Late Antique Calendrical Thought and its Reception in the Early Middle Ages: Proceedings of the 3rd International Conference on the Science of Computus in Ireland and Europe Galway, 16-18 July, 2010. Edited by Immo Warntjes and Dáibhí Ó Cróinín. Studia Traditionis Theologiae: Explorations in Early and Medieval Theology 26. Turnhout, Belgium: Brepols, 2017. Pp. xiii + 391. Price €75,00 (pbk). ISBN 978-2-503-57709-8.

Computus is the calendrical science by which ancient and medieval Christians calculated the date of Easter, but a science which depended on, contributed to, and produced, many other related forms of learning.[1] For the readership of this journal it will be especially significant that it is a science which involved Biblical exegesis and generated doctrinally significant (and sometimes doctrinally controversial) results.[2] Warntjes is surely right that scholarly neglect of *computus* has introduced serious distortions to our understanding of medieval learning, even if he seems to have forgotten Latin Averroism (to name one example) when he claims that it is exceptional in the way that its appropriation of Greek and Arabic learning sometimes 'directly questions Christian authority'.[3]

It would be hard to overestimate the significance of the International Conferences on the Science of Computus in Ireland and Europe. Since at least the 1980s there has been a growing appreciation that our understanding of early medieval Irish literature necessarily depends on an accurate analysis of the various ways in which it emerges as part of a much larger conversation. However, outside of linguistics, there are not yet any parallels to the success these conferences (and their proceedings) have enjoyed in establishing the importance of early Irish contributions to a field as a whole. For, as the first international conference series to be dedicated to the science of *computus*, the Galway conferences have

[1] My thanks to Bernhard Bauer (Maynooth), Anthony Harvey (RIA) and Ian Stewart (King's College, Halifax) for the benefit of their expert advice on certain aspects of the preceding analysis. They should not, however, be implicated in the uses to which that advice has been put here. My thanks also to Liam Breatnach (DIAS) and Nike Stam (DIAS). The expression of this review has been much improved due to their editorial suggestions.
[2] Daniel McCarthy, 'The Paschal Cycle of St Patrick', p. 98; Luciana Cuppo, 'Felix of Squillace and the Dionysiac Computus II: Rome, Gaul and the Insular World', pp. 143–56; Brigitte Englisch, 'Osterfest und Weltchronistik in den westgotischen Reichen', *passim*; Marina Smyth, 'Once in Four: The Leap Year in Early Medieval Thought', pp. 238–9, 260–64; C. Philipp E. Nothaft, 'Chronologically Confused: Claudius of Turin and the Date of Christ's Passion', pp. 280–88.
[3] Immo Warntjes, 'Introduction: State of Research on Late Antique and Early Medieval Computus', p. 36.

been integral to the general study of ancient and medieval *computus* defining itself as a field. They have, in sum, established the study of early Irish *computus* as the lens through which the full range of modern scholarly study of *computus* – covering material that ranges from the third century[4] to the seventeenth,[5] 'The Statue of Hippolytus' to James Ussher – has been enabled to reflect on its own unity and character as a discipline: a truly remarkable achievement.

That said, there are signs of trouble in paradise. The study of *computus* is unavoidably always already involved in the historiography of science. Our analysis of *computus* as a science can only be accurate insofar as the understanding of science that we are working with is appropriate to the sense in which *computus* is a science. In the foreword to the first of the proceedings in this series, Ó Cróinín had been careful to note that medieval scholars 'made no distinction between science and general culture' and that the lack of such distinction was especially evident in *computus* [p.xii].[6] However, in the first paper of the present volume, and that which plays the role of its introduction, Warntjes, while recognising the 'interrelation' of *computus* with other areas of medieval scholarship, such as Biblical exegesis,[7] shows himself much concerned with separating what he regards as the 'scientific' content of *computus* from these].[8] This position is reflected on the back of the book as well, where it is claimed that *computus* alone 'provides a traceable continuation of scientific thought from Late Antiquity to the Early Middle Ages.'

There is a sense in which this could be said to be true. If we take as our guide the way that science comes to be defined as something separate from natural philosophy (among other

[4] Alden A. Mosshamer, 'Towards and New Edition of the Computus of AD 243'.
[5] Dáibhí Ó Cróinín, 'Archbishop James Ussher (1581-1656) and the History of the Easter Controversy'.
[6] Immo Warntjes and Dáibhí Ó Cróinín, eds., *Computus and its cultural context in the Latin West, AD 300–1200: Proceedings of the 1st International Conference on the Science of Computus in Ireland and Europe*, Studia Traditionis Theologiae 5 (Turnhout 2010), p. xii.
[7] Warntjes, 'State of Research', pp. 32–3.
[8] Warntjes, 'Statue of Research', pp. 32–40.

learned disciplines) in the nineteenth century,[9] and then use this definition as our means of interpreting medieval learning, it certainly makes sense that *computus* might be seen as 'scientific' in a way in which the other disciplines with which it is interrelated are not. This begs the question, however, as to why one might think that a definition of science which belongs to a historical and social context so alien to those in which ancient and medieval *computus* flourished would be useful for understanding it. If the history of science is allowed to include only those things which fit into current definitions of what science is, then the study of its past will be no more than a means for contemporary scientific thought to become increasingly unconscious of its own historical character, thus losing the capacity to question its own principles as it sinks ever deeper into uncritical dreams of its own false objectivity.

As the greater part of scholarship on the history of science would now argue,[10] the history of science, if it is to escape reducing the past to mere propaganda for the beliefs of the moment, must extend to all things that have been regarded as science, not just those which agree with current sensibilities. It is, in the case at hand, by enquiring into what *scientia* means (and how it works) when taken to include such things as grammar and theology, along with *computus*, that we will really be learning something about medieval science, and something, moreover, that will do more than simply flatter our own received notions of what science is.

It remains that these concerns are not at odds with the greater part of the material found in this volume, little of which is directly concerned with the significance of *computus* as a science outside of Warntjes' essay and the overview on the cover. Although something similar certainly seems to be at work in Cuppo's characterisation of allegorical modes of interpretation (as represented by St. Gregory the Great) in contrast to 'scientific' modes of

[9] Although, such a separation cannot necessarily be assumed even of the nineteenth century; Ralph O'Connor, *The Earth on Show: Fossils and the Poetics of Popular Science 1802-1856* (Chicago and London 2007).
[10] See, for example, David C. Lindberg, *The Beginnings of Western Science: The European Scientific Tradition in Philosophical, Religious, and Institutional Context, Prehistory to A.D. 1450* (Chicago 2007, 2nd ed.); Roger French and Andrew Cunningham, *Before Science: The Invention of the Friars' Natural Philosophy* (London and New York 1996).

interpretation (as represented by Cassiodorus).[11] Nor can the editors be blamed over much for adopting such a perspective regarding the significance of the research accomplished by these conferences. It is exactly the kind of history of science which one would expect to follow from a similar problem in the dominant historiographical trends in the field of Early Irish, where a work tends to be identified as belonging to the genre of 'history' only to the degree that it may be said to anticipate current historical practice, and is unhelpfully relegated to the status of 'pseudo-history' or even 'fiction' to the degree that it is perceived to depart from this implicit standard, thus freeing modern scholarship from its responsibility to understand earlier forms of historical practice, as from its responsibility to scrutinise the ideological presuppositions which inform its own historical methods. The concern here is that a great part of the promise of the Galway conference – and the study of *computus* generally – may be lost if such a reduction of the history of science comes to prevail, especially at this critical juncture: these proceedings being the last that are dedicated to more technical considerations as they move on from here to a broader consideration of *computus*.[12]

The strength of this particular volume lies, in the first instance, in detailed, technical accounts of specific *computus* texts.[13] These will be tough going for those who are only beginning to find their way into *computus*. But this seems to be a testimony to the difficulty of the problems they address rather than any failure on their part. Smyth's fine paper on early medieval understandings of the leap-year is probably the best port-of-entry for the theologically interested newcomer. Nothaft makes some comparable contributions, albeit embodied in a somewhat more demanding (yet entirely lucid) argument. There is, in fact, much in this volume of theological significance. Especially interesting are the many examples it provides of what Smyth describes as the 'practice of presenting different

[11] Cuppo, 'Felix of Squillace', pp. 144–54.
[12] Warntjes, 'State of Research', p. 39.
[13] Mosshamer, 'The Computus of 243'; Jan Zuidhoek, 'The Initial Year of *De ratione paschali* and the Relevance of its Paschal Dates'; Cuppo, 'Felix of Squillace'; Nothaft, 'Chronologically Confused'.

opinions',[14] given that the ranging of apparently conflicting authorities together is something which is often supposed to emerge only with the scholastic philosophy of the High Middle Ages.

