work,¹²⁰⁹ and Dahn considered it highly probable that Paul was its author,¹²¹⁰ but both of them denied his authorship of *O Benedicta soror*.¹²¹¹ Neither Dümmler nor Neff so much as mentions either of them, and in *Poetae Latinae Aevi Carolin* they are printed among the poems of the Ottonian period.¹²¹² In 1990 a translation of these poems, together with an extract from Aldhelm's *Carmen de Virginitate*,¹²¹³ was published under the title "Three Songs

1205 Of the other four firmly attributed to him, three are in hexameters and one (*nos dicamus Christo*) is rhythmic, as is the grammatical poem *adsunt quattuor in prima* which may be the work of Paul..

1206 Dümmler, *PLAC I, carm. vii*, 19.

1207 Neff, *Anhang carm iii*, Auf des Grab des Dombrechts, 178.

1208 The following summary is taken from F. Mersman, 'St Boniface,' *The Catholic Encyclopaedia*, vol. 2, (New York: Robert Appleton Company, 1907), accessed April 1, 2016 at

<<http://www.newadvent.org/cathen/02652a.htm>>. Wynfrith (as Boniface was originally named) was born c. 675 and was killed in Frisia in 754. He was ordained when aged about thirty, was consecrated a bishop in 722 and elevated to an archbishopric in 732. He did much to spread the Christian faith in Thuringia, Bavaria, Frisia and elsewhere during the last thirty years of his life.

1209 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 289.

1210 Dahn, *Paulus Diaconus*, 65-67.

1211 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 324; Dahn, *Paulus Diaconus*, 71.

1212 G. Silagi (ed.), *Monumenta Germaniae Historica, Poetae Latini Medii Aevi V.1.2., Die Ottonenzeit*, 596-99.

1213 Verses 2025 (*Quae proprium ex Schola sumpsit Scholastica nomen*)-2050 (*Quamlibet a nullo solandi verba capessant*).

about S. Scholastica” with the sub-title ‘by Aldhelm and Paul the Deacon’.¹²¹⁴ However, by that time, the attributions to Paul in the article containing the translations, which cite Martinenguis¹²¹⁵ and Mabillon¹²¹⁶, had long been abandoned. Bethmann stated¹²¹⁷ that the attribution of *O Benedicta soror* to Paul by Arnold of Wion¹²¹⁸ and Mabillon was incorrect and that Baronius¹²¹⁹ had rightly attributed it to Abbot Bertharius,¹²²⁰ who composed it as a pendant to his verses on S. Benedict. Dümmler rejected the attribution of *sponsa decora dei* to Paul, attributing it to the twelfth-century Cassinese monk Alberico di Settefrati.¹²²¹ There are no subsequent studies challenging those attributions.

The test on both the hexameter and pentameter verses of *sponsa decora dei* gives an unequivocal result. There is one peculiarity about the syllable count data; in F1-F4 of the hexameter lines of both *sponsa decora dei* and the comparison sample of epanaleptic poems firmly attributable to Paul there are none with eleven syllables. The data are therefore distributed among four categories instead of five and consequently the contingency table has three degrees of freedom instead of four. The test on the hexameter lines yields a value of 8.121 for χ^2 , corresponding to a probability of less than 0.05 that H_0 is true, and thus unequivocally rejects Paul as the author of *sponsa decora Dei*. The test on the pentameter lines yields a value of 9.229 for χ^2 , corresponding to a probability of slightly less than 0.01 and therefore also points unequivocally to the conclusion that H_0 is false and Paul is not the author of *sponsa decora Dei*. Inconsistently, the tests on *O benedicta, soror* fail to reject H_0 although, as stated above, both Bethmann and Dümmler denied Paul’s authorship; no subsequent study has proposed it.

The hypothesis that the two S. Scholastica poems belong to the same population was also tested. This is the one occasion on which the tests of the hexameter and pentameter verses gave contradictory results. The test on the hexameter verses failed to reject H_0 , the χ^2 value of 1.880 corresponding to a probability greater than 0.5 that H_0 is true, but the test on the pentameter verses gave $\chi^2 = 9.717$, corresponding to a probability of less than 0.01, which is a

1214 M. Forman, O.S.B, trans., ‘St. Scholastica by Gregory the Great’, with an introduction by M.H. King: ‘Three Songs about St. Scholastica by Aldhelm and Paul the Deacon’, *Vox Benedictina* 7/3, (1990), 229-251.

1215 Martinengo, *Pia quaedam Poemata* (Rome: F. Zanetti, 1590), 256-58.

1216 Mabillon, *Acta sanctorum Ordinis S. Benedicti* I, 42-44.

1217 Bethmann, ‘Paulus Diaconus, Leben und Schriften,’ 323.

1218 Arnold Wion, *Lignum Vitae, ornamentum et decus Ecclesiae*, vol. II (Venice, G. Angelerius, 1595), cited by Bethmann, ‘Paulus Diaconus, Leben und Schriften,’ 323. Bethmann’s citation does not give a page reference for the cited work. *Lignum Vitae* is a history of the Benedictine Order.

1219 Bethmann does not provide a citation relating to Baronius, who lived from 1536 to 1607. He was a cleric of Neapolitan origin who was created a cardinal in 1596 and was also a noted ecclesiastical historian.

1220 Bertharius (810-883), a noted scholar and writer, was appointed abbot of Monte Cassino in 856 and was killed when the Saracens sacked the abbey. He was canonised in 1727.

1221 E. Dümmler, ‘Die handschriftlichen Überlieferung der lateinischen Dichtungen aus der Zeit der Karolinger,’ *Neues Archiv der Gesellschaft für ältere Deutsche Geschichtskunde* 4, (1879), 103.

decisive rejection of H_0 . This conflict might have been resolved if it had been possible to carry out the test on *O benedicta soror* and the poem to S. Benedict by Bertharius to which it is said by Bethmann to be a pendant. Unfortunately, that method of resolution is not available. Traube's edition of the *Bertharii Carmina*¹²²² contains two poems to S. Benedict, but neither of them is epanaleptic; furthermore, it contains no poem to S. Scholastica, though one would have been expected if Bethmann's statement is correct.

Ordinar unde tuas laudes, (ML 45) the Lake Como poem, has been attributed to Paul in every published study except Dahn's. He denied Paul's authorship on the following grounds:¹²²³

- (i) the superscription '*hos versus in laude larii lacu Paulus Diaconus composuit*' proves nothing;
- (ii) the style is not his; the description of the vegetation and the beauties of nature on the banks of the lake is unlike anything that is found in the poems undoubtedly written by him;
- (iii) there is no evidence of his knowledge of Lake Como and he did not pass by it on his way to France; and, finally
- (iv) that it would have seemed a blasphemy for a pious man such as Paul to address a 'profane lake' in the same terms as his 'holy father', presumably S. Benedict, since he quotes the opening line '*ordiar unde tuos, sacer O Benedicte triumphos*' as well as the similar opening line of the Lake Como poem.

Dahn concludes that the poem is the work of an imitator, who has sought, by re-hashing of Paul's opening and by choice of the easily constructed epanaleptic couplet, as well as by emphatically mentioning his name in the superscription, to create the appearance of authenticity.¹²²⁴

There is little, if any, substance to these assertions. The main genres of Paul's authentic poems are addresses to patrons and superiors, epitaphs, *tituli*, riddles and their answers. It is unsurprising that a poem praising the beauties of a landscape should display a different style from any of those. Dahn seems to have assumed that Paul's only opportunity to have seen Lake Como would have been in the course of his journey from Italy to France. In fact, and consistently with Bullough's view that the Lake Como poem was Paul's earliest poetic composition,¹²²⁵ Paul had ample opportunity to visit it during his periods of education and

1222 L. Traube, ed., *PLAC III*, 389-401.

1223 Dahn, *Paulus Diaconus*, 65-66.

1224 Dahn, *Paulus Diaconus*, 66. The German text of the concluding paragraph reads 'Es ist das Werk eines Nachnamers, der durch Wiederholung (*sic*; the more usual spelling is *Wiederholung*) des paulinische Anfangs und durch Wahl der leicht nachzubildenden epanaleptischen Geminatio, sowie durch emphatische Namen-Nennung in der Überschrift den Schein der Echtheit anstrebte'.

1225 D. Bullough, 'Ethnic History and the Carolingians: An alternative reading of Paul the Deacon's *Historia Langobardorum*,' in *The Inheritance of Historiography 350-900*, ed. C. Holdsworth, and T.P. Wiseman,

tutoring at the royal court in Pavia, which is some fifty miles south of the lake. Dahn's conclusion is readily demolished by the application of Occam's razor; the superscription of the poem in the manuscript Leipzig Staatsbibliothek Rep. I, 74, f.35¹²²⁶ and its resemblance to the S. Benedict poem are most simply explained as an announcement by Paul of his authorship of the Lake Como poem and his adoption of the same style in his later poem to S. Benedict.¹²²⁷ The test does not reject the hypothesis that the Lake Como poem belongs to the same population as Paul's authentic epanaleptic poems *haec domus in domini* (ML 28) and *ordiar unde tuos, sacer* (ML 45). For the hexameter verses the calculated value of 5.115 for χ^2 with three degrees of freedom corresponds to a probability of between 0.05 and 0.1 that H_0 is true, and for the pentameter verses the χ^2 value of 3.759 with two degrees of freedom corresponds to a probability slightly less than 0.2 that H_0 is true. These results are consistent with the generally received opinion that Paul is the author, and provide no support for Dahn's contrary view.

7.3.4 : Summary

NHST based on syllable count data has been carried out on eight poems. With two exceptions, the results do not reflect current views of the likelihood that Paul is their author. The two exceptions are the Lake Como poem, *ordiar unde tuas laudes* (ML 45), and *sponsa decora dei* (ML 62), one of the hymns to S. Scholastica. The test has, in accordance with received opinion, failed to reject the hypothesis of authenticity for the Lake Como poem and has rejected it for the S. Scholastica poem. The test has failed to reject that hypothesis for any of the other six *dubia*, although the possibility of Paul's authorship has been seriously considered (but not generally accepted) only in the cases of *qui sacra vivaci* and the three fables. Of the remainder, Paul is certainly not the author of *hausimus altifluo*, (ML 54), is only tentatively suggested to be the author of *hoc satus in viridi*, (ML 34), has never been proposed as the author of *funereo textu scribuntur* (ML 27) and is not currently accepted as the author of *O Benedicta soror* (ML 42).

These outcomes raise two questions. The first is whether the test based on syllable count data rather than full metrical patterning lacks sufficient discriminatory power to provide a conclusive result. The second is whether, in any event, the metrical similarities between the hexameter verses of Paul and his contemporaries are such that NHST based on metrical data is unlikely to yield any definite result. Those questions are addressed in the next section by

(Liverpool: Liverpool University Press, 1986), 85-101.

1226 Neff, *Gedichte, carm. i*; see the commentary at p.2 and the notes to the text of the poem, 4.

1227 Bullough, in 'Ethnic History and the Carolingians,' refers at p.87 to three poems which, taken together, relate to his leaving the secular world for the monastery, and these are identifiable (though Bullough himself did not do so in terms) as the two S. Benedict poems and *angustae vitae fugiunt*. This would date the S. Benedict poem to 774 or later, following Charlemagne's conquest of Lombardy.

further consideration of the test for false positives on *cartula perge cito*,¹²²⁸ which failed to reject the hypothesis of Paul's authorship although it is firmly attributable to Alcuin; the test on *hausimus altifluo* which again failed to do so although the poem is firmly attributable to Paulinus of Aquileia, and the inconclusive test on *qui sacra vivaci*.

7.4: Metrical patterning in the hexameter poems of Paul and of three other poems of the early Carolingian period

The first of the questions raised in the summary which concluded the previous section is addressed by testing the hypothesis of authenticity for each of the three other poems, using the full metrical patterning data. They cannot be referred to collectively as *dubia*, because two of them, *hausimus altifluo* and *cartula, perge cito*, are accepted, respectively, as the work of Paulinus of Aquileia and of Alcuin, and have never been attributed to Paul. Table 7.3 shows these data, together with the data for the comparison sample (C) which consists of the eight poems in hexameters firmly attributed to Paul. The table also includes the syllable count data, the spondee: dactyl (S:D) ratios and the rank of each pattern. The rank is included as it indicates the patterns most and least favoured by the authors of the three poems tested and by Paul.

1228 See sub-section 7.2.1., above.

Table 7.3: Observed frequencies of metrical patterns (O) and rank (r) for the questioned poems *hausimus altifluo* (q1), *qui sacra vivaci* (q2), *cartula perge, cito* (q3) and the comparison sample (C)

Note: Entries in bold type identify the most favoured patterns

	q1		q2 ¹²²⁹		q3		C	
	O	r	O	r	O	r	O	r
SSSS	2	5 =	3	9	2	10 =	6	11 =
SSSD	0		2	10 =	3	8 =	9	9
SSDS	0		4	7 =	2	10 =	11	7 =
SDSS	5	2	7	3	7	6	14	4
DSSS	3	4	9	1	15	1	17	3
SSDD	0		0		0		4	13
SDSD	0		4	7 =	3	8 =	2	15 =
SDDS	2	5 =	1	12 =	2	10 =	6	11 =
DDSS	12	1	6	4 =	14	2	32	1
DSDS	0		8	2	8	4 =	21	2
SDDD	1	7 =	6	4 =	8	4 =	13	5 =
DDDS	4	3	1		9	3	13	5 =
DDSD	0		1	12 =	6	7	11	7 =
DSDD	1	7 =	5	6	1	13 =	8	10
SDDD	0		1	12 =	1	13 =	3	14
DDDD	0		2	10 =	0		2	15 =
Total	30		60		81		172	
Syllables								
8	2		3		2		6	
9	8		22		27		51	
10	15		25		35		78	
11	5		8		17		35	
12	0		2		0		2	
Total	30		60		81		172	
Feet								
Spondees (S)	67		136		176		368	
Dactyls (D)	53		104		148		320	
Total	120		240		324		688	
S/(S + D)	.588		.567		.543		.535	
S:D ratio	1.26		1.31		1.19		1.15	

In sub-section 6.3.3 the metrical data for the Anglo-Latin poets studied by Orchard were analysed. That analysis led to the proposal that comparison of the S:D ratios of the questioned work (q) and the authentic comparison sample (C) drawn from the work of the candidate author could provide a criterion for predicting whether analysis of metrical data would be capable of distinguishing between q and C if they did not, in fact, belong to the same population and, if the data were so capable, the level of discrimination required. Alternatively, the quotient of the S:D ratios of q and C could be used. The closer the S:D ratios, or the closer

¹²²⁹ This poem consists of sixty-two verses, but vv. 45 and 48 have been omitted from the analysis as they contain personal names (Arnoaldus, Goericus) whose scansion is uncertain, principally because it is unclear whether the -oa- in Arnoaldus and the -oe- in Goericus would have been regarded as diphthongs.

the quotient was to unity, the less likely it would be that analysis of metrical data would be useful.

The results, based on my analysis of the data from Orchard's study of the Anglo-Latin poets, permit me to predict that:

- (a) if the S:D ratios differed by more than 0.1, or their quotient was greater than 1.1, the syllable count analysis should be adequate to reject H_0 if the bodies of verse compared did not in fact belong to the same population, but;
- (b) for lower differences or quotients closer to unity, even the analysis of the full metrical pattern data might be inadequate for the purpose.

Before embarking on more detailed testing of the three selected hexameter poems, it is necessary to acknowledge that, as a comparison sample, the body of verse consisting of the eight poems in that metre firmly attributable to Paul is far from ideal. It amounts to 172 verses in total, and contains poems in several genres. There are two verse *tituli*, *Aemula Romuleis consurgunt* (ML 6, thirty-two verses) and *Christe salus utriusque*, (ML 17; one of its seven verses has not been included in the analysis)¹²³⁰; two poems from the court exchanges, *candidolum bifido* (ML 14, forty-eight verses) and *cynthius occiduus* (ML 21, twenty-four); two epitaphs, *hic ego qui iaceo* (ML 32, twelve verses) and *lactea splendifico* (ML 39, twenty-eight); a dedicatory poem accompanying a commissioned prose work, *ampla mihi vestro* (ML 7, twenty) and a farewell message to conclude a letter, *iam fluebat decima* (ML 36), of which only two verses have been included in the analysis.¹²³¹

Applying the S:D ratio criterion to the poems whose data are shown in Table 7.3, we see that for *hausimus altifluo*, the difference between its S:D ratio (1.26) and that of Paul's hexameter verses (1.15) is 0.11 and the quotient of the ratios is 1.10; for *qui sacra vivaci*, (S:D ratio = 1.31) the difference in the ratios is 0.16 and their quotient is 1.15, and for *cartula perge, cito*, (S:D ratio = 1.19) the difference in S:D ratios is 0.04 and their quotient is 1.03. Consequently, the predictions are that:

- (i) the test based on syllable count data should be able to reject H_0 for *qui sacra vivaci*;
- (ii) *hausimus altifluo* is a borderline case, where syllable count testing might not be adequate, but analysis of the full metrical pattern should reject H_0 , since Paul is not the author; and

1230 V.4 is omitted from the analysis as the text taken from Ughelli and adopted by Dümmler and Neff does not accord with the inscription itself which has 'regnatori', not 'regnator' as the first word of that verse.

1231 V.1 (*Iam fluebat decima de mense diecula iani*) is omitted from the analysis as it is impossible to scan according to accepted rules. The last syllable of 'decima' is the first syllable of F3 and all first syllables of feet must be long. However, 'decima' is nominative, to agree with 'diecula' and terminal -a is only long when the word is in the ablative case. The author is grateful to Muriel Hall, an experienced teacher of Latin and a personal friend, for this observation.

(iii) for *cartula perge cito*, the syllable count test will fail to reject H_0 , and the test using the full metrical patterning data will also probably fail to do so, even though, again, we know that Paul is not the author.

As Table 7.1 shows, the test based on syllable count data has not wholly borne out those predictions. Contrary to prediction (i), it did not reject H_0 for *qui sacra vivaci*. In accordance with prediction (iii), it did not reject H_0 for *cartula perge, cito*.

Contrary to prediction (ii), analysis of the full metrical pattern data for *hausimus altifluo* failed to reject H_0 , even though the poem is not the work of Paul, but of Paulinus of Aquileia.

However, the result of that test must be treated with caution, since four of the sixteen expected values are less than one and another six are between one and two. The test gave a χ^2 value of 22.282 which for fifteen degrees of freedom, corresponds to a probability slightly greater than 0.1 ($\chi^2 = 22.307$) that H_0 is true. This still fails to reject H_0 , but by a fairly small margin. The smoothing-out effect of using syllable count data is demonstrated by the fact that although the frequency of occurrence of the syllable count of ten is very similar in q1 (50%) and C (45%), the distribution of patterns within that syllable count group is very different. The differences in frequency of occurrence of two patterns, DDSS and DSDS, contribute almost exactly 40% (9.032) of the value of χ^2 .

The test using the full metrical pattern data for *qui sacra vivaci* (q2), where five of the sixteen expected values lie between one and two, gave the value of χ^2 as 17.891, corresponding to a probability greater than 0.25 ($\chi^2 = 18.245$) but less than 0.5 ($\chi^2 = 14.389$) that H_0 is true. Again, the percentages of ten-syllable counts are very similar in q2 (42.5%) and C (45%), but the largest contribution to χ^2 is from a single pattern, SDDSD, which accounts for 5.901 (28.5 %) of the total value of χ^2 .

The results of the test on *cartula, perge cito* (q3) using full metrical patterning do accord with the prediction that it would probably fail to reject H_0 because of their strong metrical similarities, as measured by the S:D ratios. The test yielded a χ^2 value of 13.048 which, for fifteen degrees of freedom, corresponds to a probability less than 0.75 ($\chi^2 = 11.037$) but greater than 0.5 ($\chi^2 = 14.339$) that H_0 is true. In this case the one substantial contribution to χ^2 is from the nine-syllable pattern DSSS, which accounts for 3.345 (25.5%) of the total value. As before, the syllable count test smoothed out differences in detail; q3 and C had, respectively, 33.3% and 29.6% of nine-syllable counts.

In summary, NHST based on analysis of full metrical patterning data has shown that, in each of the three poems tested, some metrical patterns occur considerably more, or less, frequently, than the corresponding pattern in the comparison sample of Paul's authentic hexameter poems. However, the test has failed to reject the hypothesis of authenticity for all three poems, two of

which are definitely not the work of Paul. The conclusions to be drawn are that the tests have provided no evidence that Paul either is, or is not, is the author of any of the poems.

7.5: Comparison of the metrical characteristics of the hexameter poems of Paul and Alcuin

The failure of metrical data testing at any level to reject the hypothesis that *cartula, perge cito* and the *corpus* consisting of Paul's hexameter poems, and the similarity of their S:D ratios requires that two further hypotheses be tested. One, $H_0(1)$, is that that corpus belongs to the same population as Alcuin's hexameter poems, and the other, $H_0(2)$, is that *cartula perge cito* does so. These questions are addressed in this study using, for comparison, the data for Alcuin collected by Orchard, whose sample consisted of 500 lines from Alcuin's poem *Versus de patribus regibus et sanctis Euboricensis*¹²³². Table 7.4 shows the results of these tests, both using syllable count data (SCD) and full metrical pattern data (MPD), and also incorporates the data for the hypothesis (designated $H_0(3)$ in the table) that *cartula perge cito* and the corpus of Paul's hexameter poems belong to the same population.

1232 Orchard, Table A7(e), Appendix 5.2, 'A statistical survey of Anglo-Latin Verse', *Aldhelm*, 298.

Table 7.4: Tests of hypotheses that any two of (a) the corpus of Paul's hexameter poems, (b) the sample data from Alcuin's hexameter poem in Orchard's study, and (c) the questioned poem *cartula perge cito* (q3), belong to the same population

Hypothesis	SCD		MPD	
	χ^2	P	χ^2	P
H ₀ (1) Paul-Alcuin	2.914	> 0.5 ($\chi^2 = 3.357$) < 0.75 ($\chi^2 = 1.923$)	34.971	>0.001 ($\chi^2 = 37.697$) <0.005 ($\chi^2 = 32.801$)
H ₀ (2) q3-Alcuin	2.257	> 0.5 ($\chi^2 = 3.357$) < 0.75 ($\chi^2 = 1.923$)	9.900	>0.75 ($\chi^2 = 11.037$) <0.9 ($\chi^2 = 8.547$)
H ₀ (3) q3-Paul	1.198	~0.9 ($\chi^2 = 1.094$)	13.046	> 0.5 ($\chi^2 = 14.139$) <0.75 ($\chi^2 = 11.037$)

Although the S:D ratios for Paul and Alcuin and the test using the syllable count data both indicate considerable similarities in their metrical characteristics, the test using the full metrical pattern data, which very decisively rejects H₀(1), shows that differences between the frequencies of occurrence of four of the sixteen metrical patterns (SSSD, SSDD, DSSS and DSDD) account for almost exactly two-thirds of the calculated value of χ^2 . The tests do not reject H₀(2) at any level, a result which is to be expected given that Alcuin is the author of *cartula perge cito*. However, they do not reject H₀(3) at any level either and, given that the test using full metrical patterning shows substantial differences between the metrical patterning of the Pauline hexameter corpus and the Alcuin sample data, that failure cannot be explained on the basis that the hexameter poetry of the two authors is too similar to be distinguishable by such testing.

7.6: Conclusions

The analysis of both syllable count and full metrical pattern data, as applied to the metrical data for the Anglo-Latin poets in the study by Orchard, and for the classical Latin poets in the studies by Drobisch, indicated that NHST would in some cases be capable of rejecting the hypothesis that extracts from the works of two different poets belonged to the same population. Accordingly, this chapter has been devoted to carrying out such tests for the purposes listed below. In all cases, H₀ is that the poem tested belongs to the same population as the authentic poems of Paul in that metre.

The purposes are:

- (i) to detect any tendency to throw up false positives or false negatives
- (ii) as an aid to determining whether:
 - (a) certain *dubia* can be reasonably attributed to Paul

(b) it provides any support for denying the generally (but not universally) accepted attribution of the poem *ordiar unde tuas laudes*, in praise of the beauties of Lake Como, to Paul.

(iii) in the case of the two poems to S. Scholastica, whether

(a) either is the work of Paul; and

(b) they are the work of the same author

The results of those tests are, in relation to each purpose:

(i) the test gave a false positive for *cartula, perge cito* but correctly rejected the narrative poem *dux, vita, via, tuis* (ML 24) whose content eliminates Paul from consideration as the author. It correctly failed to reject H_0 for *cynthius occiduas* (ML 21) and *lugentum lacrimis* (ML 40) which are undoubtedly the work of Paul.

(ii) (a). The tests, at any level, failed to reject H_0 for any of the *dubia* composed in either hexameters or elegiac couplets and, in particular, failed to throw any light on the controversy between Dümmler (who accepts Paul's authorship) and Neff (who rejects it) of *qui sacra vivaci* (ML 54) and the three fables (ML 5, 53 and 63).

(ii)(b) The tests do not provide any support for Dahn's arguments that Paul is not the author of the Lake Como poem (ML 45) and that it is the work of an imitator.

(iii) The tests using the syllable count data for both the hexameter and pentameter verses have rejected H_0 for *sponsa decora dei* (ML 62) but are inconsistent on the authorship of *O Benedicta soror* (ML 44) and on the question whether they are the work of the same author.

It is not possible to make any general observations about the value of tests of metrical characteristics in attribution studies. The relative lack of firm conclusions to be drawn from the tests discussed in this chapter is a consequence of the very small amount of metrical data provided by the authentic poems of Paul and the poems which were tested. None of Paul's compositions exceed eighty verses in length and most of them are of less than half that length, and the *dubia* are similar. Such small samples are not conducive to reliable statistical testing, and the problem is exacerbated by the circumstance that Paul wrote in a variety of genres over a lengthy period of poetic composition; his first and last datable poems are the poem to his patron, Adelperga, written in 763, and the epitaph for his patron Arichis, her husband, following his death in 787. It may be that these procedures would be more fruitful in the

examination of such controversies about authorship as may exist in relation to the poetic output of his much more prolific contemporary, Alcuin.

Chapter 8: Conclusions

8.1: Introduction

This chapter will provide an overview of the seven preceding chapters, and will present the conclusions drawn from the study of the historical and textual evidence discussed in chapters 4 and 5, and from the statistical study whose principles were explained in chapter 6 and whose results were the subject of chapter 7.

Chapter 1 described the cultural background against which Paul's literary achievements are to be viewed, summarising the relevant aspects of his life history, in particular his roles at the Beneventan ducal court in the 760s and the court of Charlemagne in the mid 780s. That summary is based largely on the foundation provided by the two major biographical studies, by Bethmann¹²³³ (1851) and Dahn¹²³⁴ (1876), and the editions of his poems by Dümmler¹²³⁵ (1881) and Neff¹²³⁶ (1908), which included a substantially greater number of compositions than those considered in the biographical studies. There are twenty-eight poems which are attributed to Paul in both of those editions, and scholarly investigation during the eleven decades which have elapsed since the publication of Neff's edition has added relatively little to the identification of the poetic corpus securely attributable to Paul.

As the most recent edition of Paul's complete works¹²³⁷ shows, his poetic compositions represent a very small part of his total literary output, and that is reflected in the preponderance of attention to his prose works in studies from Manitius (1911)¹²³⁸ onwards. Brunhölzl (1996)¹²³⁹ described Paul's poetic heritage as 'relatively unimportant', while the thirty 'good poems' to which the *Verfasserlexikon* refers, but does not identify, receive one paragraph of commentary and three footnotes.¹²⁴⁰ The substantial study by Goffart (1988)¹²⁴¹ devotes four of its ninety-two pages to Paul's verse output. Other substantial studies by

1233 L. Bethmann, 'Paulus Diaconus Leben und Schriften', *Archiv der Gesellschaft für alte deutsche Geschichtskunde* 10, (1851), 247-334.

1234 J.S.F. Dahn, *Paulus Diaconus*, (Leipzig: Breitkopf and Hartel, 1876).

1235 E. Dümmler, ed., *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini*, I (Berlin: Weidmann, 1881), 27-86, supplemented by the *Appendix ad Paulum*, *ibid.*, 625-28.

1236 K. Neff, *Die Gedichte des Paulus Diaconus: Kritische und erklärende Ausgabe* (Munich: C.H.Beck, 1908).

1237 L. Citelli, (ed.), *Paolo Diacono Opere/2*, *Corpus Scriptorum Ecclesiae Aquilensis* vol. IX/II, (Rome: Citta Nuovo Editrice 2014). Vol.IX/I contains only the *Historia Langobardorum* and almost 80% of vol.IX/II is taken up by Paul's other prose works.

1238 Manitius, 'Die Universalen Schriftsteller; 41, Paulus Diaconus' in *Geschichte der Lateinischen Literatur des Mittelalters* (Munich: C.H.Beck, 1911), 257-72, of which pp.270-71 are devoted to the *Gedichte*.

1239 F. Brunholzl, 'Le Renouveau de Charlemagne, Paul Diacre', in *Histoire de la littérature latine du moyen age*, (Turnhout: Brepols, 1996), 20-29.

1240 F. J. Worstbrock., 'Paulus Diaconus OSB' in *Deutsches Litteratur des Mittelalters Verfasserlexikon*, *Band 11, Nachträge und Korrekturen*, ed. K. Ruh (Berlin: Walter de Gruyter, 2004): clm. 1172-86, at 1182-83.

1241 W. Goffart, 'Paul the Deacon's Interpretation of Lombard History' in *The Narrators of Barbarian History* (Indiana: Notre Dame University Press, 2005), 329-421. This edition is a paperback reprint of the edition originally published in 1988.

Woods (2007),¹²⁴² Glatthaar (2010),¹²⁴³ Kempf (2013),¹²⁴⁴ and Heath (2017)¹²⁴⁵ are devoted to individual prose works.¹²⁴⁶ The books by Everett (2003)¹²⁴⁷ and Witt (2012)¹²⁴⁸ provide a highly informative view of the cultural landscape during lengthy periods, which included much of Paul's lifetime, but very few of their references to Paul mention his poetry, and, where poems are mentioned, Neff's attributions are accepted without comment.

Belting¹²⁴⁹ has provided a detailed account of Paul's role at the Beneventan court, which included the composition of verse *tituli* for the palatine church of SS. Peter and Paul, and Bullough¹²⁵⁰ has thrown some light on Paul's transition from Lombard to Beneventan patronage, in the course of which he identifies the Lake Como poem, *ordiar unde tuas laudes*, ML 45, as Paul's earliest verse composition. Some studies of individual poems have proceeded on the assumption that¹²⁵¹, or with indifference to whether¹²⁵², Paul was the author of the poem in question.

The study by Stella (2000)¹²⁵³ identifies previously undiscovered manuscript witnesses for *ordiar unde tuos sacer* (ML 46), *fratres alacri pectore* (ML 26), both of which are included in book I of *Historia Langobardorum*, the homiliary composed by Paul at Charlemagne's behest, in which the dedication is followed by the poem *ampla mihi vestro* (ML 7) and which is concluded by the adonic poem *utere felix, munera Christi* (ML 8), all of which are securely attributable to Paul, and two *dubia*, *dulcis amice bibi gratanter* (ML 22) and *dulcis amice, veni* (ML 23). It is not clear why any of the first four poems mentioned are included in a study of 'La poesia di Paolo

Diacono: nuovi manoscritti e attribuzioni incerte'. The last two are the only *dubia* discussed in

1242 C. Woods, 'A contribution to the King's library: Paul the Deacon's epitome and its Carolingian context', in *Verrius, Festus and Paul-lexicography, scholarship and society*, ed. F. Glinister and C. Woods, (London: Institute of Classical Studies, University of London, 2007), 109-37.

1243 M. Glatthaar, 'Zur Datierung der Epistola Karls des Grössen', *Deutsches Archiv für Erforschung des Mittelalters* A 66, (2010), 455.

1244 D. Kempf, *Paul the Deacon, Liber de Episcopis Mettensibus* (Paris: Peeters, 2013).

1245 C. Heath, *The narrative worlds of Paul the Deacon* (Amsterdam: Amsterdam University Press B.V, 2017).

1246 Respectively, the epitome of Festus, Charlemagne's circular letter, the prose history of the bishops of Metz and the *Historia Langobardorum*.

1247 N. Everett, *Literacy in Lombard Italy ca 568-774 AD* (Cambridge: Cambridge University Press, 2003).

1248 R.G. Witt, chapter 1, 'The Carolingian Conquest' in *The Two Latin Cultures and the Foundation of the Renaissance* (Cambridge: Cambridge University Press, 2012), 17-71.

1249 H. Belting, 'Studien zum Beneventanischen Hof in 8. Jahrhundert', *Dumbarton Oaks Papers* 16, (1962): 141-93.

1250 D. Bullough, 'Ethnic History and the Carolingians: An alternative reading of Paul the Deacon's *Historia Langobardorum*', in *The Inheritance of Historiography 350- 900*, ed. C. Holdsworth and T.P. Wiseman, (Liverpool: Liverpool University Press, 1986): 85-101.

