

Rebecca R. Darley, Review: M. Crusafont, A. M. Balaguer and P. Grierson *Medieval European Coinage 6: the Iberian peninsula, with a catalogue of the coins in the Fitzwilliam Museum*, Cambridge, Cambridge: Cambridge University Press, 2013; 886 pages, RRP £159.99.

Medieval European Coinage 6 (MEC 6) represents the work of three authors, several editors and many years. The acknowledgements allude to the various challenges which may befall a lengthy publication project, including the tragic deaths of Philip Grierson, co-author and original editor of the *MEC* series, and Mark Blackburn, general editor of the series throughout most of the writing of the volume. The *MEC* series has begun to establish itself, as Grierson intended, as a crucial set of handbooks, presenting a wealth of illustrated examples and an English-language synthesis of numismatic literature spanning a variety of different European languages and traditions of numismatic scholarship.¹ *MEC 6* is no exception. The substantial bibliography and Appendix 5 on the numismatists of the Iberian Peninsula highlight the importance of especially Castilian-, Catalan- and Portuguese-language scholarship, in many cases in old publications of limited accessibility. This is balanced, in the bibliography and the text, with an up-to-date survey of recent English- and non-English-language scholarship. No similar introduction exists and this is a volume which deserves to take an immediate place on the shelves of museums, university libraries, auction houses and private collectors.

The *MEC* series aims, however, not only to produce handbooks or collection catalogues (since all of the volumes take as their core the collections of the Fitzwilliam Museum, Cambridge). It also seeks to present in each of its regional surveys the most advanced current interpretation of the material. In the case of the Iberian peninsula this takes the form of synthesis on a truly intimidating scale. This is because the authors set out not only to offer a regional and chronological survey, which appears in chapters four ('The Carolingians and the earliest coinages to c. 1100'), five ('The crown of Catalonia-Aragon'), six ('The Kingdom of Majorca'), seven ('The Kingdom of Navarre'), eight ('The Kingdom of Castile-León') and nine ('The Kingdom of Portugal'), but also a holistic analysis of the patterns of monetary circulation which defined the peninsula over a period of more than a millennium. It is this effort which makes *MEC 6* of value to numismatists and historians working on regions and periods beyond the peninsula. While the regional surveys provide detailed and intricate analysis, chapter two ('Finds, hoards and monetary circulation in the Iberian Peninsula') sets out to create a methodology for comparing monetary circulation over time and across different but connected systems. It therefore seems worth beginning with the regional surveys, catalogue and related appendices, which together constitute an up-to-date examination of the coinage of the Iberian Peninsula c. 450-1500, before returning to these synthetic chapters.

The survey begins chronologically, taking all coinage of the Christian regions of the peninsula up to c. 1100. This makes sense since it was only between the tenth and eleventh centuries that state coinage began to be produced consistently across the Christian polities of the Iberian Peninsula. It also provides a coherent and comparative starting point from which each of the smaller regional analyses develop. These move around the peninsula, taking in the Balearics. There are undoubtedly different divisions which could have been made and political implications to the ones chosen and their naming, visible in the lengthy justification for the use of Catalonia-Aragon as

¹ P. Grierson and M. Blackburn *Medieval European Coinage, volume 1: The Early Middle Ages (5th-10th Centuries)*, Cambridge: Cambridge University Press, 1986; P. Grierson and L. Travaini *Medieval European Coinage, volume 14: Italy III, South Italy, Sicily, Sardinia*, Cambridge: Cambridge University Press (1998).

a category (p. xxvii-xxviii). This will always be the case, however: the ones used make sense of the historical categories of scholarship and the necessary compromises they entail are as clearly outlined as the reasons for their choice.

Each regional chapter moves chronologically reign by reign, with invaluable cross-referencing to the plates and sylloge catalogue. Even in a volume of this size, each of these sections could have been enhanced by more numerous maps (there are only seven in the entire volume), but the combination of historical narrative and numismatic analysis is engaging and generally easy to follow. The authors deploy their combined knowledge of the documentary and monetary history of the peninsula to create memorable characterisations and vignettes, which are crucial to the readability of a mainly political narrative dominated by dynasties fully invested in recycling a very limited number of personal names.²

The greatest weakness of the arrangement by reign is perhaps a tendency towards an implicit organising principle of matching coins and kings. Where attributions are uncertain the logic that for each possible issuer there must be a type is tempting. Thus, to take the example of the transitional coins of Barcelona, five different coin types have been identified, which were probably issued between the late ninth and early eleventh centuries. One carries a name, and seems confidently attributable to Ramon Borrell (r. 992-1018), at the end of this period. The suggested conclusion is that the five types correspond to five historical periods of minting - two bishops, and three counts in succession (p. 79). Though convenient and appealingly complete, such a solution is not supported by the surviving (and extremely scant) evidence.³ There is no reason to suppose that each king or bishop should only have issued a single type. It is entirely possible that two or more of these coin types were issued by a single count or bishop and that others either did not issue coins or that no examples have survived or been identified. The total numbers of these transitional issues are, in any case, extremely small.