That said, the theological analysis of the *computus* texts in question is not especially dependable in this volume as a whole. Englisch's paper promises to demonstrate the importance of 'resurrection theology and contemporary apocalyptic views' for the role that *computus* played in eighth-century Visgothic belief, and includes interesting discussion of these subjects, but ultimately does not transform her hypothesis into an argument. Cuppo makes the strange contention that the Victorian practice of numbering years from the Passion (rather than the Nativity) is a 'possible symptom of crypto-Pelagianism'.[15] This argument emerges through false analogy to an earlier argument of Ó Cróinín.[16] Ó Cróinín demonstrated, not that the possible celebration of the Pasch on *luna XIIII* (allowed for by the reckoning of the *latercus*) was evidence of a Pelagian tendency,[17] but why it is that some contemporaries mistakenly interpreted it as such in their polemics against Irish use of the *latercus*. Yet it also depends on the unaccountable conclusion that the centrality of Christ's Passion to the Victorian count of years somehow amounts to a focus on Christ's humanity at the expense of his divinity:[18] an unfortunate blemish in a generally masterful and erudite presentation. In her analysis of what the idea of the eighth day of creation meant to Hrabanus Maurus, Obrist has almost entirely missed – both in Maurus himself and in earlier mediations of this Augustinian theme – its eschatological significance as the eternal day of the new creation. It is manifestly not, as she claims, 'just another way of conceptualizing the seven-

[14] Smyth, 'Once in Four', p. 233.
[15] Cuppo, 'Felix of Squillace', p. 155.
[16] Dáibhí Ó Cróinín, '"New Heresy for Old": Pelagianism in Ireland and the Papal Letter of 640', *Speculum* 60.3 (1985), 505–16.
[17] Cuppo, 'Felix of Squillace', pp. 143–4, 155.
[18] Cuppo, 'Felix of Squillace', p. 144.

day week'.[19] Albeit, her edition and translation of the passage that was later added to the end of book X of Maurus' *De rerum naturis*, where this theme is discussed in detail,[20] and her identification of its Isidorean source,[21] remain valuable contributions. The deficiencies outlined here are serious, but not fatal. None of them undermine the theological value of the forms of *computus* described in this volume, or (in most cases) the aptness of the relevant descriptions. There is much of theological import and relevance in the essays that it contains. It is simply the case that dependable theological interpretations must, more often than not, be derived from its pages rather than found in them.

The respective contributions of McCarthy and Howlett, each in its own particular way, present somewhat more of a puzzle. McCarthy's paper involves a great deal of careful and useful analysis of *Cummian's Letter*, but then seems to throw all caution to the wind in his attempt to argue that it amounts to proof, not only that St. Patrick composed his own paschal cycle, but of its original character as a cycle. It is fair enough to argue that Cummian's description of Patrick's paschal cycle has a definable character relative to the others he mentions (i.e. that it is an adaption of Victorius' cycle), or even that Cummian believed it to be Patrick's in some manner of speaking. It is another matter entirely to leap directly from there to the contention that it is a faithful record of a cycle written by Patrick, or even that it amounts to evidence that St. Patrick was in fact capable of such a feat. Such conclusions would depend on evidence not yet presented here, making it appear rather cavalier to be taking them as definitive proof that St. Patrick arrived in Ireland after the AD 457 composition date of Victorius' cycle.[22] It is hoped that McCarthy will refrain from indulging such speculative hypotheses of origin so freely in the future (as he has done in the past on the

[19] Lisa Chen Obrist, 'The Eighth Day of the Week in Book 10 of Hrabanus Maurus' *De rerum naturis*', p. 303
[20] Obrist, 'Eight Day of the Week', pp. 300–302.
[21] Obrist, 'Eight Day of the Week', p. 304.
[22] McCarthy, 'The Paschal Cycle of Patrick', p. 125.

subject of a certain unattested Rufinean chronicle),[23] lest this should begin to cast needless doubt on his very real achievements of this kind, such as his (and Breen's) identification of *De ratione Paschali* as an accurate fourth-century translation of Anatolius' Greek original.[24]

In this volume Howlett continues in his practice of providing an edition and translation of a relevant Latin text, and then subjecting it to analysis, especially numerical analysis. In this case, it is a seventh-century Hiberno-Latin poem, calendrical in theme, which follows the order of instruction given in another Hiberno-Latin treatise, *De ratione conputandi*.[25] The question mark which hovers over this is the character of the numerical analysis which dominates his engagement with this text, as with many previous. In principle, it is not a strange idea that the interest which many ancient and medieval authors demonstrably took in numbers and their symbolic value might be reflected in the structure of their compositions. This seems quite uncontroversial (and interesting) as a hypothesis. Moreover, it seems to be beyond serious dispute that many early medieval Irish authors were interested in the symbolic significance of certain numbers, and in the numerical values of letters belonging to certain significant words.[26]

However, this is not yet proof that it exists as a principle of composition in a specific Hiberno-Latin text. Of the texts which may plausibly have been available to a Hiberno-Latin context, none survive – to my knowledge – grammatical or otherwise, which describe the ways in which *gematria* should be used in composition, or which even prescribe its use. Thus, unlike allegory, we lack a guide which would tell us how to be certain that *gematria* is an intended feature of the way that a text that has been composed, or how to accurately identify the way that it has been used. Was *gematria*, for example – given that interest in it