1251 J. Pucci, 'Pied Beauty: Paul the Deacon's poem to Lake Como', *Latomus*, 58, no.4 (1999), 872-84; C. Forstall, S. Jacobson and W. Scheirer, 'Evidence of Intertextuality: Investigating Paul the Deacon's *Angustae Vitae*', *Literary and Linguistic Computing*, 26, no.2 (2011), 285-96. Pre-print version accessed 18/4/2016 from <http://llc.oxfordjournals.org/content/26/3/285.abstract>.

1252 J. Chailley, 'Ut queant laxis et les Origines de la Gamme', *Acta Musicologica* 56 (1984), 48-64.

1253 F. Stella, *La poesia di Paolo Diacono: nuovi manoscritti e attribuzioni incerte*, in *Atti del Convegno Internazionale di studi, Cividale del Friuli-Udine, 6-9 maggio 1999*, cur. Paolo Chiesa (Udine: Forum Editrice universitaria udinese, 2000), 551-74.

Stella's study, which does not propose an attribution for either of them. Stella also lists previously undiscovered manuscript witnesses for twenty other poems, but these are not discussed in his article. Valuable though it is as a study of manuscript sources, it casts no light whatever on the authorship of any of the *dubia*.

Stella's study was one of twenty-seven papers included in the proceedings of the 1999 congress, and only one other paper, by Mastandrea,¹²⁵⁴ was concerned with Paul's poetry. Mastandrea's work examined classical and patristic influences on Paul's style in the poems *sensi cuius verba* (ML 58), *ante suos refluus* (ML 10) *angustae vitae fugiunt* (ML 9) and also on the style of *perge, libelle meus* (ML 49) for which he accepted Neff's attribution to Paulinus.

The compilation edited by Valtorta (2006)¹²⁵⁵ demonstrates the continuing lack of unanimity about the content of the authentic corpus of Paul's poetry (the 'canon'). It lists thirty-nine works under the heading 'Paulus Diaconus', of which PD 1-30 are poems. The prose works PD 31-39 include the *Epistolae Ad Adalardum* and *Ad Theudemarum*, which conclude, respectively with the poems *ante suos refluus* (ML 10) and *iam fluebat decima* (ML 36). They also include the Homiliarium, which contains the poems *ampla mihi vestro* (ML 7) and *utere felix, munere Christi* (ML 8), making a total of thirty-four poems. These include all twenty-eight of the poems attributed to Paul by Dümmler and Neff, ('the provisional canon'). The other six are four (*pulchrrior me nullus*, ML 52, and the *tituli Adam per lignum*, ML 1 I-IV, *multicolor quali*, ML 43 and *O una ante amones*, ML 47) attributed to him only by Neff, one (*qui sacra vivaci*, ML 54) attributed to him only by Dümmler and one (*ut queant laxis*, ML 64)¹²⁵⁶, included by Dümmler among the *dubia*, but denied by Neff. One other candidate for inclusion in the canon is the elegiac couplet *Vale, salus patriae* (ML 68) which first came to light in the edition of his works by Citelli (2014).¹²⁵⁷ This study addresses the questions whether, in the light of all the evidence that has been collected and evaluated, any of the thirty-five poems identified in this paragraph should be excluded from the canon, or any further poems be added to it.

Part 1 of Chapter 2 reviewed a number of studies of authors earlier than or contemporary with Paul, and Part 2 identified the method employed in the studies of Schaller on Theodulf of Orlèans¹²⁵⁸ and Burghardt on Alcuin¹²⁵⁹ ('the Heidelberg method') as being the most suitable for a study of the poetic corpus attributed to Paul. Their method was to select historical or

1254 P. Mastandrea, 'Classicismo e critianismo nella poesia di Paolo Diacono', *Atti del Convegno Internazionale di studi, Cividale del Friuli-Udine, 6-9 maggio 1999*, cur. Paolo Chiesa (Udine: Forum Editrice universitaria udinese 2000), 293-311,

1255 B. Valtorta, ed., *Clavis scriptorium latinorum medii aevi, Auctores Italiae (700-1000)* (Florence: SISMEL, edizione del Galuzzo, 2006), 196-219.

1256 Dümmler, *PLAC I, carm. liv*, 83; cf. Neff, *Gedichte*, 152.

1257 Citelli, *Opere/2*, at 340 (in the text of the letter in which it appears) and 449.

1258 D. Schaller, 'Philologische Untersuchungen zu den Gedichten Theodulf von Orleans', *Deutsches Archiv für Erforschung des Mittelalters*, 18, no.1 (1962), 13-91.

textual authenticity criteria, and then to identify metrical, lexical or other stylistic characteristics of the poems which satisfied one of the authenticity criteria; those are listed in Tables 2.6A and 2.6B. The second stage of the Heidelberg method is to classify the poems which did not meet any of the authenticity criteria, according to the extent of their stylistic resemblance to those that did, as certainly, probably, possibly or (in a very few cases) definitely not the work of the author studied.

No such systematic examination of the philological and textual evidence as is carried out in Chapters 3-5 has been previously undertaken in any study of Paul. Chapter 3 was concerned with the problems encountered in using the types of evidence discussed in Chapter 2 of the present study, paying particular attention to the authenticity criteria employed by Schaller and Burghardt and their value in identifying poems securely attributable to a candidate author without recourse to metrical, lexical or other stylistic evidence. Table 8.1, below, shows the criteria of authenticity selected for use in the present study; they resemble, but are not identical with, those chosen by Schaller and Burghardt.

There are sixty-eight verse compositions for which the question of Paul's authorship has been considered in previous studies. Chapter 4 discussed the probability, estimated by reference to the extent to which the selected authenticity criteria are met, of Paul's authorship of all the sixty-eight verse compositions attributed to him, except for the six hymns which are the subject of Chapter 5. The discussion in Chapter 4 examined four broad categories of evidence for and against Paul's authorship, namely, the historical context, internal statements of authorship, manuscript association and transmission, and verse form and metrical structure. The hymns have been treated separately because, with one exception (*fratres alacri pectore*, ML 26, which is included in Chapter 1 of the *Historia Langobardorum*), none of them meet authenticity criteria sufficiently to permit their attribution to Paul. The authorship of one of them, *ut queant laxis* (ML 64), the hymn in honour of S. John the Baptist, has aroused a great deal more controversy than any of the others, while the two compositions which commemorate the translation of the relics of the martyred warrior-saint, Mercurius, provide an example, not encountered elsewhere in this study, of a clash between historical and stylistic evidence which merits discussion in detail.

Chapters 6 and 7 were concerned with the use of statistical analysis of metrical characteristics as an aid to estimating the probability of Paul's authorship of a selection of the works attributed to him. This is the first occasion on which such methods have been employed in a study of Paul. Chapter 6 explained the principles applicable to such analyses

1259 H.-D. Burghardt, *Philologische Untersuchungen zu den Gedichten Alkuins*, (Diss. Phil., Heidelberg, 1960).

and discusses a number of studies which have employed them. However, those studies had been chiefly directed towards the identification of metrical characteristics of the works of known authors as an end in itself. The characteristics identified in those studies were not employed for the purpose of assessing the probability that any poem was the work of a specified candidate author. That task was attempted in chapter 7 of this work, which addresses three types of question; the propensity of statistical analysis to throw up false positives or false negatives; the authorship of some selected *dubia*; and the balance between discriminatory power and reliability of the analysis where, as in the study of the poetic corpus attributed to Paul, the quantity of available data is small.

8.2. *The value of the types of evidence used as authenticity criteria in this study*

8.2.1 : General discussion

This study distinguishes between internal and external evidence (that is, evidence contained in, or not contained in, the work whose authorship is in question) and also between testimonial and circumstantial evidence. Testimonial evidence consists of statements made about an event by someone whose knowledge of it is either first-hand or hearsay; that is, knowledge derived from statements made about it by others. It includes all kinds of statements of authorship. Circumstantial evidence is evidence of facts connected with the event, from which inferences relating to it may be drawn. It includes evidence derived from manuscripts other than ascriptions, contextual evidence, and all evidence derived from metrical, lexical or other stylistic investigations, whether or not involving stylometric analysis. Table 2.5 identifies the types of non-stylistic evidence used in the authorship studies discussed in Chapter 2 and classifies them both as internal or external and as testimonial or circumstantial. The types of metrical, lexical and other stylistic evidence listed in Table 2.6 are all contained in the work itself and are therefore internal evidence, and as that evidence consists of facts from which inferences about authorship may be drawn, they are circumstantial evidence.

Different factors affect the weight to be given to testimonial and circumstantial evidence. For testimonial evidence, they include the reliability of the maker of the statement, ambiguity in the statement, how soon after the event the statement was made, whether it was first-hand or hearsay and, if the latter, through how many successive mouths or hands the statement was transmitted, and whether the maker of the statement had any particular motive for making it. With circumstantial evidence, relevant factors are how securely the facts from which the

inference is drawn are established, whether any other inference can be drawn from them, and, particularly in relation to stylometric studies, whether the inferential process is reliable.

Tables 3.2-3.4 identified authenticity criteria satisfied by the poems examined in studies of Paul's poetic output. These tables relate, respectively, to the twenty-eight poems accepted as authentic by both Dümmler and Neff, which constitute the provisional canon of Paul's verse compositions, the ten attributed to Paul by only one of those editors, and the twenty-seven not attributed to Paul by either editor. The two latter groups constitute the *dubia*. Neither those tables, nor their converse, Table 8.1, include the three additional poems found only in the Citelli edition. Of those, *Vale, salus patriae* (ML 68) is contained in a letter by Paul and is therefore a candidate for inclusion in the canon. *Rustice lustrivage* (ML 67) is found in a manuscript containing four poems which are undoubtedly the work of Paul. Citelli gives the manuscript source of *Olim romulea sanctis* (ML 66) as Cod. Casinensis 318, which is not known to contain any verse composition attributable to Paul.

Table 8.1: Authenticity criteria satisfied by poems associated with Paul

Key: DN group; the group of poems accepted as authentic by Dümmler and Neff
D or N group; the group of poems accepted by only one of Dümmler and Neff
Excluded group; the group of poems accepted by neither.

		Group		
		Provisional canon	<i>Dubia</i>	
		DN (Table 3.2)	D or N (Table 3.3)	Excluded (Table 3.4)
	Number of poems in group	28	10	37
	Criterion			
	Self-ascription in text			
1a	Direct	[3] ¹²⁶⁰ 10, 36, 51	[1] 52	[1] 18
1b	Indirect	[8] 7, 8, 14, 37, 45, 58, 60, 65		
2	Manuscript ascription	[4] 14, 21, 45, 65		
	Associations			
	Historical associations			
3a	With subject of epigraphic poem			
3b	With patron, dedicatee or addressee	[15] 8, 10, 11, 13, 14, 17, 28, 32, 33, 37, 40, 50, 58, 60, 65	[1] 42	
3c	Evidence of commissioning, patronage or request	[8] 6, 7, 13, 32, 33, 35, 38, 50		
3d	Other historical evidence	[3] 11, 40, 65		[2] 41, 57
3e	Manuscript associations	[19] 6, 9, 13, 14, 21, 26, 32, 33, 35, 36, 37, 39, 45, 46, 50, 56, 58, 60, 65	[8] ¹²⁶¹ 1 I-IV, 4, 5, 43, 47, 52, 53, 63	[15] 3, 12, 15, 16, 20, 22, 23, 29, 30, 31, 34, 49, 55, 61, 64
4	Content of text outside the above categories	[10] 9, 11, 14, 21, 37, 38, 40, 46, 60, 65	[1] 54	
5	The poem is included in another work of Paul	[12] 7, 8, 10, 13, 26, 32, 33, 35, 36, 38, 46, 50		[2] 19, 59
	Total number of instances of satisfaction of authenticity criteria	82	11	20

Sub-section 8.2.2. discusses the authenticity criteria listed above in order of their frequencies of occurrence.

¹²⁶⁰ Figures in bold type and square brackets show the number of poems satisfying the criterion.

¹²⁶¹ Counting ML 1, I-IV as one poem.

8.2.2 : Manuscript associations

Criterion 3(e), forty-two occurrences

In this study, 'manuscript association' means the occurrence of a poem, possibly attributable to Paul, in a manuscript containing other poems securely attributable to Paul. Table 4.3 summarised Neff's analysis of the content of the seven most important manuscript sources of Paul's authentic poems.¹²⁶² It showed that all seven of them contain *dubia*, interspersed among the poems securely attributable to Paul on other grounds. Table 8.1 presents a similar picture, since it shows that there are twenty-three poems of doubtful authorship which are found in manuscripts containing authentic works of Paul. None of those poems satisfies any other authenticity criterion. Although this shows manuscript association to be a very weak type of evidence, two of the poems attributed to Paul by both Dümmler and Neff satisfy only the manuscript association criterion. These are *lactea splendifico* (ML 39) which occurs only in Leipzig Staatsbibliothek Rep. I 74 f. 37-37^v, and *roscida de lacrimis* (ML 56) which immediately precedes it in that manuscript and is also included in two other major sources containing poems securely attributable to Paul.¹²⁶³ Neff also supports the attribution of *lactea splendifico* on stylistic grounds,¹²⁶⁴ and it is plausible that Paul could have composed an epitaph to the wife of his former patron, Desiderius, though there is no evidence that he did so. Neff was unable to identify Sophia or to establish any connexion with Paul,¹²⁶⁵ so his attribution of *roscida de lacrimis* is based only on manuscript association.

8.2.3 : Historical associations

Criteria 3(a-d), twenty-nine occurrences

Table 8.1 shows that of the twenty-six occurrences in poems of the provisional canon, fifteen are associations with the patron, dedicatee or addressee, eight are evidence of patronage, commissioning or request, and three arise from other historical evidence. With two exceptions, Paul's authorship of those poems is supported by evidence other than that of historical association. The two exceptions are the verse *tituli, Christe salus utriusque* (ML 17) and *haec domus est domini* (ML 28) for the church of SS. Peter and Paul in Salerno. Both texts contain references to Paul's patron, Arichis. There are three *dubia* which have historical associations with Paul. *Multa legit paucis* (ML 42) was associated with the epitome of Festus composed by Paul and dedicated to Charlemagne; it refers to him by title (*Karolo rege*) and

¹²⁶² Neff, *Gedichte*, Die handschriftliche Überlieferung; 2, Inhalt der wichtigsten Handschriften, xiii-xx.

¹²⁶³ Paris BnFr, lat. 528 and London, BL, Harley 3685. Both of these also contain *dubia*.

¹²⁶⁴ Neff, *Gedichte*, 41-45.

¹²⁶⁵ *Ibid.*, 47. 'Fraglich aber erscheint, wer mit Sophia neptis gemeint ist'. The suggested relationships are that she was either a granddaughter of Ansa or a daughter of Paul's brother Arichis.

appellation in the poetic circle of the court (*David*). Dümmler included it in his edition¹²⁶⁶ but subsequently abandoned his attribution of it to Paul. The other two are the two S. Mercurius hymns, *Martir Mercuri* (ML 41) and *salve, miles egregie* (ML 57) which commemorate the translation of the relics of the saint in 768 to the cathedral of S. Sophia founded by Paul's patron, Arichis II of Benevento, but there is no evidence that Paul was commissioned to compose these hymns, and their style is highly uncharacteristic of early Carolingian hymnody in general and of Paul in particular.

8.2.4 : Statements of authorship

Criteria 1a, 1b and 2, seventeen occurrences

Fifteen of these occurrences are in poems of the provisional canon. There are three instances of direct, and eight of indirect ascription in the text, and four manuscript ascriptions.

Perhaps surprisingly, the fact that 'Paul' is a common name gives rise to doubt only in two cases. *Pulchrior me nullus* (ML 52), a six-verse acrostic poem in rhythmic hexameters, spelling out PAULUS, is attributed to 'our Paul' by Neff¹²⁶⁷ essentially on the grounds that it is a poem of a type which Paul was able to write,¹²⁶⁸ that riddle-poems were a common means of entertainment in the court poetic circle, and that it is included in the ninth-century Leipzig Staatsbibliothek Rep. I 74, f.24 (which also contains, at ff. 36-37v, other poems which he attributes to Paul), at the end of a series of *questiones enigmatum rhetoricae aptis (sic)*. If, as Neff asserts, the poem was created during the earlier time of Paul's stay at Charlemagne's court,¹²⁶⁹ there is no other credible candidate for its authorship, but he does not explain the basis for that assertion. The other case is *clare beati agnoscere* (ML 18) in which the name 'Paul' occurs twice. However, the text shows that neither occurrence is a self-ascription of the poem to 'our Paul'. The first occurrence refers to S. Paul and his teachings (*dogmata*); the second refers to 'Paulus Diaconus' as the author of the book which those who wish to understand the saint's teachings are enjoined to study, not as the composer of the poem. Except for *post has nectit subsequentes*, (ML 51), all the poems containing self-ascriptions or manuscript ascriptions of Paul's authorship satisfy one or more of the other authenticity criteria.

1266 Dümmler, *PLAC I, carm. xxvi* (III), 62.

1267 Neff, *Gedichte*, 82-83.

1268 As in the rhythmical acrostic poems *A principio saeculorum* (ML 11, spelling ADELPERGA PIA) and *post has nectit subsequentes* (ML 51, spelling PAULUS FECI).

1269 Neff, *Gedichte*, 83: the text reads 'Unser Rätselgedicht ist jedenfalls in der ersten Zeit seines Aufenthalts am Hofe Karls entstanden, also zwischen 782 und 786'.

8.2.5 : The poem is included in another work of Paul

Criterion 5, fourteen occurrences.

In nine cases this evidence for Paul's authorship is incontestable; these are the five epitaphs to members of Charlemagne's family,¹²⁷⁰ all of which are included in the *Liber de Episcopis Mettensibus*, the introductory and concluding poems dedicating the homiliary to Charlemagne,¹²⁷¹ and the concluding verses of the letters to Theudemar and Adalhard.¹²⁷² However, inclusion in *Historia Langobardorum* is not conclusive evidence of Paul's authorship. It contains three authentic poems, namely, the two S. Benedict poems¹²⁷³ and the epitaph to Venantius Fortunatus¹²⁷⁴, which is known to have been commissioned by Aper, abbot of Poitiers. However, it also contains the epitaph to Droctulft, *clauditur hoc tumulo*, (ML 19),¹²⁷⁵ whose authorship is completely uncertain, and the poem celebrating the conversion and baptism of Cedoal, king of Wessex.¹²⁷⁶ The only other poem of doubtful authorship forming part of a work attributed to Paul is the addendum *Trax puer adstricto* (ML 59) to *sensi cuius verba* (ML 58), Paul's reply to Peter of Pisa's *Nos dicamus, Christo*. Paul (perhaps deliberately, given his reluctance to parade his knowledge of Greek) gave the impression that he was not the author of this Latin translation¹²⁷⁷ from the original Greek.

1270 *Aurea quae fulvis* (ML 13), *hic ego quae iaceo* (ML 32), *Hildegarde rapuit* (ML 33), *hoc tumulata iacet* (ML 36) and *perpetualis amor* (ML 50).

1271 *Ampla mihi vestro* (ML 7) and *utere felix, munere Christi* (ML 8).

1272 In the letter to Theudemar, *iam fluebat decima*, (ML 36) and in that to Adalhard, *ante suos refluus*, (ML 10).

1273 *Fratres alacri pectore* (ML 26) and *ordiart unde tuos sacer* (ML 46).

1274 *Ingenio clarus sensu* (ML 38).

1275 See E. Dümmler, 'Die handschriftlichen Überlieferung der lateinischen Dichtungen aus der Zeit der Karolinger,' *Neues Archiv der Gesellschaft für ältere Deutsche Geschichtskunde* 5, (1879) 85-159, at 105, where he considered, but rejected, the possibility of Paul's authorship of this poem.

1276 *Culmen, opes, sobolem, pollentia regna, triumphos* appears in *HL*, book vi, c.15. Paul's authorship of this poem has never been suggested and it is attributed to Archbishop Benedict of Milan; see L. Bethmann and A. Waitz, eds., 'Pauli *Historia Langobardorum*', *MGH SS. rer. Lang.*, 225.

1277 Entitled 'De puero qui in glacie extinctus est'.

8.2.6 : Other relevant content

Criterion 4, eleven occurrences.

Four poems,¹²⁷⁸ all from the exchanges within the court circle, have content relating to the answers to riddles or themselves pose riddles. Two have content depicting Paul's emotions caused by his loss of freedom and confinement to the monastic life.¹²⁷⁹ Both the poem addressed to Adelperga¹²⁸⁰ and the epitaph to Arichis¹²⁸¹ extol his virtues as ruler and allude to her role as mother. In the epitaph to Venantius Fortunatus, Paul describes his verses disparagingly as compared to those of the famous poet,¹²⁸² and in his plea to Charlemagne¹²⁸³ he recounts the sufferings of his brother's wife and children during the preceding seven years. All this content relates to matters of which Paul had knowledge or in which he was involved, and in each case it firmly identifies him as the author of the poem in which it appears.

The one instance of relevant content occurring in a poem of doubtful authorship is the history of the bishops of Metz in verse, *qui sacra vivaci* (ML 54). The question whether it was the verse component of an *opus geminatum* was discussed in sub-section 4.7.3, the conclusion being that there was no evidence that Paul was acquainted with the form or that it could be attributed to him on that basis. Obviously Paul, as the author of the prose history, had all the information necessary to compose the poem, but Angilram, who commissioned the prose history and was himself bishop of Metz from 768 to 791, had the same information. The poem is attributed to Paul by Dümmler,¹²⁸⁴ in agreement with Bethmann¹²⁸⁵ and Dahn.¹²⁸⁶ Neff attributes it to Angilram.¹²⁸⁷ He disagrees with Bethmann's interpretation of the ending of the poem as a message from Paul wishing good fortune (*Glückswunsche*) to Angilram. By comparison with the prose work Neff would expect a message of goodwill to Angilram to be more laudatory and more directly personal, and that argument gains support not only from the content of the end verses to Paul's letters to Adalhard

*dulce, Adelard, nomen, ...esto memor Pauli*¹²⁸⁸

and to Charlemagne

1278 *Candidolum bifido* (ML 14) and *sic ego suscepi* (ML 60) are replies to Peter of Pisa which both answer and set riddles; in *cynthius occiduas* (ML 21) Paul informs Charlemagne that he has solved a riddle, and in *iam puto nervosis* (ML 37) Paul conveys a similar message to Peter.

1279 *Angustae vitae fugiunt* (ML 9) and *ordiar unde tuos sacer* (ML 46), particularly v. 132 and vv.135-38.

1280 *A principio saeculorum* (ML 11).

1281 *Lugentem lacrimis* (ML 40).

1282 *Ingenio clarus sensu* (ML 38); see v.9, *hos modicus prompsi plebeio carmine versus*.

1283 *Verba tua famuli* (ML 65).

1284 *Qui sacra vivaci* (ML 54), Dümmler, *PLAC I, carm. xxv*, 60-61.

1285 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 294.

1286 Dahn, *Paulus Diaconus*, 71, includes it among those he considers as very probably by Paul.

1287 Neff, *Anhang, carm. v*, 188-90.

1288 Neff, *Gedichte, carm. xxxi*, vv. 4-6, at 130.

*Magne tuorum, Carole princeps...Dardanidaeque Gloria gentis*¹²⁸⁹

but from the concluding paragraph of the prose work, which Kempf translates as follows:

Most holy father Angilram, a space here awaits your beatitude with the continuation of my narrative. But I, conscious of my insignificance, dare not attempt inappropriately what ought to be set forth by a greater pen regarding the praiseworthy course of your life¹²⁹⁰.

It is difficult to imagine Paul composing a poem about the bishops of Metz with such a cursory reference to Angilram as:

Auxilio fultus trahit ad pia Pascua vitae/Angelramni oves

but, against that, there is no evidence about what, if any, poetry Angilram composed.

Therefore, balancing the stylistic argument that Paul was not the author against the lack of evidence that Angilram was a poet, the authorship of *qui sacra vivaci* (ML 54) must remain undecided.

8.3 : *The poems most securely attributable to Paul on the basis of the authenticity criteria*

The greater the amount of evidence in favour of Paul's authorship of a poem, the more secure is its attribution. Table 8.2 shows all the poems which satisfy two or more of the authenticity criteria listed in Table 8.1, and the criteria which they satisfy.

1289 *Ibid.*, *carm.* xxxii, vv. 3-5 (as printed), 134. The dedication in the letter, which accompanies the homiliary, begins '*Summo apici rerum*'; cf. the letter to Adelperga where the dedication reads '*Domnae Adelpergae eximia summae ductrici*' in Neff, *Gedichte*, iii, (Brief an Adelperga), 12.

1290 D. Kempf, *Paul the Deacon: Liber de episcopis Mettensibus* (Paris: Peeters, 2013),

89. The Latin text reads: '*Hic iam, pater sanctissime Angilramne*', *narrationis seriem vestram beatudinem locus expectat. Sed ego mee (sic) tenuitatis non immemor, adtemptare minus idonee non audio que de vestre vite cursu laudabili maiori stilo promenda sunt*'.

Table 8.2: Poems satisfying two or more authenticity criteria

Key to criteria: 1(a), direct, and 1(b), indirect, self-ascription in the text: 2, manuscript ascriptions; 3(b), historical association with patron, dedicatee or addressee, (c), evidence of commissioning, patronage or request, (d) other historical evidence, (e), manuscript associations; 4, content of text outside the above categories: 5, the poem is included in another work of Paul.

The abbreviations cp, ep and p in the table indicate, respectively, a poem of the court circle, an epitaph, and a poem addressed to a patron or ecclesiastical superior.

		Type of criterion				
Sub-section of section 8.2		4	3	2	6	5
ML	Incipit	1a,b, 2	3b-3d	3e	4	5
Six criteria [1]						
65	Verba tui famuli (p)	■ 1b, 2	■ 3b, d	■	■	
Five criteria [1]						
14	Candidolum bifido (cp)	■ 1b, 2	■ 3b	■	■	
Four criteria [7]						
<i>The family epitaphs (ep)</i>						
13	Aurea quae fulvis		■ 3b, c	■		■
32	Hic ego quae iaceo		■ 3b, c	■		■
33	Hildegarde rapuit		■ 3b, c	■		■
36	Hoc tumulata iacet		■ 3b, c	■		■
50	Perpetualis amor		■ 3b, c	■		■
<i>Court poems (cp)</i>						
37	Iam puto nervosis	■ 1b	■ 3b	■	■	
60	Sic ego suscepi	■ 1b	■ 3b	■	■	
Three criteria [10]						
7	Ampla mihi vestro (p)	■ 1b	■ 3c			■
8	Utere felix, munere Christi (p)	■ 1b	■ 3b			■
10	Ante suos refluus (p)	■ 1a	■ 3b			■
21	Cynthus occiduas (cp)	■ 2		■	■	
36	Iam fluebat decima (p)	■ 1a		■		■
380	Ingenio clarus sensu (ep)		■ 3c		■	■
40	Lugentum lacrimis (ep)		■ 3b, d		■	
45	Ordinar unde tuos laudes	■ 1b, 2		■		
46	Ordinar unde tuos sacer			■	■	■
58	Sensi cuius verba (cp)	■ 1b	■ 3b	■		
Two criteria [4]						
6	Aemula Romuleis consurgunt		■ 3c	■		
9	Angustae vitae fugiunt			■	■	
11	A principio saeculorum (p)		■		■	
26	Fratres alacri pectore			■		■

Table 8.2 contains twenty-three of the twenty-eight poems attributed to Paul by both Dümmler and Neff, and no poems which are not. Seven are epitaphs, five are Paul's contributions to the exchanges in the court circle, and six are addressed to a patron or ecclesiastical superior. The other five are the Lake Como poem (ML 45), the two S. Benedict poems (ML 26 and 46), the poem lamenting Paul's transition from freedom to monastic

confinement (ML 9), and one of the verse *tituli* (ML 6) for the church built by Arichis in Salerno.

There are reasonable grounds for accepting Paul's authorship of the other five poems attributed to him by both Dümmler and Neff, although they satisfy only one of the authenticity criteria. If we accept Paul as the author of the *titulus Aemula Romuleis consurgunt* (ML 6) there is no reason to doubt his authorship of the other two (*Christe salus utriusque*, ML 17) and *haec domus est domini* (ML 28). Paul certainly composed one acrostic poem in rhythmical verse (*A principio saeculorum*, ML 11), and his expertise as a grammarian makes it unlikely that there is any credible candidate, other than Peter of Pisa, to whom it has never been attributed, for the authorship of the acrostic grammatical poem *post has nectit subsequentes*, (ML 51). Finally, there are the epitaphs to Queen Ansa and the unidentified Sophia. Arguably, *lactea splendifico* (ML 39) could have been included in Table 8.2 as satisfying the criterion of historical association, since Paul would have at least been acquainted with the wife of Desiderius. In addition, Neff has advanced stylistic arguments for Paul's authorship of this poem.¹²⁹¹ There is no firm historical evidence relating to Sophia because she has not been identified, but the superscriptions to *roscida de lacrimis* (ML 56) in both Paris, BnFr. lat 528 and Leipzig, Staatsbibliothek Rep. I, 74 describe the epitaph as that of Sophia 'neptis'. Neff's commentary (in translation) reads:

But it appears questionable who is meant by Sophia neptis. Until now it has been thought that she was a niece of the poet (compare poem XII, where the four children of his brother Arichis were mentioned) but to me alone it is more probable that it is a grandchild of Queen Ansa who is thought of here¹²⁹².

But, whatever the relationship, as Paul is the only poet with a connexion to the Lombard royal family, or to his exiled brother Arichis, he is the most plausible candidate for the authorship of the poem. Also, the manuscript association evidence for Paul's authorship of Sophia's epitaph, *roscida de lacrimis*, (ML 56) is unusually strong, since it appears in three major manuscript sources of Paul's poetry.¹²⁹³

1291 Neff, *Gedichte, carm.ix*, 41-45.

1292 *Ibid*, *carm. x*, 49, where Neff entitles the poem 'Auf den Grab der Enkelin Sophia'. The summary which follows includes the sentence 'Dein Tod war auch der Tod der Grossmutter' (your death was also the death of your grandmother) and the commentary translated above reads 'Fraglich aber erscheint, wer mit Sophia neptis gemeint ist. Bis jetzt dachte man an eine Nichte des Dichters (vgl. Gedicht XII, wo von seinen Bruder Arichis vier Kinder erwähnt werden), allein mir ist es wahrscheinlicher, dass hier an eine Enkelin der Königin Ansa zu denken ist'. Gedicht XII (as Neff refers to it in the above quotation), *verba tui famuli*, is Paul's plea to Charlemagne for his exiled and dispossessed brother and family, .

1293 Paris, BnFr lat. 528, s. ix^{inc.}, f127-128v; Leipzig, Staatsbibliothek Rep I. 74, s. ix, f.37-37v, and London, BL, Harley 3685 s.xv, f.6.

Both Schaller and Burghardt considered a poem to be firmly attributable to the candidate author if it satisfied a single authenticity criterion, and on that basis, all twenty-eight poems of the 'provisional canon' may properly be securely attributed to Paul. In addition, the evidence discussed in Chapter 4 identifies four more candidates for inclusion in the canon (that is, the authentic corpus of Paul's poetic compositions). The elegiac couplet *Vale, salus patriae* (ML 68) is found in a letter composed by Paul and thus satisfies criterion 5. The acrostic riddle poem *Pulchrior me nullus* (ML 52), found in the manuscript Leipzig, Staatsbibliothek Rep. I, 74 together with other poems securely attributable to Paul, spells out PAULUS, and there is no credible candidate for authorship other than 'our Paul'.¹²⁹⁴ That is a direct statement of authorship which satisfies criterion 1a.

Perge, libelle meus (ML 49) is not printed in Dümmler's edition at all and the commentary in Neff's *Anhang* attributes it to Paulinus of Aquileia.¹²⁹⁵ Its manuscript witness is Oxford, Bodleian Library, Add. C 144, s.xi, and it appears immediately after other content which points to Paulinus as author, which permitted Neff to attribute it to him. The poem is a letter of farewell in which Benevento is named. Its text is defective but Neff has reconstructed it and interpreted the '*dominus dominaque*' addressed in its opening as Charlemagne and his wife Fastrada.

However, the alternative identification of '*dominus dominaque*' as Arichis of Benevento and Adelperga would support Paul's authorship, since Paul would have been very likely to address them in such terms. Whether Paulinus would have addressed Charlemagne and Fastrada in such a fashion is unknown. A substantial argument in favour of Paul's authorship is that the poem is in elegiac couplets, which he employed in sixteen of the poems securely attributable to him, whereas Paulinus wrote almost exclusively in rhythmic forms and in a letter appended to one of his two quantitative poems, both of which are in hexameters, confessed his lack of skill in prosody. On those grounds, *perge, libelle meus* is a credible candidate for inclusion in the canon.

The last of the four is the highly controversial *ut queant laxis*, (ML 65), the hymn in honour of S. John the Baptist. The evidence was discussed in detail in section 5.6, and it is fair to say that its widespread uncritical acceptance as Paul's work, based on the testimony of the unreliable Peter the Deacon and an obviously concocted legend based on the account in the Gospel according to St Luke of the restoration of Zacharias' power of speech on the birth of John produced something of a scholarly backlash,¹²⁹⁶ particularly as there is no hard evidence which

1294 Neff, *Gedichte, carm. xvi*, 82, states 'Unser Rätsel...weist...zweifelloos auf unser Paulus hin' (Our riddle...undoubtedly points to our Paul' (as the author).