Closely related to the issue of wanting complete lists of attributions is a visible effort to provide a definitive synthesis of current scholarship, even at the cost of offering an answer when no answer is possible. For example, it is claimed that coins of the claimant to the throne of Castile, the Infante John, 1295-1301 (pp. 329-331) should be identified with a rare type (for a long time known only from one example). The type had previously been attributed to Ferdinand IV, with whom John was in competition, and the re-attribution hangs mainly on whether a single letter should be read as I or F. Given the style of lettering in use and the quality of striking this is, at best, a judgement call, and not one which this reviewer feels can be determined from the images offered in *MEC* 6. The attribution is justified, however, on the basis of a reading of documentary evidence which is frankly perplexing. The *Crónica of Ferdinand IV* contains a reference to the minting activities of the Infante John. This states that he and two other claimants to the Castilian throne,

agreed to make coinage in the name and sign of King Ferdinand that should be worth only the fifth part of his. And in this way they forged the coinage of King Ferdinand...and with

² As the authors point out on p. 89, as a particularly egregious example, 'in [Empúries] there occurred an almost perfect alternation between counts named Hugh and others named Ponç Hugh...' Elsewhere the plethora of Ferdinands and Alfonsos can seem equally bewildering.

³ See J. Jarrett, 'Currency change in pre-millennial Catalonia: coinage, counts and economics', *Numismatic Chronicle* 159 (2009), 217-43, a article cited but disregarded by the authors.

the coinage that they minted in those places they confounded all the good coinage of King Ferdinand.

This seems fairly unambiguous: the coins issued were in the name of Ferdinand IV, and the previous section of *MEC* 6 on Ferdinand IV (pp. 321-4) demonstrated the acute difficulties this king faced as a result of the low purity of his coinage. It therefore seems reasonable to take the source, whatever the political persuasions of the *Crónica*, at face value. If the challengers had minted low-quality coinage in the name of Ferdinand IV, this would explain the numismatic evidence presented in the previous chapter on Ferdinand IV and the absence of coins clearly attributable to the Infante John. The authors cite the long struggle of Ferdinand IV to maintain his coinage at a massive over-valuation, before finally reducing its nominal value, and it is entirely possible that Ferdinand had his own difficulties maintaining quality coinage, in addition to any efforts by his rivals to undermine him. Instead, however, in order to find a solution which finally identifies the coins of the Infante, and in the process find somewhere to put a rare type, it is argued that '[w]hat this passage of the *Crónica* does undoubtedly show... is that the pretenders Alfonso de la Cerda and the Infante John both issued coinage', thereby attempting to make this passage justify precisely the opposite of what it claims - the existence of coinage in the name of John. The authors could here have followed their own sound advice (p. 237) that '[t]he correct procedure is therefore not to try to impose interpretations without some proper basis, and above all not to contradict the evidence of the coins with over-ingenious interpretations'.

In addition to a desire to offer a definitive, and therefore complete, coin list the analysis also at times shows a desire to present full synthesis of previous interpretations, even when these deserve no such endorsement. The *pepiones* of Castile are a case in point (pp. 285-286). The discussion deals with 'one of the most common Castilian coins', offering an attribution on the basis of hoards and overstrikes which seems convincing and coherent, to the effect that the *pepiones* represent an immobilised type issued between the reigns of Alfonso VIII and Alfonso X (r. 1158-1215 and 1252-84 respectively), rather than under Alfonso I of Aragon ('the Battler'), as had previously been argued. It then rehearses an alternative argument leading to the same conclusion, which seems both superfluous and damaging to the numismatic credibility of the case. A bizarre combination of etymological and iconographic analysis hinges upon the term '*pepiones*', deriving from the term *pipo*, or child. While the etymology is not disputed, no indication is given that the connection between the name and the coins is ever explained in contemporary sources. We do not know why users chose to call these coins 'children'. The authors assume it is based on the age of the issuing king, and then seek to confirm this iconographically. The portrait, it is argued, has a 'clear likeness' (with allowances made for the 'inevitable' degeneration of an immobilised type) to another type issued during the minority of Alfonso VIII, on which the king appeared, supposedly depicted as a boy

A response to this suggestion on its own terms would be that the portraits on the 'prototype' and 'immobilised copy' in fact, from the images made available for comparison in the sylloge, face in opposite directions and look stylistically similar to a range of other uncrowned portraits from throughout the corpus, including, for example, those of Sancho Ramirez I of Catalonia-Aragon (r. 1063-94) - an adult king, ruling a different kingdom a hundred years earlier. An alternative response, however, is that looking for 'clear likeness' in portraits on coins of this size, quality of striking and in a numismatic environment which clearly had no concern with naturalistic portraiture, then attempting to extrapolate from these images the reaction of a contemporary public to them (in this instance, calