Ten years ago, when I first conceived the idea of comparing Jerome’s Latin translation to a reconstruction of Eusebius’ original Greek version of his Chronici canones in order to determine what changes Jerome had made, it seemed to me a fairly easy task. Although the Greek original of Eusebius’ chronicle no longer exists, we have Jerome, a reasonably complete Armenian translation, two Syriac epitomes, and many different Greek witnesses. There might be a few difficult decisions here and there involving the evidence of a single witness, but I felt confident that for the final section of the chronicle the result would be clear and straightforward.

Those who have seen the result, which was published in 1999, will know that the result was neither clear nor straightforward. As my Greek text enters the fourth century, it erupts into a forest of brackets and question marks, indicating where I was uncertain of the wording or the chronology. This problem arose chiefly because it turned out that Jerome had altered the text as he translated it to a degree hitherto unsuspected and because other witnesses to Eusebius, who had earlier been content with copying his text alone, began to use other sources once Constantine entered into the narrative. Cursory examinations of earlier sections of the text demonstrated other obvious places where Jerome had altered Eusebius’ chronology. For instance, he shifted Eusebius’ date of the crucifixion by one year and moved the year of Cleopatra’s death back four years, to correspond to the ab urbe condita date he had from his Latin source, all the while retaining Eusebius’ regnal year chronology for the Alexandrians. As a result, Cleopatra dies in her eighteenth regnal year, yet her reign continues on without her down to year twenty-two. In spite of my difficulties in reconstructing the Canones in 1999, I still harbour a desire to attempt a reconstruction of Eusebius in Greek, in spite of the difficulties. I have undertaken some preliminary, mostly chronological studies in this direction, and I would like to take this opportunity to present some of my findings, though it must be recognized that my appearance at this conference is a sham since I can no longer even read names in Syriac, which was the limited extent of my knowledge back in 1999. Then I relied upon Sebastian
Brock, Marina Greatrex, and chiefly Witold Witakowski for Syriac help. Here I must admit that I have relied completely on the Latin translation of the Syriac and the German translation of the Armenian.

Although today we look upon Eusebius’ two-part chronicle, the Chronographia and the Chronici canones, as a ground-breaking and novel work, the more I study his antecedents the more I am of the opinion that to contemporaries much of it would have seemed very familiar. The first part, the Chronographia, was no different in form from the apologetic chronologies of Julius Africanus, who in turn had developed his work from such earlier apologists as Theophilus and Clement; what set Eusebius apart from these earlier writers was that he made almost no original contribution, but simply copied everything from earlier authoritative texts. The secular content of the Chronici canones was similarly cribbed from earlier chronicles and epitomes, and to the contemporary reader would have seemed just as much a pastiche of earlier work as the first part.

On the other hand, a number of aspects of Eusebius’ work would have seemed distinctly odd to an early-fourth-century reader. The first would have been the juxtaposition of two such disparate works, one in the form of Christian apologetic chronography, the second to all intents and purposes a traditional Olympiad chronicle. The second would have been the presence of Biblical history within this Olympiad chronicle, narrated alongside what for us is Greek mythology. And finally, perhaps most revolutionary of all, was the form of that Olympiad chronicle. Instead of the normal structure of paragraph blocks with the chronological data written in lemmata or rubrics above, one was faced with descending strings of regnal years between which were suspended extremely brief comments concerning historical events. As far as we know, no Hellenistic or Roman Olympiad chronicle had attempted to record every single year over thousands of years in this way.

Eusebius thus lies at the confluence of two independent types of Greek chronography, secular Hellenistic Olympiad chronicles and Hellenistic Jewish and later Christian apologetic chronography, a topic that I discuss briefly elsewhere, and which I shall develop further in the preface to a book on Latin chronicles that I am now working on with Michael Kulikowski.

Yet, however revolutionary Eusebius’ efforts were, the fact is that his influence on Greek historiography was severely limited. The Chronographia was the last apologetic chronological compilation; the Canones was the last Olympiad chronicle. Diodorus, Panodorus, and Annianus produced chronicles that were in essence reworked versions of Eusebius, attempts to bring his decidedly anti-millenarian chronology more into line with the standard view that placed the birth of Christ around the year 5500 since the creation of the world, but we know little about their form or content. The Chronicon Paschale, composed in 630, was the last work to contain Olympiad chronology, but it was fundamentally just translated, augmented, and extended Latin consularia, relying on the recounting of the annual consuls for its chronological backbone rather than the descending regnal years of kings or emperors. It would be another 200 years before Theophanes produced something similar, but even he collected all his chronological markers for emperors in Constantinople, kings of Persia, popes, and bishops into a
single rubric heading each year. He also relied heavily on narrative sources, which meant that much of his work abandoned the brief notes that Eusebius provided even for the most recent events. Most of the works now often called chronicles, such as the work of John Malalas, are not chronicles in the same sense as the Chronici canones at all, but epitomes, *breviaria*, and annalistic compendia. And not only was Eusebius’ influence limited, it seems likely that an intact uncontaminated manuscript copy failed to survive even the fourth century. In this light we can only describe Eusebius’ great experiment as a dismal failure in Greek.

In the Latin West, however, it was a different story, and it was here that Eusebius enjoyed his most lasting legacy. Through the translation made by Jerome in 380-381 the olympiad chronicle was brought to the West and spawned many continuators. Jerome’s format was merged with the native consularia genre and the result was the birth of an historiographical form that was not only to survive the fall of the empire but to go on to become the standard historical genre of the Middle Ages as well.

In Syriac, we have a situation that lies half way between the Greek and the Latin *nachleben*. Eusebius had only one true follower (at least, that we know of), Jacob of Edessa, a chronicler who followed Eusebius’ format exactly, without knowing that the Syriac translation that he was working from was a much altered reworking, not the original at all. He thought he was correcting Eusebius’ errors but he was merely correcting those of some unknown Syriac editor. As in the West, Syriac translations inspired many later chronicles, and in two cases epitomes of Eusebius’ work served as the basis for continuations, in the so-called Chronicle of 724 and the chronicle of Ps-Dionysius or the Zuqmin Chronicle. Unfortunately, nothing is to be seen of Eusebius’ chronological structure in these two works, completely eliminated in the former and reduced to date lemmata in the latter. As was the case in Greek, Syriac chronicles became more annalistic *breviaria* of history than true chronicles like Eusebius’. And by that I mean that the annual accounting of events was abandoned, narratives became longer and more involved, and the chronology was reduced to short headings or incorporated into the syntax of the historical entries. For Eusebius being able to see every single year on the page and to see the synchronism among those regnal years was just as important as the text.

One of the most important *cruces* in the long study of Eusebius’ Canones has been the actual format of his text. Excerptors and epitomators give us no clue regarding this and so we must turn to the translators. Here we meet a problem because there are two completely different formats. The earliest is that of Jerome’s translation. Here Olympiads and the individually marked decades since the birth of Abraham run down the left-hand side of each page or double-page spread, while the regnal years of the various kings, the so-called *fīla regnorum*, are set up on the left and right side of each page or double page spread, where up to nine separate kingdoms have their regnal years recorded, until at the end the sole remaining kingdom, Rome, takes up its position on the left. This leaves an open space, the so-called *spatium historicum*, in the centre of the page for the inclusion of historical events.³

The second possibility is the structure of the Armenian translation and of the Syriac exemplar continued by Jacob of Edessa.
These run all the olympiads, years of Abraham (each one, not just by decade), and regnal years in that order down the centre of single pages and the spaces for the entries are added to the left and right of these multiple columns. There are no double-page spreads. Because of the similarity of the formats and because of important linguistic indications in the Armenian translation that betray its Syriac origins, scholars have come to the conclusion that the existing Armenian translation of the Canones is probably the result of a collation between an earlier Armenian translation of a Greek text and a Syriac translation.

It used to be argued and accepted that the Armenian and Syriac structure was that of Eusebius’ original Greek text. But following the detailed analyses of J. K. Fotheringham and Rudolf Helm, who both spent many years working on their editions of Jerome’s translation, it became clear that it was Jerome’s format that most closely mirrored Eusebius’ original. Today no one believes that Eusebius’ Greek Canones looked like the Armenian or Jacob of Edessa, and it is usually assumed that the transition from Eusebius’ multiple *fila regnorum* to the central-column format took place in the earliest Syriac translation. However, Alden Mosshammer suggests that it occurred in an early Greek reworking of the Canones, perhaps produced in Alexandria at the beginning of the fifth century.

Much further confusion and consternation has been caused by the fact that Jerome and the Armenian translation do not always agree on the dates assigned to the historical entries and often do not agree even on the order in which these entries are listed. After much comparison of the Latin and Armenian texts, Rudolf Helm came to the conclusion that the differences between the two could be accounted for by assuming that Eusebius originally filled the single *spatium historicum* with up to three columns of text that Jerome and later translators read in a different order, depending on whether they read across or down the columns. Errors in the dating of individual entries and the omission of certain entries could be explained by the position of the entries in this type of format. This view was accepted and amplified by Mosshammer, the only other person to have studied this aspect of the Canones. There is nothing inherently implausible with this interpretation, and there is existing evidence to support it: Jerome’s translation includes a number of pages that preserve multiple columns (esp. 20, 23, 29, 31, 43, 46-51, 53, 57, 64, 65 [two columns] and 103 [three columns]), and in his preface he complains about the difficulty in figuring out the ‘ordo legendi’, the order in which one was supposed read the text (Helm 5.5). Furthermore, Greek manuscripts were often written in multiple columns, so it is not impossible that Eusebius would have written his text this way. The result is that both Helm and Mosshammer include sample pages of what Eusebius’ manuscript pages would originally have looked like, though surprisingly both present pages written in minuscule, which was only invented 500 years after Eusebius’ death.

The major problem with this multiple-column solution as I see it is that if Eusebius assigned certain dates to certain events and if the translators were attempting to copy those dates, as well as the content of the text itself, it shouldn’t make any difference whether a translator read down a column or across the columns: the dates are the dates. It would only make a difference if the trans-
lators didn’t care where they stuck their entries: reading across three entries assigned to the same year and then writing them into three consecutive years for instance. But if that were the case, then it would not matter whether there were columns or not: the differences could be accounted for by copyists who did not care where they wrote their entries. The second problem is that there are also many discrepancies between Jerome and the Armenian translation in places where there are few entries, where there could never have been multiple columns to cause confusion. Now I do not doubt that Eusebius wrote some entries side by side, or in columns, or placed certain types of entries off to the side as a way of highlighting them (which Jerome then missed), but it seems to me that the theory of multiple columns cannot solve the problem of the serious discrepancies between Jerome and the Armenian translation.

To come to a definitive conclusion I subjected this problem to careful analysis and in order to provide a control against the dates found in Jerome and the Armenian translation I included in my analysis the chronicle of Ps-Dionysius, which begins with an epitome of Eusebius’ Canones. What marks out the epitome of Ps-Dionysius from the other more well-known Syriac epitome in the Chronicle of 724, the only Syriac text that Helm considered in his edition of Jerome, is that it provides dates for almost all its excerpts from Eusebius, using years of Abraham. In this I am, in a sense, following von Gutschmid’s 1886 comparison of the chronologies of these three texts, but he had different goals and used a different method of analysis. He was also hampered by the fact that he had no reliable edition of any of the texts and for comparison used not a single text of Jerome, but six different manuscripts.

My method was to compare the dates for every event that had a parallel in Jerome, Ps-Dionysius, and the Armenian translation. Only events dated in all three texts were considered. I also discounted any event in Ps-Dionysius that was not dated to a stated year or did not begin with the statement ‘in the same year’ or ‘in this year’. Entries prefaced with statements such as ‘at this time’ were not considered since these entries almost always vary by ten or more years from the most closely cited date.

The first conclusion of this comparison was that Jerome, Ps-Dionysius, and the Armenian almost always agree in their chronology when the event is a royal death or accession that is described within the fila regnorum themselves. There are some instances of a lack of agreement but these can be explained by scribal errors or other obvious modifications. Since the fila are continuous strings of numbers that are only broken by the accession of a new king, this is what we would expect. Each event is pegged to a specific year within the string and cannot move as long as the translator or copyist did not change the actual chronology. As a result I have not included any of these events in my analysis; I have included only those entries that appear within the spatium historicum and do not relate to accessions, deaths, or other events that are pegged specifically to the fila regnorum. This exception unfortunately reduces the total number of entries for analysis to a meagre 210.

A comparison of these 210 dated events found that sometimes all three texts agreed with one another, while at other times all disagreed with one another. Sometimes two texts agreed but not the other. Nor was there a pattern with regard to the concentration of
the entries on a page; there could be agreement or disagreement regardless of whether the page was filled with entries or contained only a few scattered entries, and there was no pattern that suggested reading errors caused by multiple columns.

Of the 210 shared spatium historicum entries among Jerome, Ps-Dionysius, and the Armenian translation, only 30 entries, or 14.3%, are dated to the same year in all three texts (see Table 1A), Jerome agrees with Ps-Dionysius against the Armenian 43 times, which indicates that the Armenian is incorrect 20.5% of the time; Jerome agrees with the Armenian against Ps-Dionysius 40 times, which indicates that Ps-Dionysius is incorrect 19.0% of the time (about the same as the Armenian); and Ps-Dionysius agrees with the Armenian against Jerome 29 times, which means that Jerome is incorrect 13.8% of the time. Sixty-eight entries, or 32.4% of the total, have different dates in all three texts.

Now if we shift the criterion from an exact match of dates to one of allowing a one year difference either way among the three texts, so that, for instance, Jerome could assign an event to 1345 Abr., Ps-Dionysius to 1347, and the Armenian to 1346 (the assumed correct date being 1345), or Jerome and Ps-Dionysius to 1345 and the Armenian to 1346, the number of completely different dates drops from 68 to 14, or 6.7%, and the number of triple agreements rises from 30 to 122 (or 58.1%) (see Table 1B). Jerome agrees with Ps-Dionysius (i.e. the Armenian is incorrect by more than a single year) 19 times or 9% and with the Armenian (i.e. Ps-Dionysius is incorrect by more than a single year) 37 times or 17.6%, and Ps-Dionysius agrees with the Armenian (i.e. Jerome is incorrect by more than a single year) 18 times or 8.6%, which is statistically the same as the Armenian’s error rate. The differences between A and B in the table show that while the mistakes that appear in Jerome and Armenian tend to be within a year, those in Ps-Dionysius tend to be larger than one year: the relaxation of the criterion produces a drop of only three entries for Ps-Dionysius, yet 24 for the Armenian and 11 for Jerome. The remaining level of error is much higher for Ps-Dionysius as well, about double that of the other two witnesses.

These patterns suggest something that no scholar has so far suggested and it has nothing to do with columns or reading up or down.

In a normal olympiad chronicle the page is graphically divided by the chronological notice that presents the olympiad, the archons, the consuls, or any other chronological system. The entry for that year then follows in a single block. No matter how the text is copied the chronology can never change. Although Eusebius’ text was a great step forward with regard to its presentation of a great amount of information in a small space, especially the graphic inclusion of every single regnal year for over 2,300 years, the spatium historicum was not graphically divided in any way and there was nothing to tie any entry to any particular regnal year on the left or right other than its position on the page (and perhaps the impressions of the ruled horizontal lines used for writing). Since there was no way of anchoring the historical entries to the regnal years in a graphic manner, from the moment Eusebius’ chronicle was first copied entries could start floating on the page, drifting up or down from one regnal year to another. This is particularly true on pages where the regnal years appear on every line of the text. Even the smallest slip of a single line could
cause the shift of a year. This became more of a problem on the double page spreads where the *spatium historicum* was quite wide and the entries quite short, and so the empty space between the edges of the written text and the regnal numbers was larger as well. As a result, every time the Greek original was copied every entry was subject to further potential shifting, up or down. This is probably what gave rise to one of the complications that Jerome mentioned regarding his Greek text of the Canones. He said that there were lines, or ‘virgulae’, all over the pages connecting entries (the ‘res’) to the regnal years (the ‘numeri’) (Helm 5.3-4). This obviously arose as different readers had compared one manuscript with another and used these lines to correct what they took to be entry creep in the manuscript that Jerome ended up using and its progenitors. The same phenomenon can be seen in some manuscripts of Jerome.

In addition, most entries extend from their own year, indicated by the location of the first line of the entry, down through one or more following regnal years, and scribes could easily and mistakenly treat several different consecutive entries, each supposed to begin opposite a specific regnal year, as if they were in fact one large block of text dated to the year opposite the first line, failing to notice where individual sentences began within the block. This is very common in Latin manuscripts of chronicles, where individual entries were jammed together into a single text block to save space. As a result the marginal regnal years lost the obvious connection with the text opposite and begin to drift up or down the margins, erroneously taking the text opposite with them. In Eusebius’ text it was the just the opposite: the regnal years were fixed and it was the text that shifted. Furthermore, scribes might not even have realized that Eusebius intended the first line of each entry to be opposite a specific number in the *fila regnorum*. For such a scribe, it may have been that as long as an entry in his copy was in the same general area it appeared in his exemplar he was happy. Even the great German scholar Eduard Schwartz denied that the *fila regnorum* were intended to be read in any more than a general fashion and refused to accept that Eusebius would have tied the entries to specific regnal years. In addition, since it seems obvious that the *fila regnorum* were written out first and the entries added later, any scribe who failed to maintain the correct spacing of letters and words within an entry could end up with entries too long or too short. Any closely following entries would then be dated too late or too early, as scribes paid more attention to the relationship of the text blocks on the page to one another than to their relationship to the regnal years. Since there could be over thirty regnal years per page, the range for error was therefore enormous.

Jerome’s complaint about the ‘ordo legendi’ is still valid: Eusebius no doubt wrote his entries in short lines or small text blocks all over the page. For one used to reading a text in neat lines within neat columns Eusebius’ apparently haphazard text placement, combined with the fact that one had to read across double-page spreads for synchronisms and down to advance through time, must have confused all new readers of the text as much as it confused Jerome.

Next in the process we must consider exactly the same sort of problems with regard to the translations themselves. Helm has a special apparatus to show opposite which regnal year each entry appears in the
many different Latin manuscripts. The same problem must have occurred with the Greek, Armenian, and Syriac manuscripts as well.

There is a further problem with the Armenian translation in that it has two locations for the entries, one on either side of the column of regnal years. As a result entries could independently move up or down, thus seeming to alter the sequence of entries in relation to Jerome as well as their absolute chronology. It is also clear from my study in 1999 that crowding on one side or the other has shifted entries further down than they should be and in many cases caused the loss of entries that just didn’t fit the narrow confines left for them. In this study I have also found that in some cases dense text blocks forced the upper entries into empty spaces above, thus ante-dating them.

In view of these problems, it is really a testament to the care of the Greek scribes, the translators, and the later copyists that almost half of the surviving entries only vary from one another by a year, hardly a centimeter or two in the original Greek manuscripts.

This study therefore demonstrates, first, that multiple columns are not necessary to explain the chronological differences in the translations. Second, it shows that there is no ‘parallel corruption’ shared between the Armenian and Ps-Dionysius, as one might expect since both derived from the same later redaction of the Canones. It is Jerome and the Armenian that share the same low level of error and Ps-Dionysius that is the odd one out. Whatever the nature of the common source of the Armenian and Ps-Dionysius, its chronology was not modified from that of Eusebius’ original in any way that is now evident. Third, it also suggests the solution to another larger problem.

It has always been assumed that the disappearance of Eusebius’ original Greek text was due to Eusebius’ anti-eschatological chronology, which set it apart from all other world chronologies of the time and made it the target of correction many times over the years. But that chronology could easily have been altered in a few places by simply changing the calculation figures or adding a supplement to account for the years between creation and Abraham, years omitted by Eusebius. His chronicle would not have to have been abandoned completely. This study, on the other hand, suggests another more obvious reason: it was just too complicated to be read easily and too complex a document to be copied accurately and economically. For later readers it made no sense to take up the space and the copying expense of recording regnal years in which nothing happened. As a result from a very early date I suspect that the early ‘correctors’ of Eusebius, like Diodorus, Annianus, and Panodorus, were not just changing his chronology from the creation of the world, as we know they did, but were also simplifying his *fila regnorum* into a more easily interpreted, more easily and cheaply copied, and less corruptible format.

And so Mosshammer is almost certainly right, that the structure we see in the Syriac and Armenian witnesses goes back to an early Greek recension of the Canones and was not a Syriac innovation.

But this takes us back to my original reason for undertaking this study. Given this obvious lack of agreement, how can one reconstruct Eusebius’ Greek original? Obviously, it would be best to accept the date wherever two witnesses agree against the third, allowing for an error of one year. But that only gives us a date for 196 entries, out of hundreds and hundreds. And many puz-
zling and unusual problems still remain.

For instance, both Ps-Dionysius (1416 Abr.) and Syncellus (286.8-9, Mosshammer) record the foundation of Perinthus at the same time as Camerina, listing Camerina first. Perinthus therefore certainly appeared in Eusebius even though it does not appear in the Armenian translation (Camerina appears in 1417 Abr.). All manuscripts of Jerome mention the foundation of Camerina in the equivalent of 601 BC (1416 Abr.) but, like the Armenian, most do not mention the foundation of Perinthus. However, four do. One puts it in the equivalent of 602 BC (1415 Abr.), which is where Helm puts it. But the three others put it in 601 BC, one including it within the same entry and after Camerina. The only conclusion can be that Jerome originally missed the entry but someone later compared his translation to a Greek version and added the entry in the margin. Later copyists put it in slightly different places. That it is missing in Jerome and the Armenian can only be a coincidence. There is other clear evidence of Jerome’s text having been corrected against the Greek as well, though not in these manuscripts. Another problem occurs in 735 BC (1282 Abr.) where both Ps-Dionysius and the Armenian translation locate the foundations of Syracuse and Catana in Sicily in a single entry. Jerome not only separates the entries, repeating the shared wording, but dates the first to 738 BC and the second to 736 BC, three years and one year earlier than the other two translations. The next entry, the capture of Messene by the Spartans, is dated to 735 BC (1282 Abr.) in all three texts. Unfortunately there is no Greek witness to help sort out the problem. Has Jerome spread these three entries out, moving them up into the empty space above, or did the Greek editor of the version behind Ps-Dionysius and the Armenian compress them? So three steps ahead and two back. The result is that no accurate reconstruction of the Canones can ever be made, but if one accepts the evidence of Ps-Dionysius then a closer approximation can be produced. Whether that reconstruction ever will be made I cannot say, but until then it is certain that we can no longer blindly rely on just Jerome or the Armenian. The Syriac evidence must be given its proper due.

Table 1: Chronological Agreements Among Witnesses to the Chronici canones

<table>
<thead>
<tr>
<th>A. Exact Match</th>
<th>B. One Year Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Agreements</td>
<td>30 14.3%</td>
</tr>
<tr>
<td>Jerome = Ps-Dionysius (=Armenian Incorrect)</td>
<td>43 20.5%</td>
</tr>
<tr>
<td>Jerome = Armenian (=Ps-Dionysius Incorrect)</td>
<td>40 19.0%</td>
</tr>
<tr>
<td>Ps-Dionysius = Armenian (=Jerome Incorrect)</td>
<td>29 13.8%</td>
</tr>
<tr>
<td>No Agreement</td>
<td>68 32.4%</td>
</tr>
<tr>
<td>Total</td>
<td>210 100.0%</td>
</tr>
</tbody>
</table>
NOTES

1 Studies in Eusebian and Post-Eusebian Chronography, Historia Einzelschrift 135 (Stuttgart, 1999), 60-64.


4 See Josef Karst (ed. and trans.), Die Chronik aus dem Armenischen Übersetzt mit textkritischem Commenatar, GCS 20, Eusebius Werke 5 (Leipzig, 1911) and E. W. Brooks (ed. and trans.), Chronicon Iacobi Edesseni, in Chron. min. 3, CSCO 6, SS 6; SS 3.4, versio (Louvain, 1955 [1907]), 199-255; Syriac text: Chronicon Iacobi Edesseni, in Chron. min. 3, CSCO 5, SS 5; SS 3.4, textus (Louvain, 1955 [1905]), 261-327.


7 Mosshammer, The Chronicle, 75-9, 80-1.


9 Helm, Die Chronik, XXX-XXXI and XXXVII, and Mosshammer, The Chronicle, 27.


13 See Mosshammer, The Chronicle, 52-3 for two famous examples.