1295 *Ibid, Anhang, carm. ix*, 205.

1296 See, in particular, J. Szövérfy, *Die Annalen der Lateinischen Hymnendichtung, tom. I-Die Lateinischen Hymnen bis zum Ende des 11. Jahrhunderts* (Berlin: Erich Schmidt Verlag, 1963), 187 and n.97 thereto.; F. Brunholz, 'Le Renouveau de Charlemagne, Paul Diacre', in *Histoire de la littérature*

supports Paul's authorship.¹²⁹⁷ Nevertheless, the following circumstances point to Paul as the most likely, and, probably, the only credible author of the poem. They are:

(i) The strong evidence in sub-section 5.6.5 that the earliest witness dates from the period 780-820 makes it perfectly possible that the poem was composed during his lifetime.

(ii) Whether or not Paul was acquainted with Horace, his poetry was certainly influenced by Prudentius, another accomplished exponent of the sapphic verse form, so he cannot be excluded on the ground that he was not capable of composing the poem.

(iii) The saint was the patron saint of the Lombards and had been venerated in Lombardy since the early seventh century and Paul, who was a highly patriotic Lombard, was well aware of this and included an anecdote about the saint's protective powers in *Historia Langobardorum*.

(iv) Monza, the site of Queen Theudelinda's original foundation, is approximately twenty-eight miles, in a straight line, from the site of the Lombard royal court at Pavia where Paul was educated, so he had the opportunity to visit the site and appreciate the extent to which the saint was venerated.

(v) There is no other known author in the Carolingian period who satisfies all the above conditions; moreover, the fact that the second oldest manuscript source of the hymn is the ninth-century manuscript Bern, Burgerbibliothek 363, eliminates the possibility that it was composed in the Ottonian or some later period. It is also noteworthy that none of the sceptics suggest any other candidate for its authorship, even among those of the Carolingian era (namely, Alcuin, Hrabanus Maurus, Walahfrid Strabo and Godescalc) who are known to have composed hymns in the sapphic metre.

This study therefore proposes that, at least until another credible candidate comes to light, Paul should be credited with the authorship of *ut queant laxis*.

8.4 : *The results of the statistical study*

Previous investigations have analysed the frequencies of occurrence of metrical patterns in the first four feet (F1-F4) of poems composed in dactylic hexameters. The two most comprehensive studies of this nature were by Drobisch,^{1298, 1299} who studied fifteen classical

latine du moyen age, (Turnhout: Brepols, 1996) ,20-29; F.J. Worstbrock., 'Paulus Diaconus OSB' in *Deutsches Litteratur des Mittelalters Verfasserlexikon, Band 11, Nachträge und Korrekturen*, ed. K. Ruh, (Berlin: Walter de Gruyter, 2004), clm. 1172-86 at 1183, referring to its attribution to Paul by Dreves in *AH*, vol. 50, 120.

1297 Neff, *Gedichte*, in his commentary on Hilderic's epitaph to Paul, *Perspicua clarum nimium, carm. xxxvi*, 152, baldly states that the *hymnus quoque sancti Johannis Baptiste* 'kann Paulus nicht zugeschrieben werden' and nowhere explains why he adopts that view.

1298 W.M. Drobisch, 'Ein statistischer Versuch über die formen des lateinischer Hexameters' *Berichte über die Verhandlungen der Königl-Sächsischen Gesellschaft der Wissenschaften, Philologische-Historische Klasse* 18, (1866): 75-139.

Latin poets, and Orchard,¹³⁰⁰ who studied nine Anglo-Latin poets. However, their analyses were limited to the calculation of percentage frequencies of occurrence of those metrical patterns and identification of the patterns preferred by the poets studied. Orchard also studied other metrical characteristics, including the placement of caesuras and whether they were strong or weak, the use of hiatus and elision, and lexical features, including alliteration and word placing (lexical localisation). However, the principal difference between those studies and the present work is that none of them involved the calculation of any statistical parameters related to those frequencies of occurrence, nor were their results used in any form of attribution study. Another difference is that the statistical analysis in this work is not confined to the poems written entirely in hexameters, but is extended to the pentameter as well as the hexameter components of the poems attributed to Paul which are composed in elegiac couplets, that being the verse form which he most frequently employed.¹³⁰¹

There is no reason, in principle, why statistical analysis of metrical characteristics should not yield useful conclusions leading to inferences about the probability that a particular poem is the work of the candidate author. There are, however, three major problems associated with the use of statistical analysis in a study of the poetic corpus attributed to Paul. One is the small size both of the authentic corpus which is available for use as a comparison sample, and of the *dubia* whose authorship is investigated¹³⁰². If the analysis requires the data to be divided into the sixteen categories which represent the possible metrical patterns of F1-F4 in a hexameter verse, there will be so many low expected frequencies of occurrence as to cast serious doubts on its reliability¹³⁰³. This problem can be mitigated by dividing the data into fewer categories. This is a generally recognised approach to the problem¹³⁰⁴ and it is implemented, in this study, by the novel procedure of analysing the frequencies of occurrence of syllable counts of eight, nine, ten, eleven or twelve in F1-F4, corresponding to patterns which have four, three, two, one or no spondees and the converse number of dactyls. However, we must recognise that any gain in reliability of the analysis arising from the use of this approach will be partly offset by loss of discriminatory power of the analysis due to the division of the data into fewer categories.

1299 W.M. Drobisch, 'Weiter Untersuchungen über die formen des Hexameters des Vergil, Horaz und Homer,' *Berichte über die Verhandlungen der Königl.-Sächsischen Gesellschaft der Wissenschaften, Philologische-Historische Klasse* 20, (1868), 16-53.

1300 A. Orchard, 'A statistical survey of Anglo-Latin Verse', in *The Poetic Art of Aldhelm* (Cambridge, Cambridge University Press, 1994), Appendix 5.2, 293-98.

1301 See Table 4.5, Verse forms employed in poems attributed to Paul.

1302 See Table 4.5 and the discussion in section 6.1.3, The body of work and the metrical data to be analysed in this study.

1303 See the discussion of 'expected count conditions' in section 6.2.3., The choice of metrical data, and section 6.2.4, where the illustrative example based on the data in Table 6.4 is discussed.

1304 See, e.g., A. Kenny, *The Computation of Style* (Oxford: Pergamon Press, 1982), 117.

A second problem is the possibility of the analysis by way of NHST either rejecting a null hypothesis which is true (a Type I error) or failing to reject one which is false (a type II error).¹³⁰⁵ And, finally, even if the reliability problem can be to some extent overcome, it may be that the metrical characteristics of the authentic corpus of Paul's work are not distinguishable from those of other possible candidate authors because of a cultural background, common to them, which features the influence of the same exemplars of their styles of poetic composition¹³⁰⁶.

Tables A7: 1-18 in the Appendix present the results for:

- (i) tests for false positives and false negatives (Tables A7:1-4)
- (ii) tests relating to the probability of Paul's authorship;
 - (a) of selected *dubia*, using syllable count data (Tables 7.1, 7.2 and A7:5-13); and
 - (b) of three hexameter poems of the early Carolingian period, using full metrical pattern data (Tables 7.3, 7.4 and A7:14-18)

The null hypothesis (H_0) was, in all cases, that the questioned work and the comparison sample of Paul's authentic compositions belonged to the same population. In summary, the results are that:

- (i): the test gave a false positive for *cartula, perge cito* which is undoubtedly the work of Alcuin, but there were no other errors of either type.
- (ii)(a): the only conclusive results were for *sponsa decora dei* (ML 62), one of the two S. Scholastica poems, where H_0 was rejected, in accordance with the general opinion that it is not the work of Paul, and *ordiar unde tuas laudes* (ML 45) where H_0 was not rejected, in accordance with the opinion of all scholars other than Dahn that it is the work of Paul. The test also failed to reject H_0 for the other S. Scholastica poem, *O benedicta soror* (ML 44), which is attributed to Abbot Bertharius¹³⁰⁷.
- (ii)(b): the tests on *qui sacra vivaci* (ML 54), where Dümmler and Neff disagree about its authorship, *hausimus altifluo* (ML 30), which has been firmly attributed to Paulinus of Aquileia, and *cartula, perge cito*, the work of Alcuin, were carried out using the full metrical patterning data. The tests failed to reject H_0 for any of these poems¹³⁰⁸. In addition, *cartula, perge cito* was found to belong to the same population as the comparison samples of both Paul's and Alcuin's hexameter verses, but the hypothesis that those two samples themselves belonged to the same population was decisively rejected.

1305 See section 6.3.2, hypothesis testing, Type I and Type II errors, and Table 6.8.

1306 See the discussion of *distinctiveness* in section 6.3.1, Selection and tabulation of data.

1307 Bethmann, 'Paulus Diaconus Leben und Schriften,' 324, where he accepts that attribution by Baronius but gives no details of the work by Baronius in which the attribution is made.

1308 See section 7.4 and calculation tables A7:14-16.

No previous study of the poetic corpus attributable to Paul has employed statistical analysis. This study would have been incomplete unless such analysis was carried out, since it had the potential to resolve cases of uncertain authorship and to reinforce conclusions of Paul's authorship or non-authorship based on the historical, textual and other non-statistical evidence. The above summary shows that the statistical analysis carried out in this study has added very little to the body of evidence for or against Paul's authorship of the poems selected for investigation. However, the sets of available data are far from ideal for the application of statistical methods.¹³⁰⁹ The comparison samples and the selected *dubia* were small, and the comparison samples were made up of poems written in a variety of genres (hagiography, epitaphs, *tituli*, dedicatory poems, and conclusions of letters to ecclesiastical superiors) over a period of at least twenty-four years, that is, from 763, the date of the acrostic poem *A principio saeculorum* (ML 11) to Adelperga, to 787, when the death of his patron Arichis was commemorated in *lugentum lacrimis* (ML 40).

8.5: *The poems doubtfully attributable to Paul*

These are identified in sections 4.7.3 (The less likely candidates for inclusion in the authentic corpus) and 4.7.4 (Poems highly unlikely to be the work of Paul) and are all listed in groups D and E of Table A5 (*dubia* classified according to the probability that they are the work of Paul). There is no firm evidence for Paul's authorship of any of the twenty-three poems which make up these two groups, and only nine (four by Dümmler only, three by Neff only, and two by neither, but by the editor of volume 50 of *Analecta Hymnica*), have ever been firmly attributed to Paul. *Trax puer adstricto* (ML 59) is appended to the undoubtedly Pauline *sensi cuius verba* (ML 58). Paul did not claim to have composed the poem, which is a translation of a Greek epigram, but he was at some pains generally to play down his knowledge of the language, as the last two stanzas of *sensi cuius verba* (ML 58) demonstrate.

Of the four accepted by Dümmler, it is possible that Paul, the author of the prose history of the bishops of Metz (*Liber de Episcopis Mettensibus*) was also the author of the verse history, *qui sacra vivaci* (ML 54), though there is a good argument that Angilram, who commissioned the prose history, composed the verse history himself. Dümmler considered the style of the three fables¹³¹⁰ (ML 5, 53 and 63) to resemble the current style in the Carolingian court circle, but it is not a genre in which Paul wrote any other poetry, and Neff's proposition that it was brought to the court by someone who knew that such poems would be of interest is at least equally

1309 See section 6.3.1 and, in particular, the quoted comment by J. Grieve, 'Literary Authorship Attribution,' *Literary and Linguistic Computing*, 22, no.3 (2007), 205, on the nature of an 'author-based corpus', which has the same function as the 'comparison sample' of this study.

1310 *Aegrum fama fuit*, ML 5, *quaerebet maerentes*, ML 53 and *temporibus priscis*, ML 63.

plausible. Neff's candidates for inclusion are the three verse *tituli* (ML 1, 43 and 47) which he includes under the title '*Andere Inschriften*'.¹³¹¹ His attribution is based on manuscript association, and their proximity to the epitaph to Queen Ansa in the manuscript Leipzig Staatsbibliothek Rep. I 74, f.37-37^v leads him to suppose that they relate to her burial place. The hymns, *quis possit amplo*, (ML 55) in alcaics, and *Christe, decus*¹³¹² *mundi*, (ML 16) in iambic dimeter, are among the six attributed to Paul in *Analecta Hymnica*¹³¹³, but there is no connexion with Paul other than manuscript association.

Of the remaining poems, the grammatical poem *adsunt quattuor in prima* (ML 4) is more plausibly attributable to Paul's fellow poet and grammarian, Peter of Pisa, and *hausimus altifluo* (ML 30) to Paulinus of Aquileia as the addressee, Zacharias, was well known to him. For the rest, there is no connexion except manuscript association and/or dating (eight instances) and faint lexical (*rustice lustrivage*, ML 67) or other stylistic resemblance (the two S. Scholastica poems)¹³¹⁴ to Paul's authentic works.

8.6: *The poems certainly unattributable to Paul*

These thirteen poems, listed in group F of Table A5, fall into two groups. For eight of them, there is simply no evidence about their authorship, although Dümmler did attribute one of them, the epitaph *hoc satus in viridi*, (ML 34) for Lothair, the twin brother of the future King Louis the Pious, to Paul. The inclusion of the epitaph *clauditur hoc tumulo* (ML 19), in *Historia Langobardorum* is as part of the narrative of the battle for control of Ravenna in 584, when Droctulft (Toctron), the subject of the epitaph, was killed.

There is convincing evidence that Paul was not the author of the other five, though in two cases it contradicts the historical evidence. The plainest case is *Dux, via, vita, tuis* (ML 24) whose content includes references to events which took place fifty or more years after Paul's death. *Multa legit paucis* (ML 42), at one time thought to be part of the dedicatory content accompanying the epitome of Festus' *De verborum significatu* presented by Paul to Charlemagne, contains grammatical and prosodic errors wholly inconsistent with Paul's authorship and may be a later interpolation, as it does not appear in the earliest manuscript sources of the epitome. The text of *clare beati agnoscere* (ML 18) contains two references to 'Paul' but one is to the saint and the other to Paul the Deacon as the author of a book which must be studied in order to understand the saint's teaching. Finally, it is possible for the two poems connected with the translation in 768 of the relics of S. Mercurius to Benevento, where Paul's patron Arichis was

1311 Neff, *Gedichte, carm. v*, I-III, 20-22. The three *tituli* are all in the Leipzig manuscript at f.37^v.

1312 Printed as 'deus' in all other editions, though Citelli considers that the emendation is probably correct: see Citelli, *Opere*/2, 381.

1313 C. Blume and G. Dreves, ed., *Analecta Hymnica*, vol. 50 (Leipzig: O.R. Reisland, 1907), 117-123.

1314 *Sponsa decora Dei* (ML 62) and *O Benedicta soror* (ML 44).

ruler and Paul was present at the court there, to have been commissioned by Arichis. However, there is no evidence that he did so, and the extensive use of rhyme throughout the ten stanzas of *Martir Mercuri* (ML 41) rules out Paul as composer of it and its companion piece, *salve miles egregie* (ML 57).

8.7: Summary of the conclusions

The conclusions to be drawn from this study are as follows:

8.7.1 : The value of authenticity criteria

Following the approach adopted by Schaller and Burghardt, the selected authenticity criteria listed in Table 8.1 and noted in the key to Table 8.2¹³¹⁵ have, with the exception of manuscript association, provided reliable indications of Paul's authorship of the poems which they identify as attributable to him. Table 8.2 clearly demonstrates the exception; of the thirty-one instances of a poem included among the *dubia* satisfying an authenticity criterion, the criterion satisfied in twenty-three instances is manuscript association.

1315 The criteria are: 1(a), direct, and 1(b), indirect, self-ascription in the text; 2, manuscript ascriptions; 3(b), historical association with patron, dedicatee or addressee, (c), evidence of commissioning, patronage or request, (d) other historical evidence, (e), manuscript associations; 4, content of text outside the above categories; 5, the poem is included in another work of Paul.

8.7.2 : The potential for the use of statistical analysis

This is limited by the relatively small amount of material attributable to Paul which is suitable for such study. Both the small sample sizes and the stylistic similarities between Paul and other candidate authors tend to create unreliability and, in particular, to indicate Paul's authorship of poems otherwise doubtfully attributable to him. On the other hand, employment of these methods did not call into question any poem firmly attributable to Paul on the basis of the selected authenticity criteria.

8.7.3 : The content of the authentic corpus (the 'canon')

The results accord with the view that the authentic corpus includes about thirty poems.¹³¹⁶ The initial choice of the twenty-eight poems attributed to Paul by both Dümmler and Neff as a 'provisional canon' is vindicated by the finding that twenty-three of them satisfy two or more of the selected authenticity criteria, and the remaining five satisfy one. The results of this study support the inclusion of a further four. *Vale, salus patriae* (ML 68), first revealed in Citelli's 2014 edition, is part of a letter written by Paul. There is no reason to reject the acrostic spelling out PAULUS in *Pulchrior me nullus* (ML 52) as an authentic self-ascription. The earliest witness is the Leipzig Staatsbibliothek Rep. I, 74, s.ix, and there is no other 'Paul' of that era known as a poet. The proposed inclusion of *perge, libelle meus* (ML 49) is novel, since it has never before been firmly attributed to Paul, but the content clearly refers to events of the late eighth century and the fact that it is composed in elegiac couplets strongly supports Paul's authorship since it was his most employed verse form, whereas Paulinus of Aquileia, to whom Neff attributes it, wrote almost entirely in rhythmical forms and his output of quantitative verse consists merely of two poems in hexameters. Finally, despite the unreliability of the original attributor, the twelfth-century Peter the Deacon, and the scepticism of some modern scholars, the circumstances bearing on its possible authorship are such as to identify Paul as the only credible candidate for the authorship of *ut queant laxis* (ML 64) even though none of them, viewed individually, would support an unequivocal attribution to Paul. Finally, it is possible that if a stronger connexion with Queen Ansa or some other member of the Lombard royal house comes to light, the three verse *tituli* attributed to Paul by Neff under the heading 'Andere Inschriften'¹³¹⁷ could be added to the canon.

1316 Most clearly stated by Worstbrock, *Verfasserlexikon*, 'Unter den gut 30 Carmina, die von P[aulus] überkommen sind : see section VI, Carmina, clm. 1183.

1317 Neff, *Gedichte, carm. v* I-III 20-22.

Appendix

The Appendix contains the following tables:

General identification tables

A1: Master List

A2: List of 'context' poems

A3: *Dubia* arranged by groups

A4: Attributions of, and evidence relating to, the *dubia*

A5: *Dubia* classified according to the likelihood that they are the work of Paul

Tables relating to the specified authorship studies in Chapter 2

Study 3.1: Schaller on Theodulf

A2.1: Similarities (indicated by ■) between features of *ad episcopos* and the poems of the comparison sample

A2.2: Schaller's conclusions on the authenticity of the poems in Dümmler's edition

Study 3.2: Burghardt on Alcuin.

A.2.3: Poems in Dümmler's edition securely attributed to Alcuin by Burghardt

A2.4 Burghardt's conclusions as to Alcuin's authorship of the poems in QU other than the *gesicherten Gedichte*¹³¹⁸

Tables of manuscript witnesses and associations

A4.1 Supplementary table of manuscript witnesses

A4.2 Table of manuscript associations

A4.3 Table of occurrences of poems in manuscript witnesses

Tables of metrical data

Note: For the poems in elegiac couplets, there are two tables, H and P, relating to the hexameter and pentameter components of the couplet. The epanaleptic groups are indicated by the annotation (EP).

Data for poems of the groups used as comparison samples

AMD.1: Poems composed in hexameters

AMD.2: Poems composed in elegiac couplets

AMD.3: Poems composed in elegiac couplets (EP)

1318 That is, the poems certainly attributed to Alcuin on the basis of his the authenticity criteria I-VI.

AMD.4: Combined data for all poems

Data for poems of the questioned groups

AMD.5: Poems composed in hexameters

AMD.6: Poems composed in elegiac couplets

AMD.7: Poems composed in elegiac couplets (EP)

AMD.8: Combined data for all poems

Tables of statistical calculations

A6.0: Values of χ^2 for 1, 2, 3, 4, 5 and 15 degrees of freedom for a standard range of probabilities (P)

A6: 1-9: Calculation tables for homogeneity tests, Anglo-Latin poets

A6: 1-4: Scheme I tests (metrical data are numbers of spondees and dactyls)

A6.1: Boniface-Eusebius

A6.2: Boniface-MNE (the unknown author of *Miracula Nynie Episcopi*)

A6.3: Eusebius-MNE

A6.4: Eusebius-Bede

A6.5-7: Scheme II tests (metrical data are syllable counts)

A6.5: Eusebius-Bede

A6.6: MNE-Aedilulf

A6.7: Wulfstan-Bede

A6.8-9: Scheme III tests (Metrical data are full metrical patterns)

A6.8: MNE-Aedilulf

A6.9: Wulfstan-Bede

A7.1-18: Calculation tables for false positives and negatives, selected dubia and comparisons of Paul and Alcuin

Note: For all poems in elegiac couplets (marked *), there are two tables, H and P, relating to the hexameter and pentameter components of the couplet.

A7.1-4: Scheme II tests, false positives and false negatives

A7.1: *Cartula, perge cito*

A7.2: *Dux, via, vita, tuis**

A7.3: *Cynthius occiduas*

A7.4: *Lugentum lacrimis**

A7.5-12: Scheme II tests, selected *dubia*

A7.5: *Hausimus altifluo*

A7.6: *Qui sacra vivaci*

A7.7: The three fables (treated as one composition)

A7.8: *Hoc satus in viridi**

A7.9: *Funereo textu scribuntur**

The S. Scholastica poems

A7.10: *Sponsa decora dei**

A7.11: *O benedicta soror**

A7.12: Test of homogeneity between the two S. Scholastica poems

A7.13: *Ordinar unde tuas laudes** (this poem is included with the *dubia* as the test addresses Dahn's rejection of Paul's authorship)

A7.14-18: Scheme III tests

A7.14: *hausimus altifluo*

A7.15: *qui sacra vivaci*

A7.16: *cartula, perge cito*

A7.17: test for homogeneity of *cartula, perge cito* and a sample from a poem in hexameters (*Te patrem, omnipotentem*) by Alcuin

A7.18: test for homogeneity of the sample from *Te patrem, omnipotentem* and the comparison sample of Paul's hexameter verses

Tables

General identification tables

The master list (Table A1) is an alphabetical list identifying all verse compositions of which Paul's authorship has been discussed in any of the five major studies, those being the two biographical and critical studies by Bethmann (1851) and Dahn (1876), the two editions of his poems by Dümmler (1881) and Neff (1908) which contain the full texts of the poems, and the recent edition by Citelli (2014) which does not reproduce all the texts in full but includes commentary, in Italian, on all poems and translations into Italian of those poems whose text is reproduced. It has been prepared in order to provide a uniform system of reference throughout the text, since the numbering in the two editions and in the collection, in Dahn's *Anhang*, of poems attributed to Paul is not the same. Consequently, all compositions mentioned in the text of this study are identified by the master-list number (indicated as ML followed by the number) and incipit. The list is in alphabetical order from ML 1-65, these being the poems included in either or both of Dümmler's or Neff's editions. The three poems in the Citelli edition which are not in either of the other two are numbered ML 66-68.

The three columns of Table A1 headed D, N, and C give the numbers of the poems in the editions of Dümmler, Neff and Citelli¹³¹⁹. The Citelli edition was published in 2014 and includes all the poems mentioned in Bethmann's study, whether or not they are included in the editions of Dümmler or Neff, but does not give the text of all of them; those are indicated by asterisks in column C. A single asterisk in column C indicates a poem not attributed to Paul by either Dümmler or Neff, and a double asterisk indicates a poem whose text is in one of the prose compositions included in either volume I of the edition¹³²⁰ or the earlier part of this volume. The final column, headed 'ICL' gives the reference number in the compilation edited by Schaller and Köngsen, entitled *Initia carminorum Latinorum saeculi undecimo antiquorum*.

1319 Citelli, L., (ed.), 'Carmina/Poesie', *Paolo Diacono Opere/2* (Corpus Scriptorum Ecclesiae Aquilensis vol. IX/II, 2014), 357-451.

1320 Volume I consists of the full text of *Historia Langobardorum*.

Table A1: Master list

Note: The twenty-eight poems accepted as authentic works of Paul by both Dümmler and Neff (referred to as 'the provisional canon') are identified by their entries being in bold type. A black square in column ML indicates that Dümmler and Neff disagree on the authorship of the poem and the letter D or N identifies the author who accepts it.

ML no.	Incipit	D ¹³²¹	N ¹³²²	C	ICL
1 I ■	Adam per lignum	XLVIII ¹³²³	V III i-iv	4	237
1 II ■	Crux tua Christe potens			19	2917
1 III ■	Crux tua lux lucis			20	2919
1 IV ■ (all N)	Crux tua rex regum			21	2920
2	Ad flendos tuos, Aquilegia	<i>PLAC I</i> ¹³²⁴		2*	172
3	Ad perennis vitae fontem	<i>LI</i>		3* ¹³²⁵	195
4	Adsunt quattuor in prima	none ¹³²⁶	XV I	5A	1182
5 ■ D	Aegrum fama fuit	XXVII	VI I(A)	6	342
6	Aemula Romuleis consurgunt	VI	IV I	7	356
7	Ampla mihi vestro	XXXIV ¹³²⁷	XXXII ¹³²⁸	8** ¹³²⁹	744
8	Utere felix munere Christi			70	16925
9	Angustae vitae fugiunt	V	VIII	9	801
10	Ante suos refluus ¹³³⁰	XXVI	XXXI	10**	881
11	A principio saeculorum	I	II	1	23
12	Aquarum meis quis det	<i>LII</i>		11*	955
13	Aurea quae fulvis	XXII	XXVI	12**	1456
14	Candidolum bifido	XVIII	XIX	13	1888
15	Carmina ferte mea	XLIV	IV I (A)		1954
16	Christe deus mundi	XLIX		14*	2172
17	Christe salus utriusque	VII	IV II	16	2237
18	Clare beati agnoscere ¹³³¹			17	2348
19	Clauditur hoc tumulo ¹³³²			18*	2386
20	Crederet si velles	XLV	IV II (A)		2855
21	Cynthus occiduas	XVII	XVIII	22	3283

1321 References in italics indicate that Dümmler has designated the poem as one of the *dubia*. These appear in Dümmler, *PLAC I*, 65-66 and 77-86.

1322 References annotated (A) are to poems included in Neff's *Anhang*

1323 These four distichs are all printed under the same number, which is not sub-divided as in Neff's edition. Citelli prints them as completely separate items according to their alphabetical order, as does ICL.

1324 Dümmler includes this in *Paulini Aquilensis carmina dubia, carm.x*, 142.

1325 Single asterisks in column C indicate poems printed in Citelli's edition which have never been attributed to Paul.

1326 This and *post has nectit subsequentes* (ML 51) are printed in the *Appendix ad Paulum*, *PLAC I*, 625-28.

1327 These are printed together as *car. xxxiv* in Dümmler's edition.

1328 Those same poems are printed together at the end of a letter in Neff, entitled 'Paulus an Karl', *Gedichte, xxxii*, 131-34. The letter accompanied the homiliary compiled by Paul at Charlemagne's behest.

1329 Double asterisks in column C indicate that the text of the poem is not printed in Citelli, *Opere/2*, 357-451.

1330 This, together with two other closing verses to prose letters, (*iam fluebat decima*, ML 36, and *multa legit paucis*, ML 42), is printed as *car. xxvi* in Dümmler, *PLAC I*, 62.

1331 G. Silagi, ed., *Monumenta Germaniae Historica, Poetae Latini Medii Aevi*, V.3, Die Ottonenzeit, 671. Bethmann, 'Paulus Diaconus, Leben und Schriften,' 325, denies Paul's authorship.

1332 The only witness given is *HL*, book III, c. 19.

22	Dulcis amice bibe gratanter	XXXI	VII (A)	23*	3976
23	Dulcis amice veni ¹³³³	XXX		24*	3979
24	Dux, via, vita, tuis			25*	
25	Filius ille dei		X (A)		
26	Fratres alacri pectore	III	VII	27**	5356
27	Funereo textu scribuntur		III (A)		
28	Haec domus est domini	XXXII	IV III	28	5869
29	Hausimus altifluam ¹³³⁴		XI (A)	29*	6163
30	Hausimus altifluo		VIII (A)		6164
31	Hic decus Italiae	L		30*	6327
32	Hic ego quae iaceo	XX	XXIV	31**	6350
33	Hildegard rapuit	XXIV	XXVIII	32**	6818
34 ■ D	Hoc satus in viridi	XXXIX	I (A)	33*	7094
35	Hoc tumultata iacet	XXIII	XXVII	34**	7139
36	Iam fluebat decima	XXVI	XIV	35**	7495
37	Iam puto nervosis	XVI	XX	36	7539
38	Ingenio clarus sensu	XIX	XXIX	37	8086
39	Lactea splendifico	VIII	IX	38	8619
40	Lugentum lacrimis	XXXIII	XXXV	39	9070
41	Martir Mercuri ¹³³⁵			41*	
42 ■ D	Multa legit paucis ¹³³⁶	XXVI		42	9840
43 ■ N	Multicolor quali	XLVI	V I	43	9856
44	O Benedicta soror ¹³³⁷			45*	10817
45	Ordinar unde tuas laudes	IV	I	48	11422
46	Ordinar unde tuos sacer	II	VI	49**	11423
47 ■ N	O una ante omnes	XLVII	V II	46	11066
48	Pallida sub parvo ¹³³⁸		II (A)		11542
49	Perge, libelle meus ¹³³⁹	LII	IX (A)	52	11891
50	Perpetualis amor	XXI	XXV	53**	11920
51	Post has nectit subsequentes	none ¹³⁴⁰	XV II	5B	12204
52 ■ N	Pulchrior me nullus ¹³⁴¹		XVI	55	12767
53 ■ D	Quaerebat maerens	XXVIII	VI II(A)	56	12918
54 ■ D	Qui sacra vivaci	XXV	V(A)	57	13872
55	Quis possit amplo	LV		58*	13693
56	Roscida de lacrimis	IX	X	60	14385
57	Salve, miles egregie ¹³⁴²			62*	14561
58	Sensi cuius verba	XII	XIII	63	14894

1333 *PL*, vol.95, clm. 1594-97. Bethmann, 'Paulus Diaconus, Leben und Schriften,' 325, denies Paul's authorship.

1334 K. Strecker, ed., 'Versus incerte cuiusdam poetae de peste', *PLAC IV*, 2.3, 914.

1335 Bethmann, 'Paulus Diaconus, Leben und Schriften,' 332-33, considers Paul's authorship highly improbable. There is no known manuscript witness. Bethmann's text is as printed in Petrus Pipernus, *De effectibus magicis* (Naples; Colligni, 1634), 147 and in *PL* vol.95, col. 1600.

1336 Neff includes the verse in his footnote to Paul's letter to Charlemagne accompanying the homiliary, *Gedichte*, xxx, 125.

1337 G. Silagi, ed., *PLAM V.3*, Die Ottonenzeit, 598.

1338 Dümmler, *PLAC I*, 109, as *carm vi* in a group of verses collected under the title *Tituli saeculi VIII*, 101- 15.

1339 K. Strecker, ed., 'Versus Pauli Diaconi (?)', *PLAC IV*, 2.3, 912,

1340 This and *adsunt quattuor in prima* (ML 4) are printed in Dümmler, 'Appendix ad Paulum', *PLAC I*, 625-28.

1341 K. Strecker, ed., 'Item de Vino,' *PLAC IV*, 2.3, 759.

59	Trax puer adstricto ¹³⁴³			69*	16361
60	Sic ego suscepi	XIV	XXII	64	15261
61	Sit tibi sancta phalanx	<i>LIII</i>		65*	15447
62	Sponsa decora Dei ¹³⁴⁴			66*	15635
63 ■ D	Temporibus priscis	XXIX	VI III(A)	68	16209
64	Ut queant laxis	<i>LIV</i>		71	16894
65	Verba tui famuli	X	XI	73	17090
Poems in the Citelli edition which do not appear in any other edition					
66	Olim Romuleia sanctus ¹³⁴⁵			47*	11200
67	Rustice lustrivage ¹³⁴⁶			61*	14427
68	Vale, salus patriae ¹³⁴⁷			72**	16981

Three poems in the master list, undoubtedly by Paul, are contained in *Historia Langobardorum*. They are the two S. Benedict poems, *ordiar unde tuos sacer* (ML 46), *fratres alacri pectore* (ML 26) in Book I, c.26, and the epitaph to Venantius Fortunatus, *ingenio clarus, sensu celer* (ML 38) in Book II, c.13. There are two others, which no-one has attributed to Paul. One is the epitaph to Droctulft¹³⁴⁸, *clauditur hoc tumulo* (ML 18) in Book III, c.19. The other is *culmen, opes, sobolem* in book VI, c.15, which is not included in the master list¹³⁴⁹. It is an epitaph in elegiac couplets which recounts and celebrates the conversion to Christianity of an Anglo-Saxon king, Cedoal¹³⁵⁰ and his baptism by Pope Sergius on Easter day 689, ten days before his death. It is attributed to Archbishop Benedict of Milan, 681-725.¹³⁵¹

1342 As with *Martir Mercuri* (ML 41) Bethmann, 'Paulus Diaconus, Leben und Schriften,' 332-33, considers Paul's authorship highly improbable. No known manuscript witness exists. Bethmann's text is as printed in Petrus Pipernus, *De effectibus magicis*, 147.