[23] The existence of a Rufinean chronicle was first hypothesised in Daniel McCarthy, 'The Status of the Pre-Patrician Irish Annals', *Peritia* 12 (1998), 98–152, at 131–6.
[24] Zuidhoek, 'The Initial Year *of De ratione paschali*', p. 72.
[25] David Howlett, 'An Addition to the Hiberno-Latin Canon: *De ratione temporum*', p. 218.
[26] Howlett, 'An Addition to the Hiberno-Latin Canon', p. 223, note 10.

seems most often to have been expressed in the form of Biblical exegesis – thought to apply to texts that were not deemed to be inspired? In which case, it is hard to envisage a method which would allow us to distinguish between fact and fancy in this matter. Perhaps Howlett has devised such a method. Yet, to date, he has shown the results of his numerical analysis of these texts, rather than the method by which he has arrived at these results to the exclusion of others. The upshot of this is that, until he shows his work in such a way that makes it possible to independently confirm or deny the validity of his findings, his multiplication of examples will seem to further undermine the credibility of his findings rather than prove them. This is especially the case given the fact that his numerical analysis does not seem to result in symbolic meanings of the sort that seem to be the principle concern of this kind of composition or interpretation. His editions and translations of texts in this series remain a significant contribution to the discussion. Yet their value as editions is undermined somewhat given that he sometimes changes spellings based only on the still unproven accuracy and relevance of his numerical analysis.[27]

If it is primarily in the close analyses of individual *computus* texts that this volume is ascendant, it is in the overviews that make up its beginning[28] and end[29] that it reaches its zenith. Warntjes' essay traces the history of the modern scholarly study of *computus* from the 16th and 17th centuries to the present. The aforementioned problems which arise from his understanding of the history of science have only a minimal effect on his chronological portrayal of this field's development. The result is a seemingly effortless epitome of the relevant scholars' contributions and the various ways in which these contributions are interrelated. A few of his interpretations, especially of more recent scholars, may prove controversial. But this seems unavoidable in any such attempt. In any event, his portrayal of

[27] Howlett, 'An Addition to the Hiberno-Latin Canon', p. 212.
[28] Warntjes, 'State of Research'.
[29] Ó Cróinín, 'Archbishop James Ussher'.

the development of this field seems as if it will be a necessary reference point for any future thinking about the field as such. Moreover, given the transparency of his argument, it is an excellent place to begin for someone who is trying to get a sense of the state of the discipline.

This latter point applies to Ó Cróinín's paper as well. Ó Cróinín uses the scholarship of Archbishop James Ussher (1581–1656) – specifically a newly discovered list he made of ancient and medieval sources relevant to the study of the paschal controversy – as a way of recapitulating the history of that controversy. In this he persuasively interprets Ussher as a sort of hinge upon which the transition from the pre-modern practice of *computus* to its modern study turns. This has the happy result of making an interesting interpretation of Ussher's work function as a way of thinking about the various contents of this volume (and the Galway conferences to this point) together as a totality, as well as contributing to the satisfying literary quality which this offering enjoys, something which one might not expect from the analysis of a list of manuscript sources. Aside from what it reveals about Ussher's own analysis of these sources, Ó Cróinín's detailed comments on them will also be a useful (though not exhaustive) reference for those who are still trying to grasp the chronology of the primary sources for *computus* and to distinguish their contents. Given that the proceedings for the Galway conferences will now be transitioning from a focus on the more technical aspects of *computus* to broader considerations, it seems particularly apt that this volume would begin and end with such summaries as Warntjes and Ó Cróinín have provided, as a means of taking stock of the ground that has been covered thus far, before pressing on to new things.

In conclusion, this volume, like the other volumes in this series before it, is essential reading for scholars concerned with *computus*. It remains that its indispensability is somewhat clouded by certain shortcomings regarding the way its editors place *computus* in the history of science. However, this does not diminish the rigour which most of its descriptions of

individual examples of *computus* display, making due allowance for the methodological concerns that arise regarding two of the papers in particular. Moreover, the respective summaries that it offers regarding the modern scholarship on *computus* and its ancient practice are particularly valuable, both in themselves, and in the means they provide for reflecting on the contents of the book, the conference series, and the discipline. *Computus* is deserving of a much larger scholarly audience than it has currently. Among many other things, it is a crucial part of the overall theological picture of late antiquity and the Middle Ages. This book is, unfortunately, not generally the place to find reliable theological analysis of this aspect of *computus*, with a few notable exceptions. However, it provides the theologically interested reader a great deal of accurate information which would reward such analysis. That said, reliable theological analysis may well become more characteristic of this series in the future, as it begins to move beyond the more restricted focus of its first three meetings. As it stands, this volume, while transitional in character, is a worthy successor to those which it follows. Although given the profound contribution to knowledge which this series represents, it is hoped that more care will be given to eliminating typographical errors in its future iterations.