1343 Printed together with *sensi cuius verba* (ML 58) in both Dümmler's and Neff's editions, where they are not numbered separately.

1344 G. Silagi, ed., 'S. Scholastica, I', *PLAM* V.3, Die Ottonenzeit, 596 and immediately followed by 'S. Scholastica II', *O Benedicta soror*, 598.

1345 At one time attributed to Paul on stylistic grounds by A. Amelli, 'l'epigramma di Paolo Diacono intorno di canto Gregoriano e Ambrosiano,' *Memorie Storische Forogiuliesi*, 55 (1913) 163-75, but this attribution has been contested by several scholars; see Citelli, *Opere*/2, 413.

1346 This poem to Pan appears at p.17 of St Gallen, Stiftsbibliothek 899, immediately after Peter of Pisa's *lumine purpureo*, (Dümmler *carm. xvi*, Neff *carm. xvii*) and the next item but one in that witness is Paul's *cynthias occiduas* (Dümmler *carm. xvii*, Neff *carm. xviii*). There is one tentative attribution of it to Paul by A. Mazzarino, 'Considerazione sul carne a Pan', *Helikon* 29-30 (1989-90), 305-20, based on comparison of vocabulary with that of Paul's *candidolum bifido*.

1347 E. Dümmler, ed., *MGH Epistolae Karolini Aevi II*, (Berlin: Weidmann, 1895), 510-514. The poem is a single elegiac couplet and appears towards the end of a letter, officially sent by Theudemar, abbot of Montecassino 778-97, but actually the work of Paul, which accompanied the copy of the *Regula S. Benedicti* which Charlemagne commissioned from Paul; see Citelli, *Opere*/2, 332, n.21.

1348 He was killed in the attack on Ravenna and its port (Classis) by the Lombards at some time between 584-88.

1349 For the text, see G. Waitz, ed., *MGH SS. Rer. Lang.* VI-IX, 169.

1350 Otherwise known as Cadwalla, Caedwalla or Cadwallon), King of Wessex 687-89.

1351 G. Waitz, (ed.), 'Pauli Historia Langobardorum', *MGH SS. Rer. Lang.* VI-IX, 225.

Table A2: List of 'Context' poems.

Note:-The headings D, N and C refer to the poem numbers in the same three editions; in column N, (A) indicates the inclusion of the poem in Neff's *Anhang*.

Incipit	Author	D	N	C
Nos dicamus Christo	Peter of Pisa	XI	XII	44
Lumine purpureo	Peter of Pisa	XV	XVII	40
Paule, sub umbroso	Peter of Pisa	XIII	XXI	51
En tibi, Paule	Charlemagne ¹³⁵²	XXXVII	XXIII	26
Parvula rex Karolus	Charlemagne	XXXVI	XXXIII	50
Christe, pater mundi	Charlemagne	XXXV	XXXIV	15
Perspicua clarum nimium	Hilderic	LVI	XXXVI	54*
Hoc opus exiguo	Peter of Pisa	XL	XXXVII	
Culmina si regum	Peter of Pisa	XLI	XXXVIII	
Carmina mitto Petro	Angilbert	XLII	XXXIX	
Rex Carulus Petro	Charlemagne	XLIII	XL	
Rex Karolus gaudens	Charlemagne	XXXVIII	XLI	59*
Carmina ferte mea	'Fiducia' (unidentified)	XLIV	(A),IV ^I	
Crede si velles	Possibly 'Fiducia'	XLV	(A),IV ^{II}	

Tables A3 and A4 refer to the *dubia* and both tables classify the *dubia* by reference to their inclusion in Dümmler's or Neff's editions and whether that inclusion indicates that Paul's authorship is accepted, doubted or denied.. Table A3 lists the *dubia* by groups and Table A4 summarises the grounds on which Paul's authorship is accepted, doubted or rejected. Finally, Table A5 lists the *dubia* by reference to the likelihood, assessed on the basis of the data summarised in Table A4, of Paul's authorship.

1352 In each of his commentaries on the poems to which he gives titles identifying Charlemagne as the author, Neff considers the possibility that they were composed by other authors (notably Alcuin and Peter of Pisa) under Charlemagne's name. It is not necessary, for the purpose of this study, to explore those attributions.

Table A3: *Dubia* arranged by groups

One poem of doubtful authorship is omitted from this table and from Table A4. The poem in question, *Trax puer adstricto* (ML 59), a translation into Latin of a text from the Greek Anthology, appears in both Dümmler's and Neff's editions as an appendix to the undoubtedly authentic *sensi cuius verba* (ML 58), which is Paul's reply to Peter of Pisa's *Nos dicamus, Christo*. It is entirely unclear whether Paul composed it or remembered it from his schooldays. The text indicates the latter, but there is said to be an implication that he composed it himself¹³⁵³.

Key to symbols:

D and N indicate, respectively, that the poem is in the main text of Dümmler's or Neff's edition. Dd indicates that Dümmler includes it in the *dubia*, while Na indicates inclusion in Neff's *Anhang*. EX indicates that the poem is in neither edition.

Group	Composition of group	Poems in group	
		ML	Incipit
1	D only (rejected by N)	4	Adsunt quattuor in prima
		42	Multa legit paucis
2	N only (ignored by D)	52	Pulchrior me nullus
3	D <i>dubia</i> only (Dd)	3	Ad perennis vitae fontem
		12	Aquarum mei quis det
		16	Christe deus mundi
		23	Dulcis amice veni
		31	Hic decus Italiae
		55	Quis possit amplo
		61	Sit tibi sancta phalanx
		64	Ut queant laxis
		4	N <i>Anhang</i> only (Na)
27	Funereo textu scribuntur		
29	Hausimus altifluam		
30	Hausimus altifluo		
48	Pallida sub parvo		
49	Perge, libelle meus		
5	D, Na	5	Aegrum fama fui
		53	Quaerebat maerents
		63	Temporibus priscis
		34	Hoc satus in viridi
		54	Qui sacra vivaci
6	N, Dd	1	Adam per lignum
		43	Multicolor quali
		47	O una ante omnes
7	Dd, Na	15	Carmina, ferte mea
		20	Credere si velles
		22	Dulcis amice bibe gratanter
8	EX	2	Ad flendos tuos, Aquilegia
		18	Clare beati agnoscere
		19	Clauditur hoc tumulo

¹³⁵³ P. Godman, *Poetry of the Carolingian Renaissance* (London: Duckworth & Co, 1985), 89, n.12.

		24	Dux, via, vita, tuis
		41	Martir Mercuri
		44	O Benedicta soror
		57	Salve, miles egregie
		62	Sponsa decora dei
		66	Olim Romulea sanctus
		67	Rustice lustrivage
		68	Vale, salus patriae

Table A4: Attributions of, and evidence relating to, the *dubia*

Notes:

(1) The 'group' descriptions are those also used in Table A3.

(2) In the 'attribution' column, X signifies that the attribution to Paul has been rejected but no other plausible candidate author has been proposed. The annotation (?) indicates a tentative attribution.

(3): In the 'relevant evidence' column, the annotation 'MA only' signifies that the only evidence suggesting Paul's authorship is manuscript association.

Group and Incipit	Attribution	Relevant evidence
<i>Group 1-accepted by Dümmler but not by Neff</i>		
Adsunt quattuor in prima	Peter of Pisa	Date of composition
Multa legit paucis	X	Grammatical and prosodic errors; the reference to Charlemagne as "David" is uncharacteristic of Paul; the poem is not in the original manuscript of which it purports to be part.
<i>Group 2-accepted by Neff but not mentioned by Dümmler.</i>		
Pulchrior me nullus	Paul	Acrostic riddle poem spelling out PAULUS; Paul is known to have composed other acrostic and riddle poems.
<i>Group 3, poems included among Dümmler's dubia but not in Neff's edition.</i>		
Ad perennis vitae fontem	Paulinus of Aquileia (?)	MA only.
Aquarum mei quis det		
Christe, deus mundi; printed in <i>Analecta Hymnica</i> with variant reading 'decus'.	X	MA: attributed to Paul in <i>Analecta Hymnica</i> without explanation.
Dulcis amice, veni	X	Epigraphic poem, MA only. The manuscript includes other epigraphic poems, and the poem <i>dulcis amice, bibe</i> , which is another of the <i>dubia</i> .
Hic decus Italiae	X	MA only. The death commemorated by this epitaph occurred in the year 306.
Quis possit amplo	X	MA; The attribution to Paul in <i>Analecta Hymnica</i> relies on local tradition recorded by the 12 th century chronicler Peter the Deacon.
Sit tibi sancta phalanx	X	MA only
Ut queant laxis	X	No direct evidence but on grounds of historical association and context, Paul is the only credible candidate. Earliest witness is late 8 th or early 9 th century.

<i>Group 4-poems included in Neff's Anhang; Paul's authorship not considered by Dümmler.</i>		
Filius ille dei	(1) Paulinus (2) unidentified pupil (?)	Neff detects reminiscences of Paulinus. Earliest witness is s.viii ^{ex} or s.ixi ^{nc}
Funereo textu scribuntur	(1) Boniface (?) (2) a pupil of Peter of Pisa	Subject of epitaph was a disciple of Boniface who followed him to Germany. Neff detects the style of Peter and the epitaph has a subscription indicating that the author is submitting it to his master for correction and emendation.
Hausimus altifluo	Paulinus	Addressee of the poem, Zacharias, known to be a friend of Paulinus.
Hausimus altifluam	X	The only witness is the 15 th century Harley 3685. Neither the Peter and Paul to whom the poem is addressed nor the maidens whose recovery from the plague it celebrates have been firmly identified and there may be no connection with the Carolingian court at all.
Pallida sub parvo	Same (unidentified) author as <i>hoc satus in viridi</i> (q.v.)	Charlemagne's seneschal, Eggihard, the subject of this epitaph, was killed at Roncesvalles in 778. Only manuscript witness is a 9 th century collection of epitaphs.
Perge, libelle meus	(1) Paulinus (2) Paul	Farewell letter in elegiac couplets; question whether the dedicatees are Charlemagne and Fastrada (see Neff, attributing the poem to Paulinus) or Arichis and Adelperga (Crivelluci, attributing it to Paul). On stylistic grounds Paul is the more likely author as Paulinus wrote mainly rhythmical verse and, as he acknowledged, not expert in metrical composition.
<i>Group 5: Poems included in Dümmler's edition and in Neff's Anhang</i>		
The three fables (Aegrum fama fuit. Quaerebat maerens, Temporibus priscis)	(1) Paul (2) Notker; attribution by von Winterfeld) (3) X	(1) MA and similarity to other riddle poems composed within the court circle. (2) Composition is in the St Gallen style of which Notker was an exponent (3) Neff rejects both attributions and suggests that it was brought to the court by someone acquainted with its predilection for riddle poems.
Qui sacra vivaci	(1) Paul (2) Angilram	Paul, as author of the prose history, is a natural choice but the content (in so far as it refers to Angilram) is not characteristic of him and Angilram himself had the factual knowledge to compose it.

<i>Group 6: Poems of which Paul's authorship is accepted by Neff but doubted by Dümmler</i>		
Adam per lignum	Paul	MA; possible connection of the author with Queen Ansa whose epitaph is in the same manuscript as <i>multicolor quali</i> . No other author has been suggested.
Multicolor quali		
O una ante omnes		
<i>Group 7: Poems classed as dubia by Dümmler and included in Neff's Anhang</i>		
Carmina ferte mea Crederere si velles	X	The pseudonymous Fiducia who addressed <i>carmina ferte mea</i> and possibly <i>credere si velles</i> to Angilram has not been identified.
Dulcis amice, bibe	X	MA only
<i>Group 8-Poems excluded from Dümmler's and Neff's editions of Paul's verse</i>		
Ad flendos tuos, Aquilaegia	(1) Paul (?) (2) Paulinus (?) (3) X	(1) No reasons given by Bethmann for this attribution and Dahn's reasons are unsustainable (2) Dümmler's doubtful attribution is supported only by the historical association of Paulinus with Aquileia (3) Norberg prints it in his edition but does not attribute it to Paulinus or anyone else
Clare beati agnoscere	X	<i>Paulus diaconus...ipse monachum</i> named in the poem. This person cannot be identified as Paul the Deacon. The quality of the verse is regarded as too poor for Paul to have been the author and it is not in the style which he usually employed in poems of that type.
Clauditur hoc tumulo	X	This epitaph to one Droctulft (Toctron), killed in battle in the sixth century, is included in <i>Historia Langobardorum</i> but has never been attributed to Paul.
Dux, via, vita, tuis	X	Original attribution to Paul is clearly incorrect as the poem refers to events at which took place 45 or more years after his death.
Martir Mercuri, saeculi futuri Salve, miles egregie	X	These two compositions relate to the translation of the relics of S. Mercurius to Arichis' recently founded cathedral in Benevento, in 768 when Paul was almost certainly at the Beneventan court; Arichis may have commissioned such compositions. But the elaborate rhyme scheme of <i>Martir Mercuri</i> and the almost total absence of any laudatory reference to his patron makes Paul a very unlikely author. There is no manuscript evidence and the attribution, which first appeared in a book published in 1634, has never been accepted since.

O Benedicta soror	(1) Bertharius (2) X	(1) Originally attributed to Paul but subsequently believed to be a companion piece to Bertharius' verses to S. Benedict (2) Printed in <i>MGH PLAC V/3</i> without attribution
Olim Romulea sanctis	X	Originally thought to relate to Charlemagne's liturgical reforms but later studies connect it with 11 th century Aquileia.
Rustice lustrivage	Paul (?)	Lexical similarities; the poem is said to use rare words also used by Paul. However, the god Pan seems an unlikely subject for Paul.
Sponsa decora dei	(1) Paul (2) Alberico de Settefrati	(1) Epanaleptic poem to S. Scholastica in the same style as Paul's poem in praise of her brother, S. Benedict, <i>ordiar unde tuos, sacer</i> (2) Dümmler's attribution is based on study of the Casinese manuscript; Alberico was a Casinese monk who may have modelled this poem on <i>ordiar unde tuos, sacer</i> .
Vale, salus patriae	Paul	This distich is contained in a letter to Theudemar which is undoubtedly by Paul.

Table A5: *Dubia* classified according to the likelihood that they are the work of Paul

Notes:-

(1) LR means likelihood rating. The six ratings are: A-certain; B-very likely; C-more likely than not; D-possible but less likely than not; E-highly unlikely; F-no likelihood. Numbers in brackets after the rating show the number of poems with that rating.

(2) 'Group' refers to the groups defined in Table A3.

(3) In the 'comment' column, the annotations 'MA only' or 'MD only' signifies that the only evidence for Paul's authorship is manuscript association or the date of the earliest manuscript witness

LR	Incipit	Group	Comment
A [1]	Vale, salus patriae	8	Part of authentic letter by Paul
B [1]	Pulchrior me nullus	2	Identified by acrostic name PAULUS
C [2]	Perge libelle meus Ut queant laxis	4 3	No direct evidence but Paul is the only credible candidate author
D [6]	Multicolor quali	5	MA and possible historical connexion with dedicatee
	Aegrum fama fuit	5	Collectively referred to in the main text as 'the three fables';
	Quaerebat maerens	5	
	Temporibus priscis	5	
	Qui sacra vivaci	5	Plausible arguments for both Paul and Angilram as author
	Trax puer adstricto	None	Appended to a poem definitely by Paul
E [17]	Adsunt quattuor in prima	1	Alternative more credible attribution
	Hausimus altifluo	4	MA only
	Ad perennis vitae fontem	3	
	Aquarum meis quis det	3	
	Hic decus Italiae	3	
	Dulcis amice, veni	3	
	Sit tibi, sancta phalanx	3	
	Christe, deus (or decus) mundi	3	
	Quis possit amplo	3	
	Hausimus altifluam	4	
	O una ante omnes	6	
	Adam per lignum	6	
	Dulcis amice, bibe	7	
	Filius ille dei	4	MD only

	Sponsa decora dei O Benedicta soror	8 8	Dedicatee is a plausible subject for Paul; composed in a form (epanaleptic elegiac couplets) employed by him, but no evidence of his authorship
	Rustice lustrivage	8	Lexical similarities with Paul but very unlikely subject for him
F [13]	Multa legit paucis	1	Grammatical and prosodic errors wholly inconsistent with Paul's authorship
	Clare beati agnoscere	8	Style of reference to 'Paul' wholly inconsistent with Paul's authorship
	Martir Mercuri, saeculi futuri	9	Possibly commissioned by Paul's patron, but style so foreign to Paul as to eliminate him as author
	Salve, miles egregie	9	No evidence of Paul's authorship and composed for the same occasion as Martir Mercuri
	Pallida sub parvo	4	No evidence of Paul's authorship
	Funereo textu scribuntur	4	
	Hoc satus in viridi	5	
	Carmina ferte mea	7	
	Crederere si velles	7	
	Ad flendos tuos, Aquilegia	8	
	Olim Romulea sanctus	8	
	Clauditur hoc tumulo	9	No evidence of Paul's authorship; its inclusion in <i>Historia Langobardorum</i> is as part of the narrative.
	Dux, via, vita, tuis	8	Content eliminates Paul as author

Tables relating to authorship studies discussed in Chapter 2

Study 3.1, Schaller on Theodulf

Table A2.1: Similarities (indicated by ■) between features of *ad episcopos* and the poems of the comparison sample

Key to features: A, parallels and reminiscences; B, syntactic-stylistic similarities; C; lexical similarities; D, features of versification; E, content.

Feature	A	B	C	D	E
Comparison group poem					
XXIII, Omnipotens domine			■		
XXV, Te totus laudesque	■	■			
XXVII, Quid cycni faciunt			■		
XXVIII, Iudicii callem censores	■	■	■	■	■
XXX, I, mea charta	■				
XXXII, Rex benedicte vale	■	■	■		
XXXIII (I), Sumito quae misi	■				
XXXVI, Perge, libelle	■		■		
XXXIX, Qui regit arva			■		
XLI (I) Quicquid ad Hebraeo	■	■			
XLI (II) Codicis huius opus					
XLII, Qui sim nosse volens			■		
XLVII, Quo terrae in speciam	■		■		
LVIII, Hoc altare tibi	■	■			
LXII, Sessio Teodulfi placeat	■			■ ⁺	
LXIX, Gloria, laus et honor	■		■		
LXXI, Hoc, Aiulfe, tibi	■	■	■		
LXXII, Hoc, Modoine		+		■	

Table A2.2: Schaller's conclusions on the authenticity of the poems in Dümmler's edition

Key to symbols:-

A = poem which satisfies an authenticity criterion; B= poem safely attributable to Theodulf; C = poem highly probably by Theodulf; N = poem on which Schaller does not comment; Q = poem of questionable authorship;
 V = poem of which Theodulf was very unlikely to be the author; X = poem of which Theodulf is certainly not the author.

Numbering system in the table:

Each column refers to a sequence of ten poems, and the rows refer to the position of the poem in that sequence. For example, the poem in row 4 of column 21-30 is poem 24 in Dümmler's edition (*Inclita Fastradae reginae*)¹³⁵⁴ and Schaller's conclusion that it is of questionable authenticity¹³⁵⁵ is denoted by the symbol Q.

Decade	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-79
Position in decade								
1	B	B	B	B	A	B	C	A
2	B	B	B	A	A	V	A	A
3	C	B	A	A/B*	A	V	C	X*
4	B	B	Q* ³	B	B	V	C	Q
5	B	B	A	B	B	Q	A	Q
6	C	B	B	A	B	Q	X*	X
7	B	B	A	X*	A	V	C	N
8	B	C	A	B	C	A	C	B
9	C	B	Q	A	C	A	A	X
10	C	C	A	B	B	B	C	

Notes to the individual poems indicated by asterisks in Table A2.2

24 is the epitaph for Fastrada. Schaller's article does not explain why he doubts its authenticity. 33 is in three parts; only parts I and III are established as authentic without reference to style or content. 37 has been attributed to Jonas, Theodulf's successor as bishop of Orleans. Schaller's article does not explain why he admits the possibility of its being authentic. 66, Damasus' epitaph, is his own composition. 73 is Modoin's reply to Theodulf's exile poem (72) and is included for context.

Study 3.2: Burghardt on Alcuin

Table A2.3: Poems in Dümmler's edition (DÜ) securely attributed to Alcuin by Burghardt

Notes:

¹³⁵⁴ Dümmler, *PLAC I*, 483.

¹³⁵⁵ Schaller, 'Theodulf', 22.

Under 'Criterion', the figure in brackets is the number of poems meeting the criterion. Under 'Poems', the non-bracketed and bracketed numbers refer, respectively, to poems in DÜ and QU. In some cases Dümmler has split up a poem contained in QU so that only part of it appears in his edition; e.g., *carm.* 16,¹³⁵⁶ which consists of vv. 9-16 of poem 201 in QU.

Criterion.	Poems
I:Alcuin names himself directly as author (10)	3, 7, 20 (214), 24 (223), 31 (258), 33b (260, 5-10), 51.2 (167), 60, 65.1, 109.15 (228)
II Alcuin names himself indirectly as author (29)	4, 8, 13 (184), 16 (201, vv. 9-16), 17 (212), 18, 26 (221), 28 (252), 32 (259), 34.1,2 (262, 1-2), 35 (253), 37, 7.8 (270, 7-8), 38 (265, 5-12), 39 (264), 40 (261), 42 (268), 43 (272) 46, 47, 48, 51.1 (166), 51.3(168), 52 (160), 55.1, 59 (199, 23-54), 66.2 (50, vv. 23-42), 71.2, 72, 88.4 (54).
III Alcuin identifies himself as originator of the subject matter (4)	68, 81, 108.1 (209), 108.3 (211).
IV The poem is part of other works of Alcuin (6)	76.1, 76.3, 77(a), 77(b) ¹³⁵⁷ , 80.1, 80.2.
V The poem is preserved together with letters of Alcuin (49)	10 (180), 50, 56.2, 74, 75.1,2,3.,76.2, 82, 83.1,83.2(a) and 2(b), 84, 85.1, 85.2.
VI Other criteria (7)	1, 5 (219), 45 (271), 57, 73, 123 (269), IX ¹³⁵⁸ (217, 218).

¹³⁵⁶ Although footnote references to individual poems in Dümmler's edition identify them by Roman numerals, Burghardt's use of Arabic numbering has been adopted in the Table.

¹³⁵⁷ Poems 77 and also 83.2 are printed as two separated sections in Dümmler's edition but the separate sections are not given individual numbers, as they are in (e.g.) poem 75 which consists of three numbered sections.

¹³⁵⁸ See Burghardt, *Gedichten Alcuins*, 6, where *carm.* IX (*sic*) is identified as being printed in *PLAC I*, 113; it appears there as *carm.ix* of the collection of epitaphs entitled *Tituli saeculi VIII*, 99-115.

Table A2.4: Burghardt's conclusions as to Alcuin's authorship of the poems in QU other than the *gesicherten Gedichte*¹³⁵⁹

Conclusion	Poem number in QU
Definitely	50 (23-42), 52-57, 61, 63-90, 91-101, 104, 109, 114, 118, 123, 124, 126, 127, 131, 132, 142-45, 146, 150-52, 159, 160, 162, 164-68, 170, 173-76, 178-84, 186 ¹³⁶⁰ , 189, 192, 195, 201 (1-8), 202, 203 (1-4) and (14-41), 207-209, 222 (1-13), 224 (9-22), 225, 227-28, 229 (5-8), 230 (1-4), 231, 233, 235-36, 239, 242, 248-51, 254, 256, 260 (1-4 and 11-16), 266, 267, 270 (1-6 and 9-22).
Probably (<i>wahrscheinlich</i>)	51, 58-60, 62, 105-108, 111, 113, 115, 119-122, 125, 133, 134, 136-38, 140, 147, 148(b), 149, 153-58, 163, 169, 193, 194, 197, 203 (5-13), 204-206, 220, 226, 229 (1-4), 230 (5-8), 237, 238, 240, 241, 243-47,
Perhaps (<i>vielleicht</i>)	103, 110, 112, 128-130, 135, 139, 141, 148(a), 171-72, 185 and 187 ¹³⁶¹ , 196 198 (19-24), 199 (1-22), 200, 201 (17-24) 222 (14-51), 224 (1-8), 234, 253, 255, 259, 262 (3-12), 265 (1-4).
Probably not	18, 19, 50 (1-22), 102, 161, 188, 198 (1-18), 210
Not (no author identified)	20 ¹³⁶² , 46
By another identified author ¹³⁶³	2-17 (Aldhelm) ¹³⁶⁴ ; 25, 27-45, 47 (Rusticius Helpidus) ¹³⁶⁵ ; 48 (Bede), ¹³⁶⁶ 49 (Laurentius Scottus) ¹³⁶⁷ ; 116, 177 (Angilbert) ¹³⁶⁸ ; 117 (Fardulf) ¹³⁶⁹ ; 190-91, Eugenius Toletanus ¹³⁷⁰
No conclusion	1 ¹³⁷¹

1359 That is, the poems certainly attributed to Alcuin on the basis of his authenticity criteria I-VI.

1360 This poem (*parvula rex Karolus*) is printed in Neff, *Gedichte, carm. xxxiii*, 135 and although ostensibly addressed by Charlemagne to Paul, is attributed to Alcuin; see the commentary at 137.

1361 These two poems are printed in Neff, *Gedichte, carm. xli (Rex Karolus gaudens)*, 168, ostensibly by Charlemagne to Peter, and *carm. xxiii (En tibi, Paule)*, 106, ostensibly by Charlemagne to Paul, both of which Neff believes to be Charlemagne's own composition.

1362 Burghardt concludes that this is a cento (i.e., a poetic work wholly composed of verses or passages from other authors).

1363 Burghardt lists the editions on which he relies for the attributions to other identified authors; bibliography, 2-3 and, where he relies on Dümmler, in the section devoted to that edition, particularly the table at 8-11.

1364 R. Ehwald, ed., *Aldhelmi Opera, Monumenta Germaniae Historica, Scriptores Auctores Antiquissimi IV* (Berlin: Weidmann, 1919).

1365 F. Corsaro, *Elpidio Rustico* (Catania: Centro di studi Cristiani Paolo Ubaldi, 1955).

1366 C. Plummer, *Venerabilis Baedae Opera Historica* (Oxford: Clarendon Press, 1896). The poem (*hymnus de Aedilthyda regina*) appears in the *Historia ecclesiastica*, 4, 18.

1367 E. Dümmler (ed.), 'Kanon evangelicorum,' *Anzeiger für Kunde der deutschen Vorzeit, Neue Folge* 26.3, (1879), 84-86.

1368 Dümmler, *PLAC I, Angilberti carmina, carm.iv*, 364 and *carm.iii*, 363.

1369 Dümmler, *PLAC I, Fardulfi abbatis carmina, carm. iv*, 354.

1370 F. Vollmer, ed., 'Eugenii Toletani episcopi Carmina et Epistulae,' *MGH Auct. Ant. XIV*, (Berlin: Weidmann, 1905).

1371 Burghardt is unable to conclude whether Alcuin is the author of this hymn (see Dümmler, *PLAC I, Alcuini carmina, carm. cxxi*, 349) or another hymn (*Ibid., carm. lxxxix.*, 313), a hymn in the sapphic metre to S. Vedast) but concludes that they are not by the same author.

Tables of manuscript information

Table A4.1: Supplementary table of manuscript witnesses

Note:-

Table 4.4 in the main text lists the manuscript witnesses identified in Dümmler's and Neff's editions. Table A4.1 is a chronological list of additional manuscript witnesses identified in *Analecta Hymnica*¹³⁷² (AH) and in the studies by Chailley¹³⁷³ (Ch) and Stella¹³⁷⁴ (S); the manuscript identifications are as given by the authors. The entry ■ in any of those columns indicates inclusion of the manuscript witness in that study. Letters in brackets in the AH and Ch columns denote the *sigla* allocated to the manuscript in those studies. The entries in the column headed 'content' are the master list numbers of the poems contained in the manuscript witnesses.

Manuscript	Date	Content	Manuscript included in			No. ¹³⁷⁵
			AH	Ch	S	
Monza 159	viii	7,8			■	45
Roma Vat. Ottob. 532 ¹³⁷⁶	ix	64		■(A)		46
Verona Capit. LXXXVIII	ix	59			■	47
Cod. Turicen. [Zürich, Centralbibl.] Rh. 93	ix-x	64	■(B)	■(X21)		48
Bamberg Misc. Bibl. 44	909	64			■	49
Cod. Casinen. 506	x	26 55	■(B) ■(A)			50
Basel UB A X90	x	64			■	51
Monacen.[Münich B.N.] ¹³⁷⁷ Clm 17072	x	64	■(D)	■[X7]		52
Monacen. [Munich B.N.] Clm 27305	x	64	■(E)	■(D)		53
Cod. Rossian. [Rome, Rossi] VIII 144	x	64	■(G)	■(X16)		54
Cod. Vatican.[Rome, Ottob.] Ottobon. 145	x ^{ex}	26 64	■(C) ■(I)	■(X14)		55
Cod. Parisin. 1092	x ^{ex}	55	■(C)			56
Cod. Turicen. Rhen. [Zürich B.N. Rh] 91	x-xi	26 64	■(E) ■(H)	■(E)		57
Cod. Roman. 175 (Farf.4) [Rome B.N. Farf. 4, 175]	x-xi	64	■(K)	■(F)		58
Cod. Casinen. 420	xi	55	■(D)			59

1372 G. Dreves, ed., *Analecta Hymnica*, vol. 50, 117-123.

1373 J. Chailley, *Ut queant laxis et les Origines de la Gamme*, *Acta Musicologica* 56 (1984), Appendix, 62-64.

1374 F. Stella, 'La poesie di Paolo Diacono: nuovo manoscritti attribuzioni incerte', *Atti del Convegno Internazionale di studi, Cividale del Friuli-Udine, 6-9 maggio 1999*, cur. Paolo Chiesa, (Udine: Forum editrice universitaria udinese, 2000); the list of witnesses is at 572-74.

1375 Reference numbers follow on consecutively from 1-44 of Table 4.4. in the main text.

1376 As discussed in Chapter 5, Chailley's assertion is incorrect. *Ut queant laxis* (ML 64) is nowhere to be found in Vat. Ottob. 532.

1377 For this and other entries with two witness identifications, the first is that of AH and the alternative in square brackets is that of Chailley.

Cod. Turicen. Rhen.[Zürich, Centralbibl. Rh.] 82	xi	26 64	■ (F) ■ (L)	■ (X20)		60
Cod. Vatican [Rome, Vat.] 5776	xi	64	■ (M)	■ (J, X12)		61
Rouen, B.M. A164	xi	64		■ (K)		62
Troyes, B.M. 571	xi	64		■ (L)		63
Cod. Neapolitan. [Naples, B.N.] VI E 43	xi	26 55 64	■ (G) ■ (F)	■ (X9)		64
Cod. Neapolitan. VI G 31	xi	55	■ (E)			65
Cod. Vallicellan. [Rome, Vallic]. B 79	xi	64	■ (N)	■ (X11)		66
Cod. Laurentian. [Florence, Medic. Laur.] Conv.sup.524	xi	64	■ (O)	■ (X3)		67
Cod. Capit. Veronensis [Verone, Bibl. Cap] 109 (102).	xi	64	■ (P)	■ (G)		68
Cod. Casselan. [Kassel, Landesbibl.] Theol. 4,25	xi	64	■ (Q)	■ (X4)		69
Cod. Vat. Palat. [Rome, Vat. Palat] 235	xi	64	■ (R)	■ (H, X15)		70
Cod. Turicen. [Zürich, Centralbibl.]Rh 97	xi	64	■ (T)	■ (X22)		71
Zürich B.N. Rh. 83	xi	64		■ (I)		72
Leiden Voss. Lat. Oct. 15	xi	45			■	73
Roma Casanat. 713	xi	45			■	74
Roma Casanat. 718	xi	45			■	75
Sankt Gallen 387 p.266	xi	64			■	76
Farfa, Archiv XII, 379, and 492-93	xi	55, 64			■	77
Vat. Ottobon. 477	xi	45			■	78
Vat. 623	xi	45			■	79
Cod. Turicen. [Zürich, Centralbibl.]Rh 129	xi-xii	64	■ (U)	■ (X23)		80
Monacen. [Münich B.N.] Clm.9633	xi-xii	64	■ (V)	■ (X6)		81
London B.M.Add.11983	xi-xii	59			■	82
Roma Vallicell. C9	xi-xii	45			■	83
Vat. Lat 4928 (<i>sic</i>)	111 3 ¹³⁷⁸	55 64	■ (G)		■	84
Cambridge, Peterhouse 130 f.1	xii ^{inc.}	7, 8			■	85
Cod. Capit. Vaticani D 156	xii ^{inc.}	55	■ (I)			86
Cod. Neapolitan. VI F 2	xii	55	■ (K)			87
Dijon 159 (126)	xii	45			■	88
Douai BM 825 and 842	xii	45			■	89
Leiden Voss. Lat. F.10	xii	7, 8			■	90
Wien 2521	xii	59			■	91
Cod. Parisin nouv. Acq. [Paris, B.N., n. acq. Lat] 1235	xii	64	■ (W)	■ (M)		92
Monacen. [Münich B.N.] Clm 23037	xii	64	■ (X)	■ (X8)		93

1378 AH, vol. 50, 121, gives the date as s. xi.

Benevent, V. 20	xii	64		■(N)		94
Benevent, V. 37	xii	64		■(O)		95
Benevent, V.42	xii	64		■(P)		96
Rome, Vallic. B 91	xii	64		■(Q)		97
Rome, Vallic. C 5	xii	64		■(R)		98
Bamberg, B.N. lit.23	xii	64		■(S)		99
Rome, Casamata 1574	xii	64		■(T)		100
Einseideln, 366	xii	64		■(U)		101
Verone, Bibl. Cap. C 11	xii	64		■(V)		102
Cambrai BM 536 (495)	xiii	45			■	103
Metz. dep.	xiii	64			■	104
Roma Vallicell. C93, 491	xiii	55			■	105
Vat. Barberini XI 171	xiii or xiv	55 64	■ (L)		■	106
Escorial b. I. 12	xv	45			■	107
Berlin D. Staatsb. Lat. Oct.200	xv	45			■	108
Milano Ambr. G 64	xv	59			■	109
München lat. 25187	xv	22			■	110
Wolfenbüttel 4028	1514	59			■	111
Wolfenbüttel 4639 (Gud. Lat. 322)	xvi	59			■	112
Leiden Voss. Lat. F.123	xvii	59			■	113

Table A4.2 shows the witnesses identified by Dümmler and Neff, and listed in Table 4.4 of the main text, in which poems ML 1-65 in the master list occur. Poems 66-68, which appear only in the Citelli edition, are omitted. The poems are divided into two groups, the ‘provisional canon’ consisting of the poems accepted as authentic by both editors, and the remainder, which are listed as *dubia*. Table A4.3 is the converse of Table A4.2; it shows, for each of the poems ML 1-65, the witnesses listed in Table 4.4 in which the poem occurs.

Table A4.2: Table of manuscript associations

	The provisional canon (28)	<i>Dubia</i> (37)	
Poems, identified by ML numbers	6, 7, 8, 9, 10, 11, 13, 14, 17, 21, 26, 28, 32, 33, 35, 36, 37, 38, 39, 40, 45, 46, 50, 56, 58, 58, 60, 65	1, 2, 3, 4, 5, 12, 15, 16, 18, 19, 20, 22, 23, 24, 25, 27, 29, 30, 31, 34, 41, 42, 43, 44, 47, 48, 49, 52, 53, 54, 55, 57, 59, 61, 62, 63, 64	
Witness			Number of poems
1	10		1
2 ¹³⁷⁹	37	15, 20	3
3	51	4	2
4		25	1
5		54	1
6		64	1
7	45		1
8		55, 64	2
9		55	1
10	7, 8		2
11	26, 46		2
12		48	1
13	38		1
14	14, 21, 36, 46, 58, 56, 65	3, 12, 19, 31, 34, 59	13
15	39, 45, 56	1, 16, 43, 47, 52	8
16			0
17	28	1, 3, 12, 22, 23, 47	7
18		64	1
19	45		1
20		64	1
21	13, 32, 33, 35, 50		5
22	7, 8		2
23	45		1
24		64	1
25	21, 37, 45, 60	5, 31, 34, 42, 43, 53, 63	11
26		27	1
27	14	30, 49	3

1379 Entries in bold type identify the seven witnesses listed in Table 4.3 of the main text and considered by Neff to be the most important.

28	7, 8		2
29	26, 46		2
30	45		1
31	45		1
32	45		1
33	45		1
34	45		1
35		22	1
36		64	1
37 ¹³⁸⁰			0
38	11		1
39	45		1
40		55	1
41	40		1
42	65		1
43	45		1
44 ¹³⁸¹	6, 9, 56, 65	29, 34, 61	7

1380 This is Neff's witness M, which does not contain any poems attributed to Paul but does contain his epitaph, *perspicua clarum nimium*, composed by one Hilderic, who has not been firmly identified, except as a member of the community of Monte Cassino, and which is included in his edition as *carm. xxxvi*, 153 and in Dümmler's edition as *carm. lvi*, .85.

1381 This witness also contains the poem *culmen, opes, sobolem* which appears in *HL* Book VI, c. 15 but has never been attributed to Paul. Its subject is the conversion and baptism of Cedoal (Caedwalla, Cadwallon) king of Wessex, which took place in 689.

Table A4.3: Occurrences of poems in manuscript witnesses; Part 1: The provisional canon

Note: The column headed 'Conn'. (connection) signifies a connection or probable connexion with L (Lombardy), B (Benevento) or F (Francia)

ML	Conn.	Incipit	Witnesses ¹³⁸²
6	B	Aemula Romuleis	44
7	F	Ampla mihi vestro	10, 22, 28
8		Utere felix munere Christi	
9	B	Angustae vitae fugiunt	44
10	F	Ante suos refluus	1
11	B	A principio saeculorum	38
13	F	Aurea quae fulvis	21
14	F	Candidolum bifido	14, 27
17	B	Christe salus utriusque ¹³⁸³	No manuscript witness
21	F	Cynthias occiduas	14, 25
26	B	Fratres alacri pectore ¹³⁸⁴	11, 29 ¹³⁸⁵
28	B	Haec domus est domini	17
32	F	Hic ego quae iaceo	21
33	F	Hildegard rapuit	21
35	F	Hoc tumulata iacet	21
36	F,B	Iam fluebat decima	14, 21
37	F	Iam puto nervosis	2, 25
38	F	Ingenio clarus sensu	13
39	L	Lactea splendifico	15
40	B	Lugentum lacrimis	41
45	L	Ordiam unde tuas laudes	7, 15, 19, 23, 25, 30, 31, 32, 33, 34, 39, 43 ¹³⁸⁶
46	B	Ordiam unde tuos sacer	14, 29
50	F	Perpetualis amor	21
51	B or F	Post has nectit subsequentes	3
56	L ?	Roscida de lacrimis	14, 15, 44
58	F	Sensi cuius verba ¹³⁸⁷	14
60	F	Sic ego suscepi	25
65	F	Verba tui famuli	42, 44

1382 Witness reference numbers are those in Table 4.4 of the main text.

1383 Neff, *Gedichte*, 18, gives no manuscript witness and refers to F. Ughelli, *Italia sacra*, vol. VII (Rome: Bernardinum Tatum, 1642-48), 358.

1384 Neff, *Gedichte*, 35, gives no manuscript witnesses. The poem appears in *HL* Book I, c.26, together with *Ordiam unde tuos sacer*. Manuscript witnesses 11 and 29 are given by Dümmler in the *proemium* at 34.

1385 And six more witnesses listed in Table A4, from *Analecta Hymnica* vol. 50, 119.

1386 And eleven more witnesses identified by Stella, which are listed in Table A4.

1387 The appended verse entitled *De Puero in glacie extinctus est* (*Trax puer adstricto*, ML 59) is also in witness 14, and there is another version of it in the *Codex Bellovacensis*, which is mentioned by Neff in the notes to *carm xiii*, 68. This codex was published by Claude Binet in 1579 from a manuscript once at Beauvais and now lost. Table A4.4 lists a further seven manuscript witnesses identified by Stella.

Table 4.3: Occurrences of poems in manuscript witnesses; Part 2: *Dubia*

ML	Incipit	Witnesses
Attributed to Paul by Dümmler but not by Neff		
4	Adsunt quattuor in prima	5
5	Aegrum fama fuit	25
42	Multa legit paucis ¹³⁸⁸	42
53	Quaerebat maerens	25
54	Qui sacra vivaci	5
63	Temporibus priscis	25
Attributed to Paul by Neff but not by Dümmler		
1 I	Adam per lignum	15, 17
1 II	Crux tua Christe potens	
1 III	Crux tua lux lucis	
1 IV	Crux tua rex regum	
43	Multicolor quali	15, 25
47	O una ante omnes	15, 25
52	Pulchrior me nullus	17
Included in <i>dubia</i> by Dümmler, (A) indicates inclusion in Neff's <i>Anhang</i> (A)		
3	Ad perennis vitae fontem	14, 17
12	Aquarum meis quis det	14, 17
15	Carmina ferte mea (A)	2
16	Christe deus mundi	15
20	Crederet si velles (A)	2
22	Dulcis amice bibe (A)	17, 35
23	Dulcis amice veni	17
31	Hic decus Italiae	14, 25
34	Hoc satus in viridi (A)	14, 25, 44
55	Quis possit amplo	8, 9, 40 ¹³⁸⁹
61	Sit tibi sancta phalanx	44
64	Ut queant laxis ¹³⁹⁰	6, 8, 18, 20, 24, 36 ¹³⁹¹

¹³⁸⁸ See Neff, *Gedichte*, 125, nn. 17-20.

¹³⁸⁹ And ten more witnesses listed in Table A4, from *Analecta Hymnica* vol. 50, 121.

¹³⁹⁰ J Chailley, 'Ut queant laxis et les Origines de la Gamme', *Acta Musicologica* 56 (1984), 62-63 lists forty-five manuscript witnesses (twenty-three of which are also identified in *AH* vol. 50, 121), dating from the 12th century or earlier. F. Stella, 'La poesie di Paolo Diacono: nuovo manoscritti attribuzioni incerte', *Atti del Convegno Internazionale di studi, Cividale del Friuli-Udine, 6-9 maggio 1999*, identifies a further seven not included in *Analecta Hymnica* or by Chailley.

Included in Neff's <i>Anhang</i> but not mentioned by Dümmler		
29	Hausimus altifluam	44
30	Hausimus altifluo	27
49	Perge, libelle meus	27
Attributed by either Dümmler or Neff to another author		
2	Ad flendos tuos, Aquilegia ¹³⁹²	
19	Clauditur hoc tumulo	<i>Historia Langobardorum</i> Book III, c.19.
25	Filius ille dei ¹³⁹³	4
27	Funereo textu scribuntur ¹³⁹⁴	26
48	Pallida sub parvo ¹³⁹⁵	12
Referred to only by Bethmann and (where indicated by 'D') by Dahn.		
18	Clare beati agnoscere	Cod. Casinensium 349, s.x; ¹³⁹⁶ also Migne, <i>Patrologia Latina</i> , vol. 95, col. 1594-97, col. 1599-1600
24	Dux, via, vita, tuis	Migne, <i>Patrologia Latina</i> , vol. 95, col. 1594-97.
41	Martir Mercuri ¹³⁹⁷ (D)	No known manuscript witness
44	O Benedicta soror ¹³⁹⁸ (D)	34; also in Migne, <i>Patrologia Latina</i> , vol. 95, col. 1593-94.
57	Salve, miles egregie ¹³⁹⁹ (D)	No known manuscript witness
62	Sponsa decora Dei ¹⁴⁰⁰ (D)	34

1391 And a further fifty-two witnesses. Forty-five of these, including all twenty-three of those listed in *Analecta Hymnica*, are listed by Chailley, and Stella has identified seven more.

1392 Dümmler, *PLAC I*, 142 attributes this poem to Paulinus of Aquileia. Neither of the two manuscript witnesses noted in the *apparatus fontium* is listed by either Dümmler or Neff as containing any poems attributed to Paul.

1393 Dümmler, *PLAC I*, 98, prints this poem in a collection headed *Versus libris saeculi VIII adiecti*.

1394 Dümmler, *PLAC I*, 19, attributes this poem to Boniface.

1395 Dümmler, *PLAC I*, 109, prints it in a group of poems under the description *Tituli saeculi octavi*.

1396 Only Bethmann, 'Paulus Diaconus, Leben und Schriften,' 324, mentions this poem.

1397 Only Bethmann, 'Paulus Diaconus, Leben und Schriften,' 324, mentions this poem. He does not give a manuscript witness, and refers only to the book by Pipernus, *De effectibus magicis* (Naples : Colligni, 1634). Dahn, *Paulus Diaconus*, 71, unequivocally rejects Paul's authorship of both these poems.

1398 Only Bethmann, 'Paulus Diaconus, Leben und Schriften,' 323, gives this manuscript witness.

Although he accepts what appears to be a companion piece (*Sponsa decora Dei*, ML 62) as the work of Paul, he unequivocally denies Paul's authorship of this poem. Dahn, *Paulus Diaconus*, 71, rejects Paul's authorship of this poem but thinks it highly probable that Paul composed *sponsa decora Dei*.

1399 Only Bethmann, 'Paulus Diaconus, Leben und Schriften,' 324, mentions this poem. He does not give a manuscript witness, and refers only to the book by Pipernus, *De effectibus magicis*.

1400 Only Bethmann, 'Paulus Diaconus, Leben und Schriften,' 289, refers to this manuscript witness as containing *sponsa decora dei*. Dümmler includes the witness in the *proemium* to his edition, at 35, but refers to it only as a witness of *ordiar unde tuos laudes*.

Tables of metrical data

Note:

(1) In these tables, which are relevant to the tests using syllable count data discussed in chapters 6 and 7 of the main text, the column headings V, H and E refer to the number of verses and the number of occurrences of hiatus and elision in the poems.

(2) For all poems in elegiac couplets, there are two tables of data, one for the hexameter and one for the pentameter verses.

(2) EP = epanaleptic

Data for poems of the groups used as comparison samples

Table AMD.1: Poems composed in hexameters

					Syllable count F1-F4				
					8	9	10	11	12
ML	Incipit	V	H	E					
6	Aemula Romuleis consurgunt	32	0	10	1	5	17	8	1
7	Ampla mihi vestro	20	0	3	0	4	11	5	0
14	Candidolum bifido	48	0	6	1	17	22	7	1
17	Christe salus utriusque ¹⁴⁰¹	6 ¹⁴⁰²	0	0	0	2	0	4	0
21	Cynthias occiduas	24	0	6	1	5	14	4	0
32	Hic ego qui iaceo	12	0	1	2	4	5	1	0
36	Iam fluebat decima ¹⁴⁰³	2	0	0	0	1	0	1	0
39	Lactea splendifico	28	0	0	1	11	11	4	1
	Total	172	0	26¹⁴⁰⁴	6	49	80	34	3

1401 This *titulus* consists of seven verses and an incomplete eighth verse. V. 4 is omitted from the analysis in the main text as the correctness of the printed text is doubtful.

1402 The eighth verse of this poem is incomplete.

1403 V. 1 of this poem is omitted from the analysis in the main text as there is an inadmissible feature of the scansion.

1404 In round numbers, 15 elisions per 100 verses.

Table AMD.2H: Poems composed in in elegiac couplets (hexameter verses)

					Syllable count F1-F4				
					8	9	10	11	12
ML	Incipit	V	H	E					
9	Angustae vitae fugiunt	10	0	0	2	6	2	0	0
10	Ante suos refluus	3	0	0	0	1	0	2	0
13	Aurea qui fulvis	18	0	1	3	5	8	2	0
33	Hildegard rapuit	5	0	0	0	2	3	0	0
35	Hoc tumulata iacet	5	0	1	0	1	1	1	2
37	Iam puto nervosis	7	0	0	0	3	3	1	0
38	Ingenio clarus sensu	6	0	0	0	2	4	0	0
40	Lugentum lacrimis	26	0	0	1	8	12	5	0
50	Perpetualis amor	5	0	1	0	0	2	3	0
56	Roscida de lacrimis	9	0	0	1	2	1	4	1
60	Sic ego suscepi	27	0	4	1	5	11	8	2
65	Verba tui famuli	14	0	2	3	3	2	6	0
	Total	135	0	9	11	38	49	32	5

Table AMD.2P: Poems composed in in elegiac couplets (pentameter verses)

					Syllable count F1-F2		
					4	5	6
ML	Incipit	V	H	E			
9	Angustae vitae fugiunt	10	0	0	0	7	3
10	Ante suos refluus	3	0	0	0	2	1
13	Aurea qui fulvis	18	2	3	2	10	6
33	Hildegard rapuit	5	0	0	1	3	1
35	Hoc tumulata iacet	5	0	0	0	1	4
37	Iam puto nervosis	7	0	0	0	5	2
38	Ingenio clarus sensu	6	0	0	0	3	3
40	Lugentum lacrimis	26	0	0	0	13	13
50	Perpetualis amor	5	1	0	0	2	3
56	Roscida de lacrimis	9	0	0	1	5	3
60	Sic ego suscepi	27	0	1	3	14	10
65	Verba tui famuli	14	0	2	1	9	4

Table AMD5.3H: Poems composed in elegiac couplets (EP) (hexameter verses)

					Syllable count F1-F4				
					8	9	10	11	12
ML	Incipit	V	H	E					
28	Haec domus est domini	7	0	2	0	0	3	4	0
45	Ordiam unde tuas laudes	15	0	2	0	0	9	6	0
46	Ordiam unde tuos sacer	77	0	3	0	0	23	48	6
	Total	99	0	7	0	0	35	58	6

Table AMD5.3P: Poems composed in elegiac couplets (EP) (pentameter verses)

					Syllable count F1-F2		
ML	Incipit	L	H	E	5	6	7
28	Haec domus est domini	7	0	0	1	2	4
45	Ordiam unde tuas laudes	15	0	1	0	11	4
46	Ordiam unde tuos sacer	77	3	2	5	38	34
	Total				6	51	42

Table AMD5.4: Combined data for all poems

Key to abbreviations: HX = hexameter; EC = elegiac couplet (non-epanaleptic); EP = elegiac couplet (epanaleptic)

		Hexameter							Pentameter					
		Syllable count F1-F4							Syllable count F1-F2					
		8	9	10	11	12				4	5	6		
Type														
	V	H	E						V	H	E			
HX	172	0	26	6	49	80	35	3						
EC	135	0	9	11	38	49	32	5	135	1	3	8	74	53
EP	99	0	5	0	0	35	58	6	99	3	3	6	51	42
EP + EC	234	0	5	11	38	84	90	11	234	4	6	14	125	95
All types														
Total	406	0	40	17	87	164	125	14	234	4	6	14	125	95

Data for poems of the questioned groups

Table AMD5.5: Poems composed in hexameters

					Syllable count F1-F4				
					8	9	10	11	12
ML	Incipit	V	H	E					
15	Carmina ferte mea	22	0	0	3	7	6	5	1
16	Christe deus mundi	16	0	0	0	6	9	1	0
18	Clare beati agnoscere	13	0	5	0	3	6	3	1
20	Credere si vellis	10	0	1	1	1	6	1	1
25	Filius ille dei ¹⁴⁰⁵	16	0	0	2	9	4	1	0
29	Hausimus altifluam	12	0	0	1	3	5	2	1
30	Hausimus altifluo	30	0	0	2	10	15	3	0
43	Multicolor quali	6	0	0	0	3	2	0	1
47	O una ante omnes	4	1	2	1	1	2	0	0
54	Qui sacra vivaci	62	1	4	5	18	33	4	2
61	Sit tibi sancta phalanx ¹⁴⁰⁶	10	0	0	1	2	6	1	0
	Total	201	2	7	16	63	94	21	7

¹⁴⁰⁵ The first of the sixteen verses of this poem is missing

¹⁴⁰⁶ This poem consists of twelve verses, two of which are incomplete and have been omitted from the data.

Table AMD.6H: Poems composed in elegiac couplets (hexameter verses)

					Syllable count F1-F4				
					8	9	10	11	12
ML	Incipit	V	H	E					
1	Adam per lignum	1							
	Crux tua Christe	1							
	Crux tua rex regum	1							
	Crux tua lux lucis	1							
Sub-total for ML 1		4	0	0	0	1	1	1	1
The three fables									
5	Aegrum fama fuit	34	0	2	0	5	11	12	6
53	Quaerebet maerens	5	0	0	0	2	3	0	0
63	Temporibus priscis	7	0	1	1	1	1	1	3
Sub-total for ML 5, 53, 63		46	0	3	1	8	15	13	9
19	Clauditur hoc tumulo	13	0	2	0	0	3	7	3
27	Funereo textu scribuntur	18	0	0	0	1	6	7	2
31	Hic decus Italiae	11	0	0	0	2	4	2	3
34	Hoc satus in viridi	23	0	0	0	2	9	6	5
42	Multo legit paucis	2	0	1	0	0	2	0	0
48	Pallida sub parvo	11	0	0	0	0	4	6	1
49	Perge, libelle meus	10	0	0	0	1	3	2	2
59	Trax puer adstricto	3	0	2	0	0	3	0	0
Total		141	0	11	0	15	50	44	26

Table AMD.6P: Poems composed in elegiac couplets (pentameter verses)

					Syllable count F1-F2		
					4	5	6
ML	Incipit	V	H	E			
1	Adam per lignum	1					
	Crux tua Christe	1					
	Crux tua rex regum	1					
	Crux tua lux lucis	1					
Sub-total for ML 1		4	0	0	0	3	1
The three fables							
5	Aegrum fama fuit	34	1	0	0	22	12
53	Quaerebet maerens	5	0	0	1	3	1
63	Temporibus priscis	7	1	2	1	3	3

Sub-total for ML 5, 53, 63		46	2	2	2	28	16
19	Clauditur hoc tumulo	13	0	0	4	6	3
27	Funereo textu scribuntur	18	0	0	3	8	7
31	Hic decus Italiae	11	0	0	3	5	3
34	Hoc satus in viridi	23	0	0	2	9	12
42	Multo legit paucis	2	0	0	2	0	0
48	Pallida sub parvo	11	0	0	1	7	3
49	Perge, libelle meus	10	0	4	1	7	2
59	Trax puer adstricto	3	0	0	0	3	0
	Total	141	0	6	18	76	47

Table AMD.7H: Poems composed in elegiac couplets (EP) (hexameter verses)

					Syllable count F1-F4				
					8	9	10	11	12
ML	Incipit	V	H	E					
22	Dulcis amice bibe	10	0	1	1	0	6	2	1
23	Dulcis amice, veni	3	0	1	0	0	1	1	1
24	Dux, via, vita, tuis	72	0	2	0	2	20	32	18
44	O Benedicta soror	22	0	1	0	1	9	11	1
62	Sponsa decora Dei	40	0	0	0	2	12	20	6
	Total	147	0	5	1	5	48	66	27

Table AMD.7P: Poems composed in elegiac couplets (EP) (pentameter verses)

					Syllable count F1-F2		
ML	Incipit	V	H	E	4	5	6
22	Dulcis amice bibe ¹⁴⁰⁷	10	0	1	5	4	1
23	Dulcis amice, veni	3	0	0	0	1	2
24	Dux, via, vita, tuis	72	0	0	14	35	23
44	O Benedicta soror	22	1	1	3	6	13
62	Sponsa decora Dei	40	0	1	9	23	8

¹⁴⁰⁷ Three of the ten couplets in this poem are not epanaleptic; however, the second line of each (4, 8 and 18) is a pentameter.

Table AMD.8: Combined data for all poems of the questioned groups

				Hexameter					Pentameter						
				Syllable count F1-F4					Syllable count F1-F2						
				8	9	10	11	12				4	5	6	
	V	H	E						V	H	E				
HX	201	2	7	16	63	94	21	7							
EC	141	0	11	15	50	44	26	6	141	0	6	18	76	47	
EP	147	0	5	1	5	48	66	27	147	0	3	31	69	47	
Sub-total, EC + EP															
	288	0	18	16	55	92	92	33	288	0	9	49	145	94	
Total, all types															
	489	2	23	32	118	186	113	40	288	0	9	49	145	94	

Tables of statistical calculations

For convenience of reference, Table 6.2 of the main text is reproduced here as Table A6.0

Table A6.0: Values of χ^2 for 1, 2, 3, 4, 5 and 15 degrees of freedom for a standard range of probabilities (P)

P	.995	.99	.975	.95	.90	.50	.20	.10	.05	.025	.01	.005
1	<0.0001		<0.001	0.004	0.015	0.455	1.642	2.705	3.841	5.024	6.635	7.879
2	0.010	0.020	0.051	0.103	0.211	1.386	3.219	4.605	5.991	7.378	9.210	10.597
3	0.072	0.015	0.216	0.352	0.584	2.366	4.642	6.251	7.815	9.348	11.345	12.838
4	0.207	0.297	0.484	0.711	1.064	3.387	5.989	7.779	9.488	11.143	13.277	14.860
5	0.412	0.554	0.831	1.145	1.160	4.351	7.289	9.236	11.070	12.833	15.086	16.750
15	4.601	5.229	6.262	7.621	8.547	14.139	19.311	22.307	24.996	27.488	30.578	32.801

Tables A6.1-9: Calculation tables for homogeneity tests, Anglo-Latin poets

As explained in section 6.2.2, a test of homogeneity addresses the question whether two samples belong to the same population. If the test rejects the hypothesis that they do belong to the same population, it may properly be inferred that the two samples tested are not the work of the same author. However, if the test fails to reject the hypothesis, it cannot generally be inferred that the two samples are the work of the same author. In all the tests carried out, the hypothesis being tested (the null hypothesis, H_0) is that the two sets of data are homogeneous. As in the main text, the working of the first calculation table, which follows the procedure set out in the commentary to Table 6.1, is fully explained.

Tables A6: 1-4: Scheme I tests (data are numbers of spondees and dactyls)

Table A6.1: Boniface-Eusebius (B-E)

Key to symbols:-

(1) Entries in bold type in the section of the table headed (O) are the observed frequencies of occurrence of each category of data for the two samples which are being compared.

(2) Column t1 gives the total of the observed frequencies of occurrence for each category of data. Row t2 gives the total of the observed frequencies of occurrence of all categories of data for each sample. The figure in italics is the total (T) of all observed frequencies of occurrence.

(3) Columns B and E in the section headed (E) are the expected frequencies of occurrence of each category of data in each sample. These are calculated as explained in the commentary to Table 6.1, in the main text. For convenience, that explanation is set out after Table A6.1. The same procedure is used in all the statistical tables A6.1-6.9 and A7.1-17.

(4) $|O-E|$ is the numerical value of the difference between O and E, regardless of whether it is positive or negative.

	(O)			(E)		$ O-E $	$ O-E ^2$	$ O-E ^2/E$	
Poet	B	E		B	E			B	E
			t1						
Foot									
S	989	572	1561	903.82	657.18	85.18	7255.63	8.028	11.041
D	563	556	1119	647.91	471.09	84.91	7208.18	11.130	15.300
t2	1552	1128	2680					19.158	26.341
χ^2								45.499	

Step 1: The total amount of data (T) is made up of 1561 spondees and 1119 dactyls, totalling 2860 feet.

Step 2(a): The fraction of T attributable to B is $1552/2680$, which is 0.579, and the fraction attributable to E is $1128/2680$, which is 0.421.

Step 2(b): To calculate the expected frequencies of occurrence of spondees in B and E, multiply the total number of spondees (row S in column t1) by 0.579 for B and by 0.421 for E. Their expected frequencies of occurrence are $0.579 \times 1561 = 903.82$ for B and $0.421 \times 1561 = 657.18$ for E. Repeating this process for row D, the expected frequencies of occurrence of dactyls are $0.579 \times 1119 = 647.91$ for B and $0.421 \times 1119 = 471.09$ for E.

Step 3: The column headed $|O-E|$ shows the difference between O and E; whether it is positive or negative is disregarded since $|O-E|$ must be squared in order to calculate χ^2 .

Step 4: For each expected frequency of occurrence in each sample, divide $|O-E|^2$ by the expected value. As an example: O for the number of spondees in B is 989 and the expected frequency of occurrence of spondees in B is 903.82.

$|O-E| = 85.18$; $85.18^2 = 7255.63$; $7255.63/85.18 = 8.028$. Repeat that process for each category of data in each sample. χ^2 is the total of $|O-E|^2/E$ for all categories of data in the two samples and that total is 45.499, shown in bold type at the end of the last row of Table A6.1

Step 5: Finding the probability that H_0 is true requires the calculated value of χ^2 to be compared with the tabulated value of χ^2 for the appropriate number of degrees of freedom (df). As explained in the commentary to Table 6.1 in the main text, if a contingency table has r rows and c columns, $df = (r-1) \times (c-1)$. The contingency table (the data in bold type in Table A6.1) consists of two rows and two columns and thus has one degree of freedom. Table A6.0 shows that for one degree of freedom, the value of χ^2 corresponding to a probability of 0.01 is 6.635 and for 0.005 is 7.879. The calculated value of 45.499 is a very decisive rejection of H_0 . B and E are not metrically homogeneous.

Table A6.2: Boniface-MNE (the unknown author of *Miracula Nynie Episcopi*)

	(O)			(E)		O-E	O-E ^2	O-E ^2/E	
	B	MNE		B	NME			B	MNE
			t1						
Foot									
S	989	1114	2103	914.81	1188.19	74.19	5504.16	6.017	4.632
D	563	902	1465	637.28	827.72	74.28	5517.52	8.658	6.666
t2	1552	2016	3568					14.675	11.298
χ^2									25.973

In this comparison, B contributes 1552/3568 (= 0.435) of the data and MNE contributes 2016/3568 (= 0.565). Again, the calculated value of χ^2 corresponds to a probability of very much less than 0.005 that H_0 is true.

Table A6.3: Eusebius-MNE

	(O)			(E)		O-E	O-E ^2	O-E ^2/E	
	E	MNE		E	MNE			E	MNE
			t1						
Foot									
S	572	1114	1686	605.27	1080.73	33.27	1106.89	1.829	1.024
D	556	902	1458	523.42	934.58	32.58	1061.46	2.028	1.136
t2	1128	2016	3144					3.857	2.160
χ^2									6.017

In this comparison, E contributes 1128/3144 (= 0.359) of the data and MNE contributes 2016/3568 (= 0.641). Table A6.0 gives the value of χ^2 for a probability of 0.01 that H_0 is true as 6.635, and as 3.841 for a probability of 0.05. The calculated value of 6.017 corresponds to a slightly greater probability than 0.01, but H_0 is still rejected if the significance level as set at the conventional 0.05.

Table A6.4: Eusebius-Bede (BD)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	E	BD	T	E	BD			E	BD
Foot									
S	572	965	1537	554.86	982.14	17.14	293.780	0.529	0.299
D	556	1035	1591	574.35	1016.65	18.35	336.723	0.586	0.331
Total (T)	1128	2000	3128					1.115	0.630
χ^2									1.745

In this comparison, E contributes 1128/3128 (= 0.361) of the data and BD contributes 2000/3568 (= 0.639). Table A6.0 gives the value of χ^2 for a probability of 0.2 that H_0 is true as 1.642. The calculated value of 1.745 corresponds to a probability slightly lower than 0.2, so the test has not rejected H_0 . The analysis is therefore repeated with the higher level of discrimination achieved by dividing the data among the five categories of possible syllable counts.

Tables A6:5-7: Scheme II tests (data are syllable counts)

Table A 6.5: Eusebius-Bede

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	E	BD		E	BD			E	BD
Count			t1						
8	7	11	18	6.50	11.50	0.50	0.25	0.038	0.022
9	69	122	191	68.95	122.05	0.05	0.0025	<.001	<.001
10	132	215	347	125.27	221.73	6.73	45.293	0.362	0.204
11	73	125	198	71.48	126.52	1.52	2.310	0.032	0.018
12	1	27	28	10.11	17.64	9.11	82.991	8.209	4.705
t2	282	500	782					8.642	4.949
χ^2									13.591

In the tests using syllable count data, the contingency table now has five rows and two columns, so there are $(5-1) \times (2-1) = 4$ degrees of freedom. Table A6.0 gives χ^2 as 13.277 for a probability of 0.01 with four degrees of freedom. The calculated value of 13.591 indicates a probability of slightly less than 0.01 that H_0 is true, so it is rejected when the test is carried out at this higher level of discrimination.

Table A6.6: Aediluulf-(AE)-MNE

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	AE	MNE		AE	MNE			AE	MNE
Count									
			t1						
8	46	34	80	48.96	31.04	2.96	8.762	0.179	0.282
9	246	152	398	243.58	154.42	2.42	5.856	0.024	0.038
10	327	217	544	332.93	211.07	5.93	35.169	0.105	0.167
11	162	88	250	153.00	97.00	9.00	81.00	0.529	0.835
12	15	13	28	17.14	10.86	2.14	4.580	0.267	0.421
t2	796	504	1300					1.104	1.743
χ ²								2.847	

In this comparison, AE contributes 796/1300 (= 0.612) of the data and MNE contributes 504/1300 (= 0.388). Table A6.0 gives χ² as 3.387 for a probability of 0.5 and 1.094 for a probability of 0.9, for four degrees of freedom, that H₀ is true. The calculated value of 2.847 indicates more strongly, but not conclusively, that H₀ is true.

Table A6.7: Wulfstan (W)-Bede (BD)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	W	BD		W	BD			W	BD
Count									
			t1						
8	12	11	23	11.5	11.5	0.50	0.025	0.002	0.002
9	123	122	245	122.5	122.5	0.50	0.025	<.001	<.001
10	220	215	435	217.5	217.5	2.50	6.25	0.029	0.029
11	117	125	242	121	121	4.00	16.00	0.132	0.132
12	28	27	55	27.5	27.5	0.50	0.025	<.001	<.001
t2	500	500	1000					0.163	0.163
χ ²								0.326	

It is apparent, from simply looking at the syllable count data for these two poets, that their distributions of syllable counts is almost identical and that analysis at that level will fail to distinguish between them. Table A6.0 gives χ² as 0.484 for a probability of 0.975 and 0.297 for a probability of 0.99 that H₀ is true, so the calculated value of χ² indicates very strongly that W and BD are metrically homogeneous. It is therefore necessary to investigate whether even the analysis of the full metrical data is able to differentiate between samples from the works of authors who are so metrically similar.

Tables A6.8-9: Scheme III tests (full metrical pattern data)

Table A6.8: Aediluulf-MNE

	(O) ¹⁴⁰⁸			(E)		O-E ¹⁴⁰⁹	O-E ² /E	
	AE	MNE	t	AE	MNE		AE	MNE
Pattern			t1					
SSSS	46	34	80	48.96	31.04	2.96	0.179	0.282
SSSD	10	14	24	14.69	9.31	4.69	1.497	2.361
SSDS	31	17	48	29.38	18.62	1.62	0.089	0.141
SDSS	60	45	105	64.26	40.74	4.26	0.282	0.445
DSSS	145	76	221	135.25	85.75	9.75	0.703	1.108
SSDD	10	4	14	8.57	5.43	1.43	0.239	0.376
SDSD	14	12	26	15.91	10.09	1.91	0.229	0.358
SDDS	25	22	47	28.76	18.24	3.76	0.492	0.775
DDSS	169	100	269	164.63	104.37	4.37	0.116	0.183
DSDS	82	49	131	80.17	50.83	1.83	0.042	0.066
DSSD	27	30	57	34.88	22.12	7.88	1.780	2.807
DDDS	99	45	144	88.13	55.87	10.87	1.341	2.114
DDSD	34	25	59	36.11	22.89	2.11	0.123	0.194
DSDD	22	13	35	21.42	13.58	0.58	0.016	0.025
SDDD	7	5	12	7.34	4.66	0.34	0.016	0.025
DDDD	15	13	28	17.14	11.86	2.14	0.268	0.422
t2	796	504	1300				7.312	11.682
χ^2							18.994	

Dividing the data into the sixteen categories corresponding to the possible metrical patterns in F1-F4 gives a contingency table with $(16-1) \times (2-1) = 15$ degrees of freedom. Table A6.0 gives χ^2 for a probability of 0.2 that H_0 is true as 19.311 for fifteen degrees of freedom. The calculated value of 18.994 corresponds to a slightly higher probability, so the test is inconclusive.

1408 In this table and in Tables 6.5-6.7, the numbers in bold type, together with the row and column totals, constitute the contingency table.

1409 This will be the same for q and C; one will have a positive and the other, a negative value.

Table A6.9: Wulfstan-Bede

	(O) ¹⁴¹⁰			(E)		O-E ¹⁴¹¹	O-E ² /E	
	W	BD		W	BD		W	BD
Pattern								
			t1					
SSSS	12	11	23	11.5	11.5	0.5	0.022	0.022
SSSD	10	12	22	11	11	1.0	0.091	0.091
SSDS	31	21	52	26	26	5.0	0.962	0.962
SDSS	39	34	73	36.5	36.5	2.5	0.171	0.171
DSSS	43	55	98	49	49	6.0	0.735	0.735
SSDD	12	7	19	9.5	9.5	2.5	0.659	0.659
SDSD	26	17	43	21.5	21.5	4.5	0.942	0.942
SDDS	26	17	43	21.5	21.5	4.5	0.942	0.942
DDSS	53	76	129	64.5	64.5	11.5	2.050	2.050
DSDS	63	54	117	58.5	58.5	4.5	0.346	0.346
DSSD	40	44	84	42	42	2.0	0.095	0.095
DDDS	38	40	78	39	39	1.0	0.026	0.026
DDSD	33	53	86	43	43	10.0	2.326	2.326
DSDD	34	22	56	28	28	6.0	1.286	1.286
SDDD	12	10	22	11	11	1.0	0.091	0.091
DDDD	28	27	55	27.5	27.5	0.5	0.009	0.009
t2	500	500	1000				10.553	10.553
χ^2							21.106	

The calculated value of χ^2 corresponds to a probability of between 0.2 ($\chi^2 = 19.311$) and 0.1 ($\chi^2 = 22.307$) that the null hypothesis is true so, again, the test is inconclusive.

The tests as a whole show that analysis of metrical characteristics at varying levels of discrimination may be capable of distinguishing between the works of different authors but there is a level of metrical similarity beyond which that method of analysis will fail to do so.

1410 In this table and in Tables 6.5-6.7, the numbers in bold type, together with the row and column totals, constitute the contingency table.

1411 This will be the same for q and C; one will have a positive and the other, a negative value.

Tables A7.1-18: Calculation tables for false positives and negatives, selected dubia and comparisons of Paul and Alcuin.

Note: For all poems in elegiac couplets (marked *), there are two tables, H and P, relating to the hexameter and pentameter components of the couplet.

A7.1-4: Scheme II tests, false positives and false negatives

Tests for false positives

A7.1: *Cartula, perge cito*

A7.2: *Dux, via, vita, tuis**

Tests for false negatives

A7.3: *Cynthius occiduas*

A7.4: *Lugentum lacrimis**

A7.5-12: Scheme II tests, selected *dubia*

A7.5: *Hausimus altifluo*

A7.6: *Qui sacra vivaci*

A7.7: The three fables (treated as one composition)*

A7.8: *Hoc satus in viridi**

A7.9: *Funereo textu scribuntur**

A7.10-12: The S. Scholastica poems

A7.10: *Sponsa decora dei**

A7.11: *O benedicta soror**

A7.12: Test of homogeneity between the two S. Scholastica poems*

A7.13: *Ordinar unde tuas laudes** (this is included with the *dubia* as the test addresses Dahn's rejection of Paul's authorship)

A7.14-18: Scheme III tests

A7.14: *hausimus altifluo*

A7.15: *qui sacra vivaci*

A7.16: *cartula, perge cito*

A7.17: Comparison of metrical patterns in *cartula, perge cito* (q3) and a sample from the hexameter verses of Alcuin (A)

A7.18: Comparison of metrical patterns in the authentic hexameter poems of Paul (P) and the same sample from the hexameter verses of Alcuin (A).

A7.1-4: Scheme II tests, false positives and false negatives

Tests for false positives

Table A7.1: *Cartula, perge cito* (q)

The comparison sample (C) is the group of Paul's authentic hexameter poems; see Table AMD 1

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C	q + C	q	C			q	C
Count			t1						
8	2	6	8	2.56	5.44	0.56	0.314	0.123	0.058
9	27	49	76	24.32	51.68	2.68	7.182	0.295	0.139
10	35	80	115	36.80	78.20	1.80	3.240	0.089	0.042
11	17	34	51	16.32	34.68	0.68	0.462	0.028	0.013
12	0	3	3	0.96	2.04	0.96	0.922	0.960	0.451
t2	81	172	253					1.495	0.703
χ ²									2.198

In this table, q contributes 81/253 = (0.32) of the data and C contributes 0.68. Table A6.0 gives χ² as 3.387 for a probability of 0.5 that H₀ is true, so the calculated value of 2.198 indicates a probability higher than 0.5. The test has failed to reject the null hypothesis that q and C belong to the same population. It has therefore thrown up a false positive, as *cartula, perge cito* is indisputably the work of Alcuin.

Tables A7.2H and 7.2P: *Dux, via, vita, tuis**

The comparison sample (C) is the group of Paul's authentic epanaleptic poems; see Tables AMD 3H and 3P.

Table A7.2H: *Dux, via, vita, tuis** (hexameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C	q + C	q	C			q	C
Count			t1						
9	2	0	2	0.842	1.158	0.842	0.709	0.842	0.612
10	20	35	55	23.155	31.845	3.155	9.954	0.430	0.313
11	32	58	90	37.890	52.110	5.890	35.760	0.944	0.686
12	18	6	24	10.194	13.806	7.806	60.934	5.977	4.737
t2	72	99	171					8.193	6.348
χ ²									14.341

Table A7.2P: *Dux, via, vita, tuis** (pentameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C	q + C	q	C			q	C
Count			t1						
4	14	6	20	8.400	11.600	5.600	31.360	3.733	2.703
5	35	51	86	36.206	49.794	1.206	1.454	0.040	0.029
6	23	42	65	27.300	37.700	4.300	18.490	0.677	0.490
t2	72	99	171					4.450	3.222
χ^2								7.672	

q contributes 72/171 of the data (0.421) and C contributes 99/171 (0.579). For the hexameter verses, there are only four categories of syllable count since neither q nor C contains any verses with a count of 8. The contingency table has $(4-1) \times (2-1) = 3$ degrees of freedom. Table A6.0 gives $\chi^2 = 12.858$ for a probability of 0.001 with three degrees of freedom that H_0 is true. The calculated value of 14.431 corresponds to an even lower probability. For the pentameter verses, the contingency table has $(3-1) \times (2-1) = 2$ degrees of freedom. Table A6.0 gives $\chi^2 = 7.378$ for a probability of 0.025 with two degrees of freedom, which is close to the calculated value of 7.672. Thus, analysis of the both the hexameter and the pentameter verses strongly rejects H_0 , and that rejection is correct, as the poem refers to events which took place after Paul's death.

Tests for false negatives

In the tables of tests for false negatives, the data are slightly different. As before, q is the tested poem. However, q is in these cases an authentic poem, so the data for q have to be compared with the data for the remainder of the group from which the comparison sample is drawn. The two sets of data are, therefore, q and C-q.

Table A7.3: *Cynthius occiduus*

C is the group of Paul's authentic hexameter poems

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C-q	C	q	C-q			q	C-q
Count			t1						
8	1	5	6	0.84	5.16	0.16	0.026	0.030	0.005
9	5	44	49	6.86	42.14	1.86	3.460	0.504	0.082
10	14	66	80	11.20	68.80	2.80	7.840	0.700	0.114
11	4	30	34	4.76	29.24	0.76	0.578	0.121	0.020
12	0	3	3	0.42	2.58	0.42	0.176	0.420	0.068
t2	24	148	172					1.775	0.289
χ^2								2.064	

In this table, q contributes 24/172 (0.14) of the data and C-q contributes 0.86. Table A6.0 gives $\chi^2 = 3.387$ for a probability of 0.5, with four degrees of freedom) that H_0 is true, so the calculated value of 2.064 indicates a higher probability than 0.5. This result is to be expected as *cynthus occiduus* is undoubtedly by Paul.

Table A7.4: *Lugentum lacrimis**

C is the group of Paul's authentic poems in elegiac couplets; see Tables AMD.2H and 2P.

TableA7.4H: *Lugentum lacrimis* (hexameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C-q	C	q	C-q			q	C-q
Count			t1						
8	1	10	11	2.123	8.877	1.123	1.261	0.594	0.142
9	8	30	38	7.334	30.666	0.666	0.444	0.060	<.001
10	12	37	49	9.457	39.543	2.543	6.467	0.684	0.164
11	5	27	32	6.176	25.824	1.176	1.383	0.224	0.054
12	0	5	5	0.097	4.903	0.097	0.009	0.097	<.001
t2	26	109	135					1.659	0.360
χ^2									2.019

TableA7.4P: *Lugentum lacrimis* (pentameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C-q	C	q	C			q	C
Count			t1						
4	0	8	8	1.544	6.456	1.544	2.415	1.554	0.374
5	13	61	74	14.282	59.718	1.282	1.644	0.115	0.028
6	13	40	53	10.229	42.771	2.771	7.678	0.751	0.180
t2	26	109	135					2.420	0.582
χ^2									3.002

In these tables, q contributes 26/135 (0.193) of the data and C-q contributes 0.807. For the hexameter verses, where the contingency table has four degrees of freedom, Table A6.0 gives $\chi^2 = 3.357$ for a probability of 0.5 that H_0 is true, and $\chi^2 = 1.094$ for a probability of 0.9. The calculated value of 2.019 corresponds to a fairly high probability that H_0 is true. Analysis of the pentameter verses gives lower probabilities but falls well short of rejecting H_0 . Table A6.0 gives $\chi^2 = 3.219$ for a probability of 0.2, with two degrees of freedom, that H_0 is true. The calculated value of 3.002 corresponds to a probability slightly somewhat greater than 0.2 that H_0 is true. Again, the failure to reject H_0 is to be expected, as this poem, also, is undoubtedly by Paul.

A7.5-12: Scheme II tests, selected *dubia*

In this group of tests, H_0 is that q belongs to the same population as the relevant comparison sample (C) of authentic poems of Paul.

Table A7.5: *Hausimus altifluo*

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C		q	C			q	C
Count									
			t1						
8	2	6	8	1.19	6.81	0.81	0.656	0.551	0.096
9	8	49	57	8.47	48.53	0.47	0.221	0.026	0.005
10	15	80	95	14.11	80.89	0.89	0.792	0.056	0.009
11	5	34	39	5.79	33.21	0.79	0.624	0.108	0.019
12	0	3	3	0.45	2.55	0.45	0.203	0.450	0.079
t2	30	172	202					1.191	0.208
χ^2									1.399

In this table, q contributes 30/202 (0.149) and C for 0.851 of the data.

Table A6.0 gives $\chi^2 = 1.064$ for a probability of 0.9, with four degrees of freedom, that H_0 is true. The calculated value of 1.399 indicates a probability not much greater than 0.9. The test fails, by a wide margin, to reject the null hypothesis of Paul's authorship of this poem, although it has been firmly attributed to Paulinus of Aquileia because of his known friendship with the addressee, a cleric named Zacharias.

Table A7.6: *Qui sacra vivaci*

Again, C is the group of Paul's authentic hexameter poems.

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C		q	C			q	C
Count									
			t1						
8	3	6	9	2.33	6.67	0.67	0.449	0.193	0.067
9	22	49	71	18.36	52.64	3.64	13.250	0.722	0.252
10	25	80	105	27.16	77.84	2.16	4.666	0.172	0.060
11	8	34	42	10.86	31.14	2.86	8.180	0.753	0.263
12	2	3	5	1.30	3.70	0.70	0.490	0.377	0.132
t2	60	172	232					2.217	0.774
χ^2									2.991

In this table, q contributes 0.259 of the data and C contributes 0.741. Table A6.0 gives $\chi^2 = 3.357$ for a probability of 0.5, with four degrees of freedom, that H_0 is true, so the calculated value of 2.991 corresponds to a probability of somewhat greater than 0.5. There is a strong, but not

conclusive argument for the attribution of the poem to Paul's contemporary, Angilram, but this test does not lead to any conclusion as to authorship.

In Tables A7.7-A7.9, the comparison sample consists of the authentic poems of Paul in elegiac couplets which are not epanaleptic (see Tables AMD.2H and AMD.2P).

Tables A7.7: The three fables

TableA7.7H: The three fables, treated as one composition (hexameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C		q	C			q	C
Count			t1						
8	8	11	19	4.829	14.171	3.171	10.055	2.082	0.710
9	15	38	53	13.470	39.530	1.530	2.369	0.176	0.060
10	13	49	62	15.757	46.243	2.757	7.601	0.482	0.164
11	9	32	41	10.420	30.580	1.420	2.016	0.194	0.066
12	1	5	6	1.525	4.475	0.525	0.276	0.181	0.062
t2	46	135	181	46.001	134.999			3.115	1.062
χ^2								4.177	

TableA7.7P: The three fables, treated as one composition (pentameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C		q	C			q	C
Count			t1						
4	2	8	10	2.541	7.459	0.541	0.293	0.115	0.039
5	28	74	102	25.918	76.082	2.082	4.335	0.167	0.057
6	16	53	69	17.533	51.467	1.533	2.350	0.134	0.046
T2	46	135	181	46.002	134.998			0.416	0.142
χ^2								0.558	

In these tables, q contributes 46/181 (0.254) of the data, and C contributes 135/181 (0.746). The calculated values of χ^2 correspond, for the hexameter verses, to a probability greater than 0.2 ($\chi^2 = 5.989$ for four degrees of freedom) and for the pentameter verses to a probability greater than 0.5 ($\chi^2 = 1.386$, with two degrees of freedom), that H_0 is true. As with *qui sacra vivaci*, the test fails to reject the null hypothesis and leads to no conclusion about the authorship of the three fables.

Tables A7.8: *Hoc satus in viridi*

Table A7.8H: *Hoc satus in viridi* (hexameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C		q	C			q	C
Count			t1						
8	2	11	13	1.892	11.108	0.108	0.012	0.006	< .001
9	9	38	47	6.842	40.158	2.158	4.657	0.681	0.116
10	6	49	55	8.006	46.994	2.006	4.024	0.503	0.086
11	5	32	37	5.386	31.614	0.386	0.149	0.028	0.005
12	1	5	6	0.874	5.126	0.126	0.016	0.018	0.003
t2	23	135	158	23.000	135.00			1.236	0.210
χ^2									1.446

Table A7.8P: *Hoc satus in viridi* (pentameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C		q	C			q	C
Count			t1						
4	2	8	10	1.456	8.544	0.544	0.296	0.203	0.035
5	9	74	83	12.085	70.915	3.085	9.517	0.788	0.134
6	12	53	65	9.464	55.536	2.536	6.431	0.680	0.116
t2	23	135	158	23.005	134.995			1.671	0.285
χ^2									1.956

In these tables, q contributes 23/158 = 0.146 of the data, and C contributes 135/158 = 0.854. For a probability of 0.9 that H_0 is true, Table A6.0 gives $\chi^2 = 1.064$ with four degrees of freedom, so the calculated value of 1.446 indicates a probability somewhat lower than 0.9. For the pentameter verses, the calculated value of 1.956 indicates a probability of somewhat less than 0.5; Table A6.0 gives $\chi^2 = 3.219$ for a probability of 0.5 with two degrees of freedom. As with the three fables, the test on the hexameter verses indicates a higher probability than the test on the pentameter verses, but, again, the test leads to no conclusions about the authorship of the poem.

Tables A7.9: *Funereo textu scribuntur*

Table A7.9H: *Funereo textu scribuntur* (hexameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	Q	C		q	C			q	C
Count			t1						
8	1	11	12	1.412	10.588	0.412	0.170	0.120	0.016
9	6	38	44	5.176	38.824	0.824	0.679	0.131	0.175
10	7	49	56	6.588	49.412	0.412	0.170	0.026	0.003
11	2	32	34	3.998	30.002	1.998	3.992	0.999	0.133
12	2	5	7	0.823	6.177	1.177	1.385	1.684	0.224
t2	18	135	153	17.997	135.003			2.960	0.551
χ^2									3.551

Table A7.9P: *Funereo textu scribuntur* (pentameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	Q	C		q	C			q	C
Count			t1						
4	3	8	11	1.294	9.706	1.706	2.910	2,249	0.300
5	8	74	82	9.643	72.357	1.643	2.699	0.280	0.037
6	7	53	60	7.056	52.944	0.056	0.003	<.001	<.001
t2	18	135	153	17.993	134.007			2.529	0.337
χ^2									2.866

In these tables, q contributes 18/153 = 0.118 of the results, and C contributes 135/153 = 0.882. For the hexameter verses, the calculated value of 3.551 for χ^2 is close to the value of 3.387 for a probability of 0.5, with four degrees of freedom, that H_0 is true. For the pentameter verses, the calculated value of 2.866 indicates a probability somewhat greater than 0.2, for which $\chi^2 = 3.219$ for four degrees of freedom. The results are, again, inconclusive.

Tables A7.10-12: The S. Scholastica poems

In Tables A7.10 and A7.11, the comparison group consists of the authentic poems of Paul in elegiac couplets which are epanaleptic (see Tables AMD.3H and AMD.3P).

Tables A7.10: *Sponsa decora dei**

Table A7.10H: *Sponsa decora dei* (hexameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	Q	C	t1	q	C			q	C
Count									
9	2	0	2	0.576	1.424	1.424	2.028	3.520	1.424
10	12	35	47	13.525	43.475	1.525	2.326	0.172	0.053
11	20	58	78	22.446	55.554	2.244	5.036	0.224	0.091
12	6	6	12	3.453	8.547	2.547	6.487	1.878	0.759
t2	40	99	139	40.000	99.000			5.794	2.327
χ ²									8.121

Table A7.10P: *Sponsa decora dei* (pentameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	Q	C	t1	q	C			q	C
Count									
4	9	6	15	4.917	10.083	4.083	16.671	3.390	1.653
5	23	51	74	21.297	52.703	1.703	2.900	0.136	0.055
6	8	42	50	14.390	35.610	6.390	40.832	2.838	1.147
t2	40	99	139	40.604	98.396			6.364	2.855
χ ²									9.229

In these tables, q contributes $40/139 = 0.288$ of the data, and C contributes $99/139 = 0.712$. There are no eight-syllable verses in the hexameter verses of either *sponsa decora dei* or the authentic epanaleptic poems, so the contingency table contains only four rows, and has three degrees of freedom. For the hexameter verses, the calculated value of 8.121 for χ^2 is higher than the tabulated value of 7.815 for a probability of 0.05 with three degrees of freedom. For the pentameter verses, the calculated value of 9.229 is close to the tabulated value of 9.210 for a probability of 0.01 with two degrees of freedom. Both tests reject H_0 and lead to the conclusion that Paul is not the author of *sponsa decora dei*. This accords with the current view, since the poem is not included in either Dümmler's or Neff's editions.

Table A7.11: *O benedicta soror**Table A7.11H: *O benedicta soror* (hexameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	Q	C		q	C			q	C
Count			t1						
9	1	0	1	0.182	0.818	0.818	0.669	3.677	0.818
10	9	35	44	8.008	35.992	0.992	0.984	0.123	0.027
11	11	58	69	12.558	56.442	1.558	2.427	0.193	0.443
12	1	6	7	1.274	5.726	0.274	0.075	0.059	0.013
t2	22	99	121	22.022	98.978			4.052	1.301
χ^2								5.353	

Table A7.11P: *O benedicta soror* (pentameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	Q	C		q	C			q	C
Count			t1						
4	3	6	9	1.638	7.362	1.362	1.855	1.133	0.210
5	6	51	57	10.374	46.626	4.374	19.132	1.844	0.425
6	13	42	55	10.010	43.990	1.990	3.960	0.396	0.090
t2	22	99	121	22.022	98.978			3.373	0.726
χ^2								4.099	

In these tables, q contributes $22/121 = 0.182$ of the data, and C contributes $99/121 = 0.818$. As with *sponsa decora dei*, there are no eight-syllable verses in the hexameter verses of either *O benedicta soror* or the authentic epanaleptic poems, so the contingency table contains only four rows, and has three degrees of freedom. For the hexameter verses, the calculated value of 5.353 for χ^2 corresponds to a probability between 0.2 ($\chi^2 = 4.642$) and 0.1 ($\chi^2 = 6.251$, with three degrees of freedom). For the pentameter verses, the calculated value of 4.099 corresponds to the same range of probability ($\chi^2 = 3.219$ for probability 0.1 and 4.605 for probability 0.1, with two degrees of freedom). Both tests have failed to reject H_0 and are inconclusive.

Table A7.12: Test of homogeneity between the two S. Scholastica poems

Table A7.12H: Test of homogeneity of q1, *sponsa decora dei*, and q2, *O benedicta soror*, (hexameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q1	q2		q1	q2			q1	q2
Count			t1						
9	2	1	3	1.935	1.065	0.065	0.004	0.002	0.004
10	12	9	21	13.548	7.452	1.548	2.396	0.177	0.322
11	20	11	31	20.001	10.999	0.001	<<0.001		
12	6	1	7	4.516	2.484	1.484	2.202	0.488	0.887
t2	40	22	62					0.667	1.213
χ ²								1.880	

Table A7.12P: Test of homogeneity (pentameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q1	q2		q1	q2			q1	q2
Count									
4	9	3	12	7.750	4.250	1.250	1.563	0.201	0.368
5	23	6	29	18.728	10.272	4.272	17.811	0.974	1.734
6	8	13	21	13.562	7.438	5.562	30.936	2.281	4.159
t2	40	22	62	40.040	21.960			3.456	6.261
χ ²								9.717	

In these tables, q1 contributes 40/62 = 0.646 of the results, and q2 for 22/62 = 0.354. This is the one test for which the analysis of the hexameter and pentameter verses has led to inconsistent conclusions. For the hexameter verses, the calculated value of 1.880 for χ² corresponds to a probability well over 0.5 (χ² = 2.866 with three degrees of freedom) that H₀ is true, but for the pentameter verses the calculated value of 9.717 corresponds to a probability of less than 0.01 (χ² = 9.210 with two degrees of freedom), that H₀ is true. It is not possible to base any reliable conclusion on these inconsistent results.

Table A7.13: *Ordinar unde tuas laudes**

This is included with the tests on selected *dubia* as the test addresses Dahn's rejection of Paul's authorship, which has found no support in any subsequent study.

In this case the comparison is between *ordiar unde tuas laudes* (q) and the remainder of the group of authentic epanaleptic poems (C-q). There are no hexameter verses with syllable counts of 8 or 9 in either *ordiar unde tuas laudes* or the other two authentic epanaleptic poems, *haec domusest domini* and *ordiar unde tuos, sacer*.

Table A7.13H: *Ordinar unde tuas laudes* (hexameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C		q	C			q	C
Count			t1						
10	9	26	35	5.303	29.697	3.697	13.668	2.577	0.460
11	6	52	58	8.788	49.212	2.788	7.773	0.884	0.158
12	0	6	6	0.909	5.091	0.909	0.826	0.909	0.162
t2	15	84	99	15.000	84.000			4.370	0.780
χ^2								5.150	

Table A7.13P: *Ordinar unde tuas laudes* (pentameter verses)

	(O)			(E)		O-E	O-E ²	O-E ² /E	
	q	C		Q	C			q	C
Count			t1						
4	0	6	6	0.909	5.091	0.909	0.826	0.909	0.162
5	11	40	51	7.727	43.273	3.273	10.713	1.386	0.248
6	4	38	42	6.363	31.637	2.363	5.584	0.878	0.176
t2	15	84	99					3.173	0.586
χ^2								3.759	

In these tables, q contributes 15/99= 0.1515 of the data, and C - q contributes 84/99 = 0.8485. For the hexameter verses, the calculated value of 5.150 for χ^2 corresponds to a probability greater than 0.05 ($\chi^2 = 5.991$ with two degrees of freedom) that H_0 is true. For the pentameter verses, the calculated value of 3.759 corresponds to a probability somewhat less than 0.2 ($\chi^2 = 4.605$ with two degrees of freedom) that H_0 is true. The tests therefore give no support to Danh's contention that Paul is not the author of this poem.

A7.14-18: Scheme III tests

A7.14: *hausimus altifluo* (q1)

A7.15: *qui sacra vivaci* (q2)

A7.16: *cartula, perge cito* (q3)

A7.17: Comparison of metrical patterns in *cartula perge cito* (q3) and a sample from the hexameter verses of Alcuin (A).

A7.18: Comparison of metrical patterns in the authentic hexameter poems of Paul (P) and a sample from the hexameter verses of Alcuin (A).

The three poems whose metrical data are analysed in Tables A7.14-16 have all been attributed to authors other than Paul; q1 to Paulinus of Aquilea, q2 to Angilram and q3 to Alcuin. However, in each case the Scheme II test, in which the syllable count data were analysed, has failed to reject the null hypothesis that the poem in question belongs to the same population as the comparison sample of Paul's authentic hexameter poems. It is therefore necessary to ascertain whether the greater discriminatory power of a test based on full metrical patterning will or will not reject the same null hypothesis.

Table A7.14: *hausimus altifluo* (q1)

	(O)			(E)		O-E	O-E ² /E	
	q1	C		q1	C		q1	C
Pattern			t1					
SSSS	2	6	8	1.188	6.812	0.812	0.474	0.083
SSSD		9	9	1.337	7.663	1.337	1.337	0.233
SSDS		11	11	1.634	9.366	1.634	1.634	0.285
SDSS	5	14	19	2.822	16.178	2.178	1.681	0.292
DSSS	3	17	20	2.570	17.430	0.430	0.072	0.013
SSDD		4	4	0.514	3.486	0.514	0.514	0.076
SDSD		2	2	0.257	1.743	0.257	0.257	0.011
SDDS	2	6	8	1.028	6.972	0.972	0.919	0.160
DDSS	12	32	44	6.534	37.466	5.466	4.573	0.796
DSDS		21	21	3.119	17.881	3.119	3.119	0.544
DSSD	1	13	14	2.079	11.921	1.079	0.560	0.097
DDDS	4	13	17	2.525	14.475	1.475	0.231	0.040
DDSD		11	11	1.634	9.366	1.634	1.634	0.285
DSDD	1	8	9	1.337	7.663	1.337	1.337	0.233
SDDD		3	3	0.446	2.554	0.446	0.446	0.078
DDDD		2	2	0.257	1.743	0.257	0.257	0.011
t2	30	172	202				19.045	3.237
χ^2							22.282	

In this table, q1 contributes $30/202 = 0.149$ of the total data, C contributes $172/202 = 0.854$. The calculated value of 22.282 for χ^2 indicates a probability close to 0.1 ($\chi^2 = 22.307$ with 15 degrees of freedom) that H_0 is true. This is much lower than the probability estimated from analysis of the syllable count data but not sufficiently low to reject H_0 .

Table A7.15: *qui sacra vivaci* (q2)

	(O)			(E)		O-E	O-E ² /E	
	q2	C		q2	C		q2	C
Pattern			t1					
SSSS	3	6	9	2.327	6.763	0.763	0.250	0.087
SSSD	2	9	11	2.845	6.155	0.845	0.251	0.087
SSDS	4	11	15	3.879	12.121	0.121	0.004	0.001
SDSS	7	14	21	5.431	15.569	1.569	0.453	0.158
DSSS	9	17	26	6.724	19.276	2.276	0.770	0.269
SSDD		4	4	1.034	2.966	1.034	1.034	0.373
SDSD	4	2	6	1.552	4.448	2.448	3.861	1.348
SDDS	1	6	7	1.810	5.190	0.810	0.362	0.127
DDSS	6	32	38	9.827	28.173	3.827	1.490	0.520
DSDS	8	21	29	7.499	21.501	0.501	0.033	0.012
DSSD	6	13	19	4.913	14.087	1.087	0.240	0.084
DDDS	1	13	14	3.620	10.380	2.620	1.896	0.662
DDSD	1	11	12	3.104	8.896	2.104	1.426	0.498
DSDD	5	8	13	3.362	9.638	1.638	0.798	0.279
SDDD	1	3	4	1.034	2.966	0.034	0.001	0.000
DDDD	2	2	4	1.034	2.966	0.966	0.902	0.315
t2	60	172	232				13.071	4.820
χ^2							17.891	

In this table, q2 contributes $60/232 = 0.259$ of the data and C contributes $172/232 = 0.741$.

The calculated value of 17.891 for χ^2 corresponds to a probability somewhat greater than 0.2 ($\chi^2 = 19.311$ with 15 degrees of freedom) that H_0 is true. As with *hausimus altifluo*, the analysis of full metrical patterns rather than syllable counts gives a reduced estimate of the probability that H_0 is true, but the result is inconclusive.

Table A7.16: *cartula, perge cito* (q3)

	(O)			(E)		O-E	O-E ² /E	
	q3	C		q3	C		q3	C
Pattern			t1					
SSSS	2	6	8	2.567	5.433	0.567	0.125	0.059
SSSD	3	9	12	3.842	8.158	0.842	0.185	0.087
SSDS	2	11	13	4.163	8.837	2.163	1.124	0.529
SDSS	7	14	21	6.724	14.276	0.276	0.011	0.005
DSSS	15	17	32	10.246	21.754	4.754	2.206	1.039
SSDD	0	4	4	1.281	2.719	1.281	1.281	0.603
SDSD	3	2	5	1.601	3.399	1.399	1.222	0.576
SDDS	2	6	8	2.567	5.433	0.567	0.125	0.059
DDSS	14	32	46	14.729	31.271	0.729	0.036	0.017
DSDS	8	21	29	9.286	19.714	1.286	0.178	0.084
DSSD	8	13	21	6.724	14.276	1.276	0.242	0.114
DDDS	9	13	22	7.044	14.956	1.956	0.543	0.256
DDSD	6	11	17	5.443	11.557	0.557	0.046	0.022
DSDD	1	8	9	2.882	6.118	1.882	1.229	0.579
SDDD	1	3	4	1.281	2.719	0.281	0.062	0.029
DDDD	0	2	2	0.640	1.360	0.640	0.410	0.193
t2	81	172	253				8.795	4.251
χ ²							13.046	

In this table, q3 contributes $81/253 = 0.320$ of the data, and C contributes $172/253 = 0.680$. The calculated value of 13.046 for χ^2 corresponds to a probability somewhat greater than 0.50 ($\chi^2 = 14.339$ with 15 degrees of freedom) that H_0 is true. However, as this poem has been firmly attributed to Alcuin by Bethmann¹⁴¹², Dümmler¹⁴¹³, Neff¹⁴¹⁴ and Burghardt¹⁴¹⁵, it is worth investigating the extent to which the metrical patterns of this poem and other hexameter verses of Alcuin resemble each other. Table A7.17 compares the full metrical pattern data for *cartula perge cito* (q3) with the data for Alcuin collected by Orchard, whose sample consisted of 500 lines from Alcuin's poem *Versus de patribus regibus et sanctis Euboricensis*.¹⁴¹⁶

1412 L. Bethmann, 'Paulus Diaconus Leben und Schriften,' 248.

1413, PLAC I, *Alcuini Carmina, carm. iv*, 220

1414 K. Neff, *Gedichte des Paulus Diaconus*, xx. This is a list of the contents of Paris, BnFr, lat. 528

1415 H.-D. Burghardt, *Philologische Untersuchungen zu den Gedichten Alkuins*, (Diss. Phil., Heidelberg, 1960).

1416 A. Orchard, *The Poetic Art of Aldhelm*, Appendix 5.2, 'A statistical survey of Anglo-Latin Verse', 293-298. His detailed data for Alcuin have been re-worked for this study and are at Table 6.7 of the main text.

Table A7.17: Comparison of metrical patterns in *cartula perge cito* (q3) and a sample from the hexameter verses of Alcuin (A)

	(O)			(E)		O-E	O-E ² /E	
	q3	A		q3	A		q3	A
Pattern			t1					
SSSS	2	11	13	1.813	11.187	0.187	0.003	0.019
SSSD	3	7	10	1.395	8.605	1.605	0.299	1.847
SSDS	2	13	15	2.092	12.908	0.092	<0.001	0.004
SDSS	7	55	62	8.649	53.351	1.649	0.051	0.314
DSSS	15	94	109	15.205	93.795	0.205	<0.001	0.003
SSDD	0	4	4	0.558	3.442	0.558	0.090	0.558
SDSD	3	19	22	3.069	18.931	0.069	<0.001	0.002
SDDS	2	25	27	3.766	23.234	1.766	0.134	0.828
DDSS	14	82	96	13.392	82.608	0.608	0.004	0.028
DSDS	8	49	57	7.951	49.049	0.049	<0.001	<0.001
DSSD	8	32	40	5.58	34.42	2.420	0.170	1.049
DDDS	9	33	42	5.859	36.141	3.141	0.273	1.684
DDSD	6	46	52	7.254	44.746	1.254	0.035	0.218
DSDD	1	9	10	1.395	8.605	0.395	0.018	0.112
SDDD	1	8	9	1.255	7.745	0.255	0.008	0.052
DDDD	0	13	13	1.813	11.187	1.813	0.294	1.812
t2	81	500	581				1.379	8.521
χ^2							9.900	

In this table, q3 contributes $81/581 = 0.1395$ of the data, and A, $500/581 = 0.8605$. The calculated value of χ^2 corresponds to a probability somewhat less than 0.9 ($\chi^2 = 8.547$ with fifteen degrees of freedom) that H_0 is true. The test comparing *cartula, perge cito* with the authentic hexameter poems of Paul (Table A:7.16) gave a probability *ca* 0.5 that H_0 was true. That prompts another comparison, between the metrical patterns of the Alcuin sample and those of the authentic hexameter poems of Paul.

Table A7.18: Comparison of metrical patterns in the authentic hexameter poems of Paul (P) and the same sample from the hexameter verses of Alcuin (A)

Note: Sample A is the same as the sample used in Table A7.17.

	(O)		t1	(E)		O-E	O-E ² /E	
	P	A		P	A		P	A
Pattern								
SSSS	6	11	17	4.352	12.648	1.648	0.624	0.215
SSSD	9	7	16	4.096	11.904	4.904	5.871	2.020
SSDS	11	13	24	6.144	17.856	4.856	3.897	1.341
SDSS	14	55	69	17.664	51.336	3.664	0.760	0.262
DSSS	17	94	111	28.416	82.584	11.416	4.586	1.578
SSDD	4	4	8	2.048	5.952	1.952	1.860	0.640
SDSD	2	19	21	5.376	15.624	3.376	2.120	0.729
SDDS	6	25	31	7.936	23.064	1.936	0.472	0.163
DDSS	32	82	114	29.154	84.816	2.816	0.272	0.093
DSDS	21	49	70	17.920	52.080	3.080	0.529	0.182
DSSD	13	32	45	11.520	33.480	1.480	0.188	0.065
DDDS	13	33	46	11.776	34.224	1.224	0.127	0.044
DDSD	11	46	57	14.592	42.408	3.592	0.883	0.304
DSDD	8	9	17	4.352	12.648	3.648	3.058	1.011
SDDD	3	8	11	2.816	8.184	0.184	0.012	0.004
DDDD	2	13	15	3.840	11.160	1.840	0.882	0.303
t2	172	500	672				26.141	8.832
χ^2							34.971	

In this table, the group of authentic hexameter poems of Paul contributes $172/672 = 0.256$ of the data, and the sample of Alcuin's verse contributes $500/672 = 0.744$. The calculated value of 34.971 for χ^2 corresponds to a probability of less than 0.005 ($\chi^2 = 32.801$ for fifteen degrees of freedom that H_0 is true). The tests lead to the somewhat surprising conclusion that although the metrical pattern distribution in *cartula, perge cito* has some resemblance to those found in each of the two bodies of hexameter poetry by Paul and Alcuin, those two bodies of work are not metrically homogeneous.

Glossary, abbreviations and conventions

1. Glossary

1.1 Statistical terms

- Categorical variable** A variable that has a finite number of discrete values. In this study, the frequencies of occurrence of syllable counts or metrical patterns are categorical variables. An example of a categorical variable in biometric data is eye colour See, also, continuous variable.
- Chi-square (χ^2)** A test, frequently applied where the test data are categorical variables (*q.v.*) which compares observed frequencies of occurrence of specified categories, in the sample tested, with the frequencies of occurrence expected if the hypothesis being tested (generally referred to as the 'null hypothesis, *q.v.*) is true. The test may be used to test goodness of fit or homogeneity (*qq.v.*).
- Continuous variable** A variable that can have an infinite number of values; in biometric studies, usually between specified limits. Examples are the distribution of values of height and weight in a population. Continuous variables are also known as quantitative or numerical variables.
- Expected count conditions** Conditions required to be satisfied if the χ^2 test is to be employed. Their general nature is that all, or a high proportion, of the expected values, should exceed a specified lower limit of five or less.
- False negative**
see Type I error
- False positive**
see Type II error
- Goodness of fit**
The term used to designate tests whose purpose is to determine whether observed data conform to a predicted distribution, e.g. that a certain type of event occurs randomly throughout the year or that its occurrence is particularly frequent or infrequent in particular months or seasons. The χ^2 test may be used to investigate both goodness of fit and homogeneity.
- Homogeneity**
The comparison sample (C) and the questioned work (q) are said to be homogeneous if they belong to the same population (*q.v.*). For the purposes of this study, they belong to the same population if their metrical characteristics are distributed in a sufficiently similar way among the categories into which they are divided. For a graphical and tabular representation of homogeneity, see Figures G1(a), G1(b) at the end of this section of the Glossary.

Hypothesis of authenticity

The hypothesis that the questioned work or group of works belongs to the same population as the comparison sample. This is the null hypothesis normally tested in statistical studies of authorship.

Minimum discrimination information statistic

This is one of a number of statistics which have been considered in the literature relating to the use of the χ^2 test for small samples. However there have been no small-sample studies which indicate that this, or any of the others, might be serious competitors.¹⁴¹⁷

Null hypothesis

The term, denoted by the symbol H_0 , normally used to designate the hypothesis which is being tested. In authorship studies, H_0 is normally the hypothesis of authenticity (*q.v.*)

Null hypothesis significance testing

The process of testing H_0 by calculating the value of χ^2 and, if that value corresponds to a probability that H_0 is true is lower than the significance level adopted in the test, rejecting H_0 . The process may give rise to one of two types of error (*q.v.*)

Ordinal data

Categories of ordinal data are organised with the most frequently occurring category having the highest rank and the least frequent, the lowest. There are statistical procedures for analysing data according to the rank in which the categories occur, rather than the observed frequencies of occurrence, which are known as as nominal data.

Significance level

The level of probability (often designated by the symbol α) that H_0 is true, below which H_0 is rejected. In many types of study, α is conventionally set at 0.05 or 0.01.

Standard deviation

A measure of the dispersion of a set of data relative to its mean. (NB, this study does not involve calculations of standard deviation)

Type I error

occurs when H_0 is true but the test rejects it (false negative)

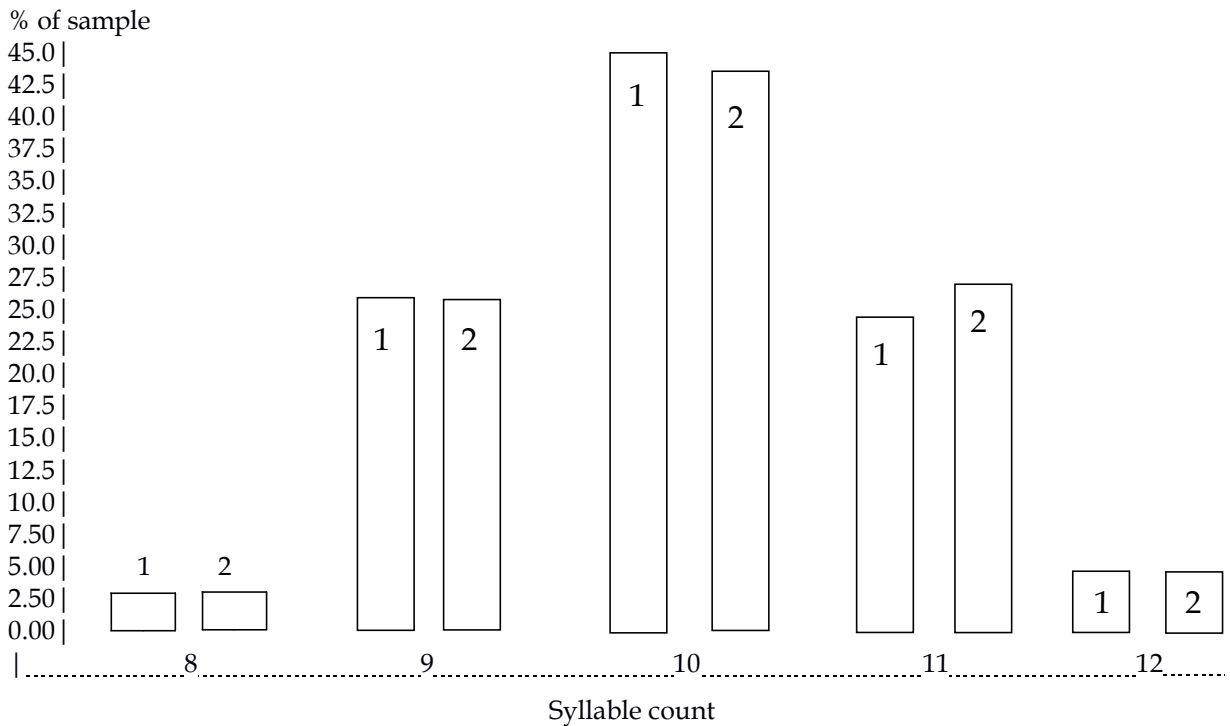
Type II error

occurs when H_0 is false but the test fails to reject it (false positive)

¹⁴¹⁷ T.R.C. Read and N.A.C. Cressie, *Goodness-of-fit statistics for Discrete Multivariate Data* (New York: Springer-Verlag, 1988), 135-36.

Figures G1(a) and G1(b).

The null hypothesis (H_0) in both comparisons is that the two samples tested belong to the same population and are, therefore, metrically homogeneous



Data: Table A6.7. W (1) and BD (2) belong to the same population

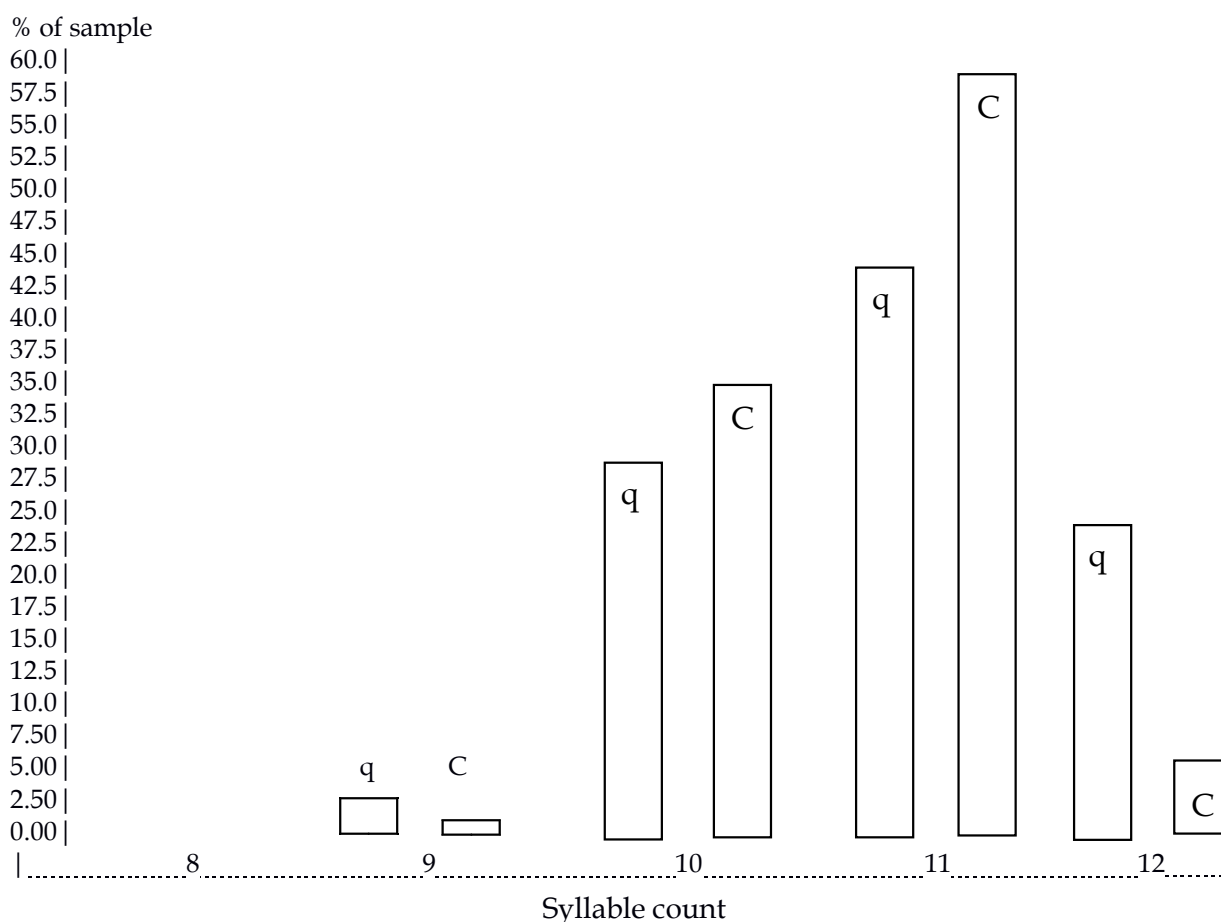
$\chi^2 = 0.326$ for 4 degrees of freedom, corresponding to a probability of between 0.975 ($\chi^2 = 0.484$) and 0.99 ($\chi^2 = 0.297$) that H_0 is true

Contingency table and percentage occurrence of each syllable count category

O = observed frequency of occurrence

Count	W		BD	
	O	%	O	%
8	12	2.4	11	2.3
9	123	24.6	122	24.4
10	220	44.0	215	43.0
11	117	23.4	125	25.0
12	28	5.6	27	5.4
Total	500	100.0	500	100.0

Figure G1 (a): Graphical and tabular representation of metrically homogeneous data samples



Data: Table A7.2H.

The questioned poem *Dux, via, vita, tuis* (q) and the comparison sample (C) consisting of the authentic poems of Paul in epanaleptic elegiac couplets do not belong to the same population and therefore are not metrically homogeneous.

The syllable count of 8 does not occur in either q or C.

$\chi^2 = 14.431$ for 3 degrees of freedom, corresponding to a probability of less than 0.001 ($\chi^2 = 12.858$) that H_0 is true.

Contingency table and percentage occurrence of each syllable count category

O = observed frequency of occurrence

	q		C	
	O	%	O	%
Count				
9	2	2.7	0	0.0
10	20	27.7	35	35.3
11	32	44.4	58	58.6
12	18	25.0	6	6.1
Total	72	99.8	99	100.0

Figure G1 (b): Graphical and tabular representation of metrically inhomogeneous data samples

1.2 Other words and phrases

Candidate author

A person who is proposed or who, given the available evidence, could reasonably be proposed as the author of a questioned work

Canon

The corpus of verse compositions securely attributable to Paul. See also 'provisional canon'.

Comparison sample

A group of authentic works (in this study, poems) of the candidate author (*q.v.*) with whose characteristics those of the questioned poem or group of poems can be compared for the purpose of testing the hypothesis that they are the work of the same author. See, also, hypothesis of authenticity; null hypothesis.

Context poem

A poem, admittedly not the work of Paul, included in an edition of his poems as having some connection with him, e.g., Hilderic's epitaph to him, *perspicua clarum nimium*, or with the poems composed by him, e.g. Peter of Pisa's contribution to the exchanges and solution of riddles within Charlemagne's court circle.

DN and D or N groups

The groups of verse compositions which have, respectively, been attributed to Paul by both Dümmler and Neff, or only one of Dümmler or Neff

Dubia

The verse compositions which have been studied in the context of Paul's possible authorship, whether or not at any time they have been attributed to him. The *dubia* consist of the D or N group and the excluded group (*qq.v.*)

Excluded group

The verse compositions which have been studied in the context of Paul's possible authorship but have not been attributed to him by either Dümmler or Neff.

Hyperbaton

The rhetorical device of creating emphasis by inversion of the normal word order in a phrase, often by changing the sequence subject-verb-object by placing the object first.

Poems associated with Paul

This is the collective term used in this study for the poems whose authorship is considered, comprising (1) poems securely attributed to Paul, (2) poems doubtfully attributed to him and (3) poems for which his authorship has been discussed in other studies, but which have never been attributed to him.

Provisional canon	The body of verse compositions securely attributable to Paul; this is the same as 'the DN group' (<i>q.v.</i>)
Questioned work	A work of unknown or uncertain authorship.
Stylistics	The study of the distinctive styles found in particular literary genres and in the works of different authors.
Stylometry	The statistical analysis of variations in literary style between one writer or genre and another. ¹⁴¹⁸

2. Abbreviations

2.1 *Short titles of sources frequently cited in footnotes*

Note: The full title is used in the first citation in each chapter and, where appropriate, in the first citation in any section or sub-section.

Bethmann, 'Paulus Diaconus Leben und Schriften'

L. Bethmann, 'Paulus Diaconus Leben und Schriften,' *Archiv der Gesellschaft für alte deutsche Geschichtskunde* 10, (1851), 247-334.

Burghardt, *Gedichten Alcuins*

H.-D. Burghardt, *Philologische Untersuchungen zu den Gedichten Alcuins*, (Diss. Phil., Heidelberg, 1960)

Citelli, *Opere/2*

L. Citelli, (ed.), *Paolo Diacono Opere/2*, *Corpus Scriptorum Ecclesiae Aquilensis* vol. IX/II, (Rome, Citta Nuovo Editrice 2014), 357-451

Dahn, *Paulus Diaconus*

J.S.F. Dahn, *Paulus Diaconus*, (Leipzig: Breitkopf and Hartel, 1876).

1418 For this and the previous definition, see A Stevenson, ed., *Oxford Dictionary of English*, 3rd edition (Oxford: Oxford University Press, 2010).

Dümmler, *PLAC I*

E. Dümmler, ed., *Poetae Latini Aevi Carolini, vol.I*, (Berlin: Weidmann 1881), 27-86, supplemented by the *Appendix ad Paulum, ibid.*, 625-28.

Neff, *Gedichte*

K. Neff, *Die Gedichte des Paulus Diaconus: Kritische und erklärende Ausgabe* (Munich: C.H.Beck, 1908).

Orchard, *Aldhelm*

A. Orchard, *The Poetic Art of Aldhelm*, (Cambridge: Cambridge University Press, 1994)

Schaller, 'Theodulf'

D. Schaller, 'Philologische Untersuchungen zu den Gedichten Theodulf von Orlèans', *Deutsches Archiv für Erforschung des Mittelalters* 18, no. 1 (1962), 13-91

Stella, *Paolo Diacono*

F. Stella, La poesia di Paolo Diacono: nuovi manoscritti e attribuzioni incerte, in *Atti del Convegno Internazionale di studi, Cividale del Friuli-Udine, 6-9 maggio 1999*, cur. Paolo Chiesa (Udine: Forum Editrice universitaria udinese 2000), 551-74.

Verfasserlexikon

F.J. Worstbrock., 'Paulus Diaconus OSB' in *Deutsches Litteratur des Mittelalters Verfasserlexikon, Band 11, Nachträge und Korrekturen*, ed. K. Ruh, Berlin: Walter de Gruyter 2004), clm. 1172-86.

2.2 Other abbreviations

Note: The abbreviations listed occur frequently throughout the text. Where the abbreviation is used only in a small part of the text, it is indicated in the text, e.g., *Carmen de Virginitate (CdV)* but not included in this list.

A	Designation for a candidate author (see 1.2, above)
AH	<i>Analecta Hymnica</i>
C	Comparison sample
DN group	The group of poems accepted as authentic by Dümmler and Neff
D or N group	The group of poems accepted by only one of Dümmler and Neff
DÜ	Dümmler's edition of the poems of Alcuin
F	Foot: followed by a number, denoting its position (F1-6). The foot may be either a dactyl (D) or a spondee (S)
H ₀	Symbol used to denote the null hypothesis (<i>q.v.</i>)
HL	<i>Historia Langobardorum</i>

LC	<i>Libri Carolini</i>
MGH	<i>Monumenta Germaniae Historia</i>

The following abbreviations refer to various parts of MGH:

<i>Auct. Ant.</i>	<i>Auctores antiquissimi</i>
<i>PLAC (I-IV)</i>	<i>Poetae Latini Aevi Carolini</i>
<i>PLMA</i>	<i>Poetae Latinorum Medii Aevi</i>
<i>SS rer. Lang</i>	<i>Scriptores rerum Langobardicarum et Italicarum</i>
<i>SS. rer. Merov.</i>	<i>Scriptores rerum Merovingicarum</i>

ML	Master list
PL	<i>Patrologia Latina</i>
q or Q	A poem (q) or group of poems (Q) whose authorship is in question
QU	The Quercetanus edition of the poems of Alcuin
s.	Indicating the century (e.g., s.viii) to which a manuscript is dated. The numeral may be followed by the abbreviations inc., med. or ex. denoting the beginning, middle or end of the century.

3. Conventions

1. For referencing, the Chicago style guide accessible on the university website is adopted save as follows:

(a) single instead of double quotes in footnotes where a part of a work is referred to, e.g. A. Orchard, 'A statistical survey of Anglo-Latin verse', *The Poetic Art of Aldhelm*, (Cambridge: Cambridge University Press, 1994).

(b) Use of numerals when identifying a poem by its number in an edition or other source (Roman numerals) and by page number (Arabic numerals), e.g., Neff, *Gedichte, carm. ix*, 41-45.

(c) For the following types of reference, the Chicago Manual of Style Online has been adopted:

Editions other than the first, para. 14.113;

Reference works consulted in physical formats, para. 14.232;

Theses and dissertations, para. 14.215;

Mediaeval references, para. 14.252.

For references to manuscripts, the Journal of Mediaeval Latin style is adopted, e.g.,

Berlin Staatsbibliothek Diez B. Sant. 66, f.7 (the date is included where relevant)

2. In conformity with normal practice (see, e.g., Orchard, *Aldhelm Neff, Gedichte, Citelli, Opere/2*), individual lines of poems are referred to as 'verses' (vv.). Where the poem is divided (as in hymns) it is said to be divided into stanzas, e.g., *Martir Mercuri, saeculi futuri* is a hymn of ten stanzas in the sapphic metre.

List of references

Editions

Citelli, L., ed. *Paolo Diacono Opere/2*, Corpus Scriptorum Ecclesiae Aquilensis vol. IX/II. Rome: Citta Nuovo Editrice 2014.

Dümmeler, E., ed. *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini*, vol. I. Berlin: Weidmann, 1881.

Neff, K. *Die Gedichte des Paulus Diaconus: Kritische und erklärende Ausgabe*. Munich: C.H.Beck, 1908.

Major biographical studies

Bethmann, L. 'Paulus Diaconus Leben und Schriften,' *Archiv der Gesellschaft für alte deutsche Geschichtskunde* 10 (1851): 247-334.

Dahn, J.S.F. *Paulus Diaconus*. Leipzig: Breitkopf and Hartel, 1876.

Other collections which include poems associated with Paul

Baehrens, E., ed. *Poetae Latini Minores*, vol. III. Leipzig: B.G. Teubner, 1881.

Blume, C., ed. *Analecta Hymnica*, vol. 52. Leipzig: O.R. Riesland, 1909.

Dreves, G., ed. *Analecta Hymnica*, vol. 50. Leipzig: O.R. Riesland, 1909.

Dümmeler, E., ed. *Monumenta Germaniae Historica, Epistolarum t. IV, Karolini aevi II*. Berlin: Weidmann, 1885.

Liber Usualis, Missae et Officii. Solesmes: ex Typographeo Sancti Petri, 1896.

Mastandrea, P, Tessarola, L., eds., *Poetria Nova-a CD-ROM of Latin mediaeval poetry, 650-1250 AD*. Florence: SISMEL, Edizione Galluzzo, 2001.

Migne, J.-P. *Patrologia Latina*. Paris, 1844-64: vol. 95, clms. 1584-1606.

Silagi, G., ed. *Monumenta Germaniae Historica, Poetae Latini Medii Aevi*, vol. V (die Ottonenzeit), Part 3. Munich: Monumenta Germaniae Historica, 1979.

Societas Aperiendis Fontibus. *Monumenta Germaniae Historica, Rerum Langobardarum et Italicarum, saec. VI-IX*. Hanover: Impensis Bibliopoli Hahniani, 1878.

Strecker, K., ed. *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini IV*, tom 2, 3. Berlin: Weidmann 1914.

Traube, L., ed. *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini III*. Berlin; Weidmann, 1896.

Editions or collections of poetic works of the authors studied in Chapter 2

Andersson, T.M., tr., in collaboration with A. Ommundsen and L.S.B. MacCoull. *Theodulf of Orleans-The Verse*. Tempe, Arizona: Arizona Centre for Mediaeval and Renaissance Studies, 2014.

Dümmler, E., ed. *Monumenta Germaniae Historica, Poetae Latini Aevi Carolini I, Alcuini carmina, Theodulfi carmina*.

Ehwald, R., ed. *Aldhelmi Opera, Monumenta Germaniae Historica, Scriptores Auctores Antiquissimi, IV, 15*. Berlin: Weidmann, 1919.

Frobenius Forster. *Beati Flacci Albini seu Alcuini Opera*. Ratisbon: Englerth, 1777.

Lapidge, M. and Rosier, J.L., eds. and trans. *Aldhelm: The Poetic Works*. Cambridge: D.S. Brewer, 1985.

Migne, J.P. *Patrologia Latina*, 221 vols. (Paris, 1844-64): vol. 80 (Columbanus): clms. 291-93.

Migne, J.-P. *Patrologia Latina*, 221 vols. (Paris, 1844-64); vol. 105 (Theodulf): clms. 239-41, 253-56.

Plummer, C. *Venerabilis Baedae Opera Historica*. Oxford: Clarendon Press, 1896.

Quercetanus, A. (André Duchesne), Turoniensis. *Flacci Albini, sive Alcuini Abbatis Caroli magni, Opera Omnia*. vol. III. Paris: Cramoisy, 1617.

Sirmond, J. *Theodulfi Aurelianensis Episcopi Opera*. Paris: Cramoisy, 1646).

Manuscripts

Bern, Burgerbibliothek 399

Rome, BAV ott.lat 532

Rome, BAV urb.lat 532

Other sources cited

Adams, J. N. 'Introduction: "Vulgar Latin" and social variation.' In *Social Variation and the Latin Language*. Cambridge: Cambridge University Press, 2013.

Alberici monachi Trium Fontium Chronicum. Hanover: Leibnitz, 1698.

Altmann, G. 'The Homogeneity of Metric Patterns in Hexameter.' In *Hexameter Studies, Quantitative Linguistics* (11), edited by R. Grotjahn, 137-150. Bochum: Studienverlag Brockmeyer, 1981.

Amelli, A. 'L'epigramma di Paolo Diacono intorno di canto Gregoriano e Ambrosiano.' *Memorie Storische Foroguiliesi* 55 (1913): 163-75.

Bastgen, H. Das Capitulare Karls des Grossen über die Bilder.' *Neues Archiv der Gesellschaft für ältere Deutsche Geschichtskunde* 36 (1911): 631-66; 37 (1912): 15-51, 455-533.

Baur, F.C. *Paulus, der Apostel Jesu Christi, sein Leben und Wirken, seine Briefe und seine Lehre*. Stuttgart: Becher and Müller, 1845.

Becker, G. *Catalogi Bibliothecarum Antiqui*. Bonn: Fr. Cohen, 1885.

Belting, H. 'Studien zum Beneventanischen Hof in 8. Jahrhundert.' *Dumbarton Oaks Papers* 16, (1962): 141-93.

Bethmann, L. and Waitz, G., eds. 'Pauli Historia Langobardorum', in *Monumenta Germaniae Historica, Scriptorum Rerum Langobardicarum et Italicarum, saec. VI-IX*. Hanover: Impensis Bibliopoli Hahniani, 1878.

Bibliotheca Hagiographica Graecia, 2nd edn. Brussels: Societe des Bollandistes, 1909.

Bibliotheca Hagiographica Latina, vol. K-Z. Brussels: Societe des Bollandistes, 1898- 1901.

Bischoff, B. *Katalog der festländischen Handschriften des neunten Jahrhunderts (mit Ausnahme der wisigotischen, Teil III, Padua-Zwickau*. Aus dem Nachlass

- herausgegeben von Birgit Ebersperger. Wiesbaden: Harrasowitz Verlag, 2014.
- Bischoff, B. *Lorsch im Spiegel seiner Handschriften*. Munich: Arben-Gesellschaft, 1974.
- Bischoff, B., ed. *Sammelhandschrift Diez. B Sant.66; Grammatici Latini et Catalogus Librorum*. Graz: Akademische Druck-u. Verlanganstalt, 1973.
- Bloch, H. *Monte Cassino in the Middle Ages*. Rome: Edizione di Storia e Letterature, 1986.
- Boslaugh, S. *Statistics in a Nutshell*, 2nd edn. Sebastopol, CA: O'Reilly Media, 2013.
- Boyle, L. *Mediaeval Latin Palaeography: A Bibliographical Introduction*, 1984. Reprint, Toronto: University of Toronto Press, 1995.
- Britt, Rev. M., OSB. *Hymns of the Breviary and Missal*. London: Burns, Oates and Washbourne, 1922.
- Brown, G. 'The Carolingian Renaissance.' In *Carolingian culture-emulation and innovation*, edited by R. McKitterick, 1-51. Cambridge: Cambridge University Press, 1994.
- Brunholzl, F. 'Le Renouveau de Charlemagne, Paul Diacre.' In *Histoire de la littérature latine du moyen age*, 20-29. Turnhout: Brepols, 1996.
- Bücheler, F. and Riese, A., eds. *Anthologia Latina*, 2nd ed., Pars I, Fasc. II. Leipzig: B.G. Teubner, 1906.
- Bullough, D. *Carolingian Renewal: Sources and Heritage*. Manchester: Manchester University Press, 1991.
- Bullough, D. 'Ethnic History and the Carolingians: An alternative reading of Paul the Deacon's *Historia Langobardorum*.' In *The Inheritance of Historiography 350-900*, edited by C. Holdsworth, and T.P. Wiseman, 85-101. Liverpool: Liverpool University Press, 1986.
- Bullough, D. 'The Career of Columbanus.' In *Columbanus: Studies on the Latin writings*, edited by Michael Lapidge, 24-27. Woodbridge: The Boydell Press, 1997.
- Burghardt, H.-D. 'Philologische Untersuchungen zu den Gedichten Alkuins.' Diss. Phil., Heidelberg, 1960.

- Butler, A. *Lives of the Fathers, Martyrs and other Principal Saints*, vol.1. London: John Murphy, 1812.
- Campbell, A., ed. *Aethelwulf: De Abbatibus*. Oxford: Clarendon Press, 1967.
- Canisius, Hendricus. *Antiquae lectionis in quo...antiqua monumenta nunquam edita*, 6 vols. Ingoldstadt: Andreas Angemarius, 1601-04.
- Capetti, V. 'De Pauli Diaconi carminibus.' *Atti e memorie del congresso storico tenuto in nel giorno 3, 4, 5 settembre 1899*, 63-108. Cividale, 1899.
- Cassander, G. *Hymni ecclesiastici, praesertim qui Ambrosiani dicuntur, multis in locus recogniti et multorum hymnorum accessione locupletati*. Cologne, 1556.
- Cassander, G. *Opera omnia*. Paris, A. Pacard, 1616.
- Cervani, R. *L'epitome di Paolo del 'De verborum significatu' di Pompeo Festo: struttura e metodo*. Rome: Edizione dell' Ateneo e Bizzarri, 1978.
- Chailley, J. 'Ut queant laxis et les Origines de la Gamme.' *Acta Musicologica* 56 (1984): 48-69.
- Christie, N. *The Lombards*. Oxford: Blackwell, 1998.
- Cochran, W. G. 'Some Methods for strengthening the common chi-square tests.' *Biometrics* 10, no.4 (1954): 417-54.
- Cohen, J. 'The Earth is Round (p < .05).' *American Psychologist* 49 (1994): 997-1003.
- Contreni, J.J. 'The Irish in Western Europe.' In *Die Iren und Europa in frühen Mittelalter*, edited by H. Löwe, vol. II, 758-98. Stuttgart: Klett-Cotta, 1982.
- Corsaro, F. *Elpidio Rustico*. Catania: Centro di studi Cristiani Paolo Ubaldi, 1955.
- Costambeys, M., 'The Monastic Life of Paul the Deacon.' In *Atti del Convegno Internazionale di studi, Cividale del Friuli-Udine, 6-9 maggio 1999*, cur. Paolo Chiesa, 127-38. Udine: Forum editrice universitaria udinese, 2000.
- Costambeys, M., Innes, M. and MacLean, S. *The Carolingian World*. Cambridge: Cambridge University Press, 2011.
- Crivellucci, A. 'Una poesia di Paolo Diacono attributa a Paolino d'Aquileia,' *Studi Storici* 18 (1909): 201-207.
- Dales, R.C. *The Intellectual Life of Western Europe in the Middle Ages*. Brill: Leiden, 1995.

- Delucchi, K. L. 'Use and misuse of chi square test: Lewis and Burke revisited,' *Psychological Bulletin* 94 (1983): 166-176.
- Delucchi, K. L. 'On the Use and Misuse of chi-square.' In *A Handbook for Data Analysis in the Behavioral Sciences: Statistical Issues*, edited by G. Keren and C. Lewis, 295-318. Hillsdale, New Jersey: Laurence Erlbaum Associates, 1993.
- de Rubeis, F. 'Le iscrizione de rei longobardi,' *Atti della euroconferenze per il Corpus dei ritmi latini (VI-IX sec.)*, edited by F. Stella, 223-240. Arezzo, 6-7 Novembre 1998 e Ravello, 12-15 Settembre, 1999.
- de Santi, A. 'Paolo Diacono, Studi Recenti I,' *La Civiltà Cattolica* s.17, vol.88, fasc. 1185 (1899): 268-72.
- Diehl, P.S. *The Mediaeval European Religious Lyric*. Berkeley: University of California Press, 1985.
- Downey, S., Drout, M.D.C. , Kerekes, V.E. and Rattle, D.C., 'Lexomic Analysis of Medieval Latin Texts.' *Journal of Medieval Latin* 24, (2014): 225-275.
- Drobisch, W.M., 'Ein statistischer Versuch über die formen des lateinischer Hexameters.' *Berichte über die Verhandlungen der Königl-Sächsische Gesellschaft der Wissenschaften, Philologische-Historische Klasse* 18, (1866): 75-139.
- Drobisch, W. M. 'Weiter Untersuchungen über die formen des Hexameters des Vergil, Horaz und Homer.' *Berichte über die Verhandlungen der Königl-Sächsische Gesellschaft der Wissenschaften, Philologische-Historische Klasse* 20, (1868): 16-53.
- Duckett, E.S. *Alcuin, Friend of Charlemagne*. New York: Macmillan, 1951.
- Duckworth, G. *Vergil (sic) and classical hexameter poetry*. Ann Arbor: University of Michigan Press, 1969.
- Duffield, S.W. *The Latin Hymn Writers and their Hymns*. Completed and edited by R.E. Thompson. New York: Funk and Wagnall, 1889.
- Dümmler, E. 'Die handschriftlichen Überlieferung der lateinischen Dichtungen aus der Zeit der Karolinger. *Neues Archiv der Gesellschaft für ältere Deutsche Geschichtskunde* 4, (1879): 85-159.
- Dümmler, E., ed. 'Kanon evangelicorum.' *Anzeiger für Kunde der deutschen Vorzeit, Neue Folge* 26, no.3 (1879): 84-86.
- Dümmler, E. 'Zu den Gedichten Paulus Diaconus.' *Neues Archiv der Gesellschaft für ältere Deutsche Geschichtskunde* 17, (1892): 397-401.

- Durandus, Guilielmus. *Rationale divinatorum officiorum*, Liber VII, caput xiv. Naples: J. Dura, 1859.
- Ebert, A. *Zeitschrift für deutsche Altertum* 22, (1878): 328-335.
- Eder, M. 'Style markers in authorship attribution: a cross-language study of the authorial fingerprint.' *Studies in Polish Linguistics* 6, (2011): 99-114.
- Everett, N. *Literacy in Lombard Italy ca 568-774 AD*. Cambridge: Cambridge University Press, 2003.
- Fisher, R. A. *Statistical Methods for Research Workers*, 1st edn. Edinburgh: Oliver and Boyd, 1925.
- Fontaine, J., 'Education and learning'. In *The New Cambridge Mediaeval History*, vol. I, c. 500-c. 700, edited by P. Fouracre, 735-59. Cambridge: Cambridge University Press, 2005.
- Forman, M., OSB, trans. 'St. Scholastica, by Gregory the Great,' with an introduction by M.H. King; 'Three songs about St. Scholastica by Aldhelm and Paul the Deacon.' *Vox Benedictana, A Journal of Translations from Monastic Sources*. 7/3, (1990): 229-251.
- Forstall, C., Jacobson, S. and Scheirer, W. 'Evidence of Intertextuality: Investigating Paul the Deacon's *Angustae Vitae*.' *Literary and Linguistic Computing* 26, no.2 (2011): 285-96. The pre-print version was accessed on 18 April 2016 from <http://llc.oxfordjournals.org/content/26/3/285.abstract>.
- Fossier, F. 'Premieres recherches sur les manuscrits latins du Cardinal Marcello Cervini (1511-1555).' *Mélanges de L'École française de Rome, Moyen Age*, 91 (1979): 381-456.
- Freeman, A. 'Theodulf of Orleans and the *Libri Carolini*.' *Speculum* 32, no.4, (1957): 663-705.
- Fried, J. *Charlemagne*, translated by P. Lewis. Munich: C.H. Beck, 2013.
- Garrison, E. B. 'Random Notes on Early Italian Manuscripts, II.' *Bibliofilia, Rivista di storia del libro e di biografia* 91 (1979): 1-22
- Garrison, M. 'Carolingian Latin literature.' In *Carolingian culture-emulation and innovation*, edited by R. McKitterick, 111-40. Cambridge: Cambridge University Press, 1994.

- Gaselee, S., ed. *Oxford Book of Mediaeval Latin Verse*. Oxford: Clarendon Press, 1928.
- Gaskoin, C.J.B. *Alcuin: his life and his work*. London: C.J. Clay, 1904.
- Gildersleeve, B.L. *Gildersleeve's Latin Grammar*. Republished, New York: Forgotten Books, 2012.
- Glare, P.G.W., ed. *Oxford Latin Dictionary*. London: Oxford University Press/Clarendon Press, 1968-82.
- Glatthaar, M. 'Zur Datierung der Epistola generalis Karls des Grossen.' *Deutsches Archiv für Erforschung des Mittelalters* 66, (2010): 455-78.
- Gneuss, H. *Hymnar und Hymnen im englischen Mittelalter*. Tübingen: Max Niemeyer Verlag, 1968.
- Godman, P. *Poetry of the Carolingian Renaissance*. London: Duckworth, 1985.
- Goffart, W. 'Paul the Deacon's Interpretation of Lombard History.' *The Narrators of Barbarian History*, 1988. Reprint, Notre Dame, Indiana: Notre Dame University Press, 2005.
- Goldast, M. *Paraeneticum veterum pars I: In qua producuntur scriptores VIII. Insulae ad lacum Aconicum, Lindau, Bodensee: ex officina typographica J.L.Brem. 1604.*
- Greenberg, N.A. 'Metrics of the Elegiac Couplet.' *The Classical World* 80, no.4, (1987): 233-241.
- Grieve, J. 'Quantitative authorship attribution: an evaluation of techniques.' *Literary and Linguistic Computing* 22, no.3 (2007): 251-70.
- Hagen, H., ed. *Carmina Medii Aevi*. Bern: G. Frobenius, 1877.
- Hagen, H. *Theodulfi...de iudicibus versus ad Hermanno Hagen recogniti*, in Ein Berner Universitätsprogramm von 1882, S.IX.
- Hamelin, F. *Essai sur la vie et les ouvrages d'Alcuin*. Paris: E. Thorin, 1873.
- Hartmann, F. 'Paulus Diaconus zwischen Langobarden und Franken.' *Frühmittelalterliche Studien* 43, (2009): 71-93.

- Häring, N.A., ed. "Alan of Lille, 'De planctu Naturae'." *Studi mediaevali*, ser. 3 (1978): 797-879.
- Haupt, M. *Opuscula*. Leipzig: Impensis Salomonis Hirzelii, 1876.
- Heath, C. *The narrative worlds of Paul the Deacon*. Amsterdam: Amsterdam University Press B.V, 2017.
- Herren, M.W. 'A ninth century poem for St Gall's feast day and the "Ad Sethum" of Columbanus.' *Studi Mediaevali*, ser. 3, 24, no.2 (1983): 487-520.
- Herren, M. W. 'Classical and Secular Learning among the Irish before the Carolingian renaissance.' *Florilegium* 3, (1981): 118-157.
- Herren, M. W., 'Some quantitative poems attributed to Columbanus of Bobbio.' In *Poetry and Philosophy in the Middle Ages*, edited by J. Marenbon, 99-112. Leiden: Brill, 2001.
- Hilgenfeld, A.B.C. *Histor-kritisches Einleitung in der Neue Testament*. Leipzig: Fues' Verlag, R. Riesland, 1875.
- Hill, G.B., ed. *Boswell's Life of Johnson*, vol.III. Revised by L.F.Powell. Oxford: Clarendon Press, 1934.
- Hodgkin, T. *Italy and her Invaders*, Book VI. Oxford: Clarendon Press, 1895.
- Holmes, D.I., 'Authorship Attribution.' *Computers and the Humanities* 28, no.2, (1994): 87-106.
- Hornby, E. In *The Canterbury Dictionary of Hymnology*, edited by J.R. Watson and E. Hornby, s.v. 'Ut queant laxis'. Norwich: Canterbury Press, 2013.
- Jacobsen, P.C. 'Carmina Columbani.' In *Die Iren und Europa in frühen Mittelalter*, edited by H. Löwe, vol.I, 434-67. Stuttgart: Klett-Cotta, 1982.
- Janson, T. *Prose Rhythms in Mediaeval Latin from the 9th to the 13th Century*. Stockholm: Almqvist and Wiksell, 1975.
- Kayser, J. 'Paulus Diaconus und sein Hymnung auf dem heiligen Tauffer Johannes.' *Beiträge zur Geschichte und Erklärung der alten Kirchenhymnen*, vol. II. Paderborn: Schöningh, 1886.
- Kelly, T. F. *The Beneventan Chant*. Cambridge: Cambridge University Press, 1989.
- Kempf, D. *Paul the Deacon, Liber de episcopis Mettensis*. Paris: Peeters, 2013.

- Kenny, A. *The Computation of Style-an introduction to statistics for students of literature and the humanities*. Oxford: Pergamon Press, 1982.
- Kipling, R. *The Seven Seas*. London: Methuen & Co., 1896.
- Kleinclausz, A. 'Alcuin et la question des images.' *Alcuin*. Paris: Société d'Édition des Belles Lettres, 1948.
- Kreutz, B. *Before the Normans: Southern Italy in the Ninth and Tenth Centuries*. Philadelphia: University of Pennsylvania Press, 1996.
- Ku, H. H. 'A note on contingency tables involving zero frequencies and the 2I test.' *Technometrics* 5 (1963): 398-400.
- Kullback, S., Kuppermann, M. and Ku, H.H. 'An application of information theory to the analysis of contingency tables, with a table of $2n \ln n$, $n = 1-10,000$.' *Journal of Research, National Bureau of Standards section B*, 66b (1962): 217-243.
- Künast, H-J and Zäh, H., eds. *Die autografen Katalog Peutingers, Der nicht-juristischen Bibliotheksteil*. Tübingen, Max Niemeyer Verlag, 2003.
- Lapidge, M. 'Aldhelm's Latin Poetry and Old English Verse.' *Comparative Literature*. 31, no.3, (1979): 209-31.
- Lapidge, M. 'Aldhelm's Latin Poetry and Old English Verse.' In M. Lapidge, *Anglo-Latin Literature 600-899*, edited by M. Lapidge, 247-70. London: Hambledon Press, 1996.
- Lapidge, M. 'Bede the Poet.' In *Anglo-Latin Literature 600-899*, edited by M. Lapidge, 313-331. London: Hambledon Press, 1996.
- Lapidge, M. 'Epilogue: did Columbanus compose metrical verse ?' In *Columbanus: Studies on the Latin writings*, edited by M. Lapidge, 274-87. Woodbridge: Boydell Press, 1997.
- Lapidge, M. 'Precamur Patrem: An Easter Hymn by Columbanus.' In *Columbanus: Studies on the Latin writings*, 255-63, edited by M. Lapidge. Woodbridge: Boydell Press, 1997.
- Lapidge, M. 'The authorship of the adonic verses "Ad Fidolium" attributed to Columbanus.' *Studi mediaevali ser 3*, 18, no.2 (1977): 249-314.
- Lebeuf, J. *Dissertations sur l'histoire ecclésiastique et civile de Paris*, vol I. Paris: Lambert and Durand, 1739.
- Lejay, P. 'Notes Latines.' *Revue de philologie* 18, (1894): 42-52.

- Lewis, D. and Burke, C.J. 'The use and misuse of the chi square test.' *Psychological Bulletin* 46, (1949): 433-489.
- Licht, T. 'Horazüberlieferung in Frühmittelalter.' In *Ex Praeteritis Presentia. Sprach-, literature-und kulturwissenschaftliche Studien zu Wort- und Stoffgeschichten, Festschrift zum 70. Geburtstag von Theo Stemmler*, edited by M. Eitelmann und N. Stritzke, 109-34. Heidelberg: Winter, 2006.
- Love, H. *Attributing Authorship-an Introduction*. Cambridge: Cambridge University Press, 2002.
- Löwe, H. 'Columbanus und Fidolius.' *Deutsches Archiv für Erforschung des Mittelalters* 37, (1981): 1-19.
- Mabillon, J. *Acta Sanctorum Ordines S. Benedicti*. Paris: L. Billaine, vol. I, 1668; vol.II, 1703.
- Mabillon, J. *Acta Sanctorum Ordines S. Benedicti*, vol. 4/2. Venice: S. Coleti and J. Betinelli, 1738: 185.
- Mabillon, J. *Analecta vetera*, 2nd edn. Paris: Montalant, 1723.
- Mabillon, J. *Veterum Analectorum*, t.1. Paris: L. Billaine, 1673.
- Manitius, M. *Geschichte der Christlich-Lateinischen Poesie bis zur Mitte den 8. Jahrhunderts*. Stuttgart: J.G.Cotta, 1891.
- Manitius, M. 'Die Universalen Schriftsteller; 41, Paulus Diaconus.' In *Geschichte der Lateinischen Literatur des Mittelalters: Erster Teil, von Justinian bis zur Mitte des zehnten Jahrhunderts, 257-72*. Munich: C.H.Beck, 1911.
- Manuscriptorium,
http://www.manuscriptorium.com/apps/main/mns_direct.php?docId=rec1341954867 (accessed 22 August 2014).
- Martinengo, P. *Pia quaedam poemata et theologica odaeque sacrae diverso carminum generae conscriptae*. Rome: F. Zanetti, 1590.
- Maselli, A. *De alcune poesie dubbiamente attribuite a Paolo Diacono*. Montecassino, 1905.
- Mastandrea, P. 'Classicismo e critianismo nella poesia di Paolo Diacono.' *Atti del Convegno Internazionale di studi, Cividale del Friuli-Udine, 6-9 maggio 1999*, cur. Paolo Chiesa, 293-311. Udine: Forum editrice universitaria udinese 2000.
- Mazzarino, A. 'Considerazioni sul carne a Pan.' *Helikon* 29-30, (1989-90): 305-20.

- McKitterick, R. *Charlemagne: The Formation of a European Identity*. Cambridge: Cambridge University Press, 2008.
- Mendenhall, T. C. 'On the characteristic curves of composition.' *Science* 9(214S), (1887): 237-49.
- Mendenhall, T.C. 'A mechanical solution to a literary problem.' *Popular Science Monthly* 60, (1901): 97-105.
- Mershman, F. 'St Boniface.' *The Catholic Encyclopaedia*, vol. 2. Robert Appleton Company: New York, 1907. Accessed April 1, 2016 at <http://www.newadvent.org/cathen/02652a.htm>.
- Meyer, W. *Gesammelete Abhandlungen zur Mittellateinischen Rythmik*, vol. II. Berlin: Weidmannsche Behandlung, 1905.
- Mitchell, J. 'L'arte nell' Italia longobarda e nell' Europa carolingia.' In *Il future dei longobardi e la costruzione dell' Europa di Carlo magno*, edited by C. Bertelli and G.P. Brogiolo, 171-87. Milan: Skira, 2000.
- Mommsen, Th. 'Grabschrift des Kaisers Constantinus Chlorus.' *Hermes* 28, (1894): 33-39.
- Morton, A.Q. *Literary Detection*. New York: Charles Scribner's Sons, 1978.
- Morrison, D.E. and Henkel, R.E., eds. *The Significance Test Controversy*, 1970. Reprint, New Brunswick, USA: Aldine Transaction, 2007.
- Mosteller, F., and Wallace, D.L. 'Inference in an authorship problem.' *Journal of the American Statistical Association* 58, issue 302 (1963): 275-309.
- Mostert, M. *The Library of Fleury : A provisional list of manuscripts*. Hilversum: Verloren Publishers, 1989.
- Müllenhoff, K. 'Über Reinhart Fuchs.' *Zeitschrift für deutsches Altertums* 18, (1875): 1-9.
- Nees, L. 'Godescalc's career and the problems of "influence".' In *Under the Influence; The Concept of Influence and the study of Illuminated Manuscripts*, edited by J. Lowden and A. Bailey, 21-43. Turnhout: Brepols, 2007..
- Nelson, J.L., *King and Emperor: A New Life of Charlemagne*. London: Allen Lane, 2019.

- Niemeyer, J. E. and van der Kieft, L, eds. *Mediae Latinitatis Lexicon Minus*. Leiden: Brill, 2002.
- Norberg, D.L. *An Introduction to the study of Mediaeval Latin Versification*, J. Ziolkowsky, ed., G. C. Roti and J. Skubly, trans. Washington, D.C: Catholic University of America Press, 2004.
- Norberg, D.L. *L'oeuvre poetique de Paulin d'Aquileia*. Stockholm: Almqvist & Wiksell, 1979.
- Orchard, A. *The Poetic Art of Aldhelm*. Cambridge: Cambridge University Press, 1994.
- Palisca, C. V., 'Guido d'Arezzo.' In *The New Grove Dictionary of Music and Musicians*, edited by S. Sadie, vol. 7. London: Macmillan, 1980..
- Palma, M. 'Modifiche di alcuni aspetti materiali della produzione libraria latina nel secoli XII e XIII.' *Scrittura e civiltà* 12, (1988): 119-153.
- Panhuis, D. *Latin Grammar*. Ann Arbor: University of Michigan Press, 2006.
- Parry, M. 'Studies in the Epic Technique of Oral Verse-Making I: Homer and the Homeric Style.' *Harvard Studies in Classical Philology* 41, (1930): 73-147.
- Paschini, P. *San Paolino patriarca a la Chiesa aquileise alla fine del sec. VIII*. Udine: Crociato (tip.), 1906.
- Paton, W.R., ed. 'Sepulchral Epigrams.' In *The Greek Anthology*, vol. 2, book VII. Cambridge, MA: Loeb Classical Library, Harvard University Press, 1989.
- Peabody, B. *The Winged Word: a Study in the Technique of Ancient Greek Oral Composition as Seen Principally through Hesiod's 'Works and Days.'* Albany: SUNY Press, 1975.
- Pearson, K. 'On the criterion that a given system of deviations from the probable in the case of a correlated system of variables is such that it can be reasonably supposed to have arisen from random sampling.' *Philosophical Magazine.*, series 5, no. 50 (1899): 157.
- Pertz, G.H., ed. *Monumenta Germanica Historiae, Scriptores 2, Liber de episcopis Mettensibus*. Hanover: Impensis Bibliopoli Hahniani, 1879.
- Pertz, G.H., ed. *Monumenta Germanica Historiae, Scriptores 7, Chronica et gesta aevi Salici XII; Leonis Marsicani et Petri Diaconi chronica monasterii Casinensis*, edited by W. Wattenbach. Hanover: Impensis Bibliopoli Hahniani, 1846.

- Peters, E., ed., Foulke, W.D., trans. 'Paul the Deacon, *History of the Lombards*,' 1907. Reprint, Philadelphia: University of Pennsylvania Press, 1974.
- Petrus Diaconus. *De viri illustribus Casinensis*, c.8. In *Rerum Italicarum scriptores*, edited by L. A. Muratori, vol. 6. Milan: Typografia Societatis Palatinae, 1725.
- Petrus Pipernus. *De effectibus magis libri sex; ac De nuca maga Beneventana liber uncius*. Naples: Colligni, 1634.
- Platnauer, M. *Latin Elegiac Verse: A Study of the Metrical uses of Tibullus, Propertius and Ovid*. Cambridge: Cambridge University Press, 1951.
- Pucci, J. 'Pied Beauty: Paul the Deacon's poem to Lake Como.' *Latomus* 58, no.4 (1999): 872-84.
- Raby, F.J.E. *Christian Latin Poetry*, 2nd edn. Oxford: Clarendon Press, 1953.
- Rand, E. K. *Studies in the Script of Tours I: A survey of the manuscripts of Tours*, vol I (text). Cambridge, MA: Mediaeval Academy of America, 1929.
- Raven, D.S. *Latin Metre*, 1965. Reprint, Bristol Classical Press, 1988.
- Read, T.R.C. and Cressie N.A.C. *Goodness-of-fit statistics for Discrete Multivariate Data*. New York: Springer-Verlag, 1988.
- Reifferscheid, A. *Bibliotheca Patrum Latinorum Italica*. Vienna: Nachdruck der Ausgabe, 1865-72.
- Renoir, A. *A Key to Old Poems; the Oral-Formulaic Approach to the Interpretation of West-Germanic Verse*. University Park, PA: Pennsylvania State University, 1988.
- Riche, P. *Education and Culture in the Barbarian West*, J. J. Contreni, trans. Columbia: University of South Carolina Press, 1978.
- Rifkin, J. 'Problems of Authorship in Josquin: Some Impolitic Observations, with a postscript on *Absalon, fili mi*.' *Josquin Proceedings* (1986): 46-7.
- Rozeboom, W. W. 'The Fallacy of the Null Hypothesis Significance Test.' In *The Significance Test Controversy*, 1970, edited by D.E. Morrison and R. E. Henkel, 216-230. Reprint, New Brunswick, USA: Aldine Transaction, 2007.
- Rothman, K. 'Curbing Type I and Type II errors.' *European Journal of Epidemiology* 25, (2010): 223-24.

- Rubensohn, M. 'Eine Übersetzung des Paulus Diaconus aus der griechischen Anthologie.' *Jahrbücher für Theologie und Pädagogik* 147, (1895): 764-65.
- Ruysschaert, J., dir., Maricchi, A., ed. *I Codici Latini Datati della Biblioteca Apostolica Vaticana*. Citta del Vaticana: Biblioteca Apostolica Vaticana, 1997.
- Schaller, D. 'De Mundi transitu: A rhythmical poem by Columbanus.' In *Columbanus: Studies on the Latin writings*, edited by M. Lapidge, 240-54. Woodbridge: Boydell Press, 1997.
- Schaller, D. 'Der junge "Rabe" am Hof Karls des Grossen.' In *Festschrift Bernhard Bischoff am 65. Geburtstag*, edited by J. Autenreith and F. Brunhölzl, 123-41. Stuttgart: Anton Hiersemann, 1971.
- Schaller, D., 'Philologische Untersuchungen zu den Gedichten Theodulf von Orleans.' *Deutsches Archiv für Erforschung des Mittelalters* 18, no. 1 (1962): 13-91.
- Schaller, D., and Köngsen, E., eds. *Initia carminorum Latinorum saeculi undecimo antiquorum*. Göttingen: Vandenhoeck and Ruprecht, 1977.
- Smit, J.W. *Studies on the Language and Style of Columba the Younger (Columbanus)*. Amsterdam: A.M. Hakkert, 1971.
- Smith, M. W. A. 'Attribution by Statistics: A Critique of Four Recent Studies.' *Revue, Informatique et Statistique dans les Sciences Humaines* 26, (1990): 223-251.
- Smits von Waesberghe, J. *De musico-pedagogico et theoretico Guidone Aretino eiusque vita et moribus*. Florence: Olschki, 1953.
- Snedecor, G.W. and Cochran, W.G. *Statistical Methods*, 7th edn. Ames, Iowa: Iowa State University Press, 1980.
- Stancliffe, C. 'The thirteen sermons attributed to Columbanus and their authorship.' In *Columbanus: Studies on the Latin writings*, edited by M. Lapidge, 150-61. Woodbridge: Boydell Press, 1997.
- Stang, A., Poole, C. and Kuss, O. 'The ongoing tyranny of statistical significance testing in biomedical research.' *European Journal of Epidemiology* 25, (2010): 225-230.
- Stella, F. 'La poesie di Paolo Diacono: nuovo manoscritti attribuzioni incerte.' *Atti del Convegno Internazionale di studi, Cividale del Friuli-Udine, 6-9 maggio 1999*, cur. Paolo Chiesa, 551-74. Udine: Forum editrice universitaria udinese 2000.
- Stenton, Sir F. *Anglo-Saxon England*, 3rd edition. Oxford: Clarendon Press, 1971.

- Stevenson, A., ed. *Oxford Dictionary of English*, 3rd edition. Oxford: Oxford University Press, 2010.
- Stigler, S. M. 'Fisher and the 5% level.' *Chance*, 12, no.4 (2008): 12.
- Stornajolo, C., ed. *Codices Urbinae Latini* tom. II, codices 501-1000. Rome: Typis polyglottae Vaticanis, 1912.
- Strecker, K., ed. *Monumenta Germaniae Historica, Nachtrage zu den Poetae Latini Aevi Carolini*, vol. 6.1. Weimar: Herman Bohlaus Nachfolger, 1953.
- Szövérfy, J. *Die Annalen der Lateinischen Hymnendichtung, tom. I-Die Lateinischen Hymnen bis zum Ende des 11. Jahrhunderts*. Berlin: Erich Schmidt Verlag, 1963.
- Tosti, L. *Storia della Badia di Monte Cassino I*. Naples: Stabilimento de Poligrafico di Filippo Citelli, 1842.
- .
- Traube, L. *Karolingische Dichtungen: Aedelwulf. Alchhuine. Angilbert. Rhythmen*. Berlin: Weidmann, 1888.
- Traube, L. *Textgeschichte der Regula sancti Benedicti*. München: Verlag der k. Akademie, 1898.
- Traube, L. 'Zu den Geschichten Paulus Diaconus.' *Neues Archiv der Gesellschaft für ältere deutsche Geschichtskunde* 15, (1890): 199-201.
- Tunberg, T.O. 'A study of *clausulae* in selected works of Lorenzo Valla.' *Humanistica Lovaniensis* 41 (1992): 104-33.
- Ughelli, F. *Italia sacra sive de Episcopis Italiae*, VII. Rome: Bernardinum Tanum, 1642-48.
- Valtorta, B., ed. *Clavis scriptorium latinorum medii aevi, Auctores Italiae (700-1000)*. Florence: SISMEL, edizione del Galuzzo, 2006.
- Vogel, F., ed. *Monumenta Germaniae Historica Scriptores Auctores Antiquissimi*, VII. Berlin: Weidmann, 1885.
- Vollmer, F., ed. 'Eugenii Toletani episcopi Carmina et Epistulae.' *Monumenta Germaniae Historica Scriptores Auctores Antiquissimi*, XIV. Berlin: Weidmann, 1905.
- von Barth, C. *Adversariorum commentariorum libri sexaginta*. Frankfurt: Aubry Schleich, 1624.

- von Schubert, H. *Geschichte der christlichen Kirche in Frühmittelalter*, vol. I. Tübingen: Georgs Olms Verlag, 1917.
- von Winterfeld, P. 'Paulus Diaconus oder Notker der Stammler.' *Neues Archiv der Gesellschaft für ältere Deutsche Geschichtskunde* 29, (1904): 468-71.
- Waddell, H., trans. *More Latin Lyrics*. London: Gollancz, 1980.
- Wake, W.C. 'The Authenticity of the Pauline Epistles: A Contribution from Statistical Analysis.' *Hibbert Journal* 47, (1948-9): 50-55.
- Wallach, L. *Alcuin and Charlemagne: Studies in Carolingian History and Literature*. Ithaca, N.Y: Cornell University Press, 1959.
- Walsh, P. G., ed. and trans. *One Hundred Latin Hymns-Ambrose to Aquinas*. Cambridge, MA: Harvard University Press, 2012.
- Wegman, R. C. 'Who was Josquin?', In *The Josquin Companion*, edited by R. Sherr, 21-50. Oxford: Oxford University Press, 2000.
- Westerbergh, U. ed. *Chronicon Salernitanum*. Stockholm: Almqvist & Wiksell, 1956.
- Wickham, C. *Early Mediaeval Italy*. London: Macmillan, 1981.
- Wieland, G.R. *The Canterbury Hymnal*. Toronto: Pontifical Institute of Mediaeval Studies, 1982.
- Wilcoxon, F. 'Individual comparisons by ranking methods.' *Biometrics Bulletin* 1, (1945): 80-83.
- Wilcoxon, F. *Some Rapid Approximate Statistical Procedures*, 1957. Revised, with R.A. Wilcox. Pearl River, N.Y : American Cyanamid, 1964.
- Williams, C.B. *Style and Vocabulary: Numerical Studies*. London: Charles Griffin & Co. Ltd., 1970.
- Winbolt, S. *Latin Hexameter Verse*. London: Methuen, 1903.
- Winkelmüller, M. 'Politische Unifikationsbestrebungen im Konflikt mit der Wahrung lokaler Tradition: "Gallia tota" im Gedicht "Olim romulea" (Montecassino 318).' In *Nationes-Begriffe in mittelalterlichen Musikschriftum: Politische und regionale Gemeinschaftsnamen in musikbezogenen Quellen, 800-1400*, edited by F. Hentschel, 41-50. Berlin: Walter de Gruyter, 2016.

- Wion, A. *Lignum Vitae, ornamentum et decus Ecclesiae*, vol. II. Venice: G. Angelerius, 1595.
- Witt, R.G., 'The Carolingian Conquest.' In *The two Latin cultures and the foundations of the Renaissance*, 1-71. Cambridge: Cambridge University Press, 2012.
- Wolf, J.Q. 'A note on Dryden's Zimri.' *Modern Language Notes* 47, no.2 (1932): 97-99.
- Wonnacott, T.H., and Wonnacott, R.J. *Introductory Statistics*, 5th edn. New York: John Wiley, 1990.
- Woods, C., 'A contribution to the King's library: Paul the Deacon's epitome and its Carolingian context.' In *Verrius, Festus and Paul-lexicography, scholarship and society*, edited by F. Glinister and C. Woods, 109-37. London: Institute of Classical Studies, University of London, 2007.
- Worstbrock., F.J. 'Paulus Diaconus OSB.' In *Deutsches Litteratur des Mittelalters Verfasserlexikon, Band 11, Nachträge und Korrekturen*, edited by K. Ruh, clms. 1172-86. Berlin: Walter de Gruyter, 2004.
- Wright, N., ed. and trans. 'Prosody and Metrics.' *The Historiia Regum Britannie of Geoffrey of Monmouth: V, Gesta Regum Britannie*, lxxiv-lxxix. Woodbridge: D.S. Brewer, 1991.
- Wright, N. 'Columbanus's Epistulae.' In *Columbanus: Studies on the Latin writings*, edited by M. Lapidge, 55-58. Woodbridge: Boydell Press, 1997.
- Wright, T. *Biographica Britannica Literaria, Anglo-Saxon Period*. London: John W. Parker, 1842.
- Yule, G.U. 'On sentence-length as a statistical characteristic of style in prose, with application to two cases of disputed authorship.' *Biometrika* 30, (1938): 363-390.
- Yule, G.U. *The Statistical Study of Literary Vocabulary*. Cambridge: Cambridge University Press, 1944.
- Zorzetti, N., ed., J. Berlioz, trans. *Le premier mythographie de Vatican*. Paris: Les Belles Lettres, 1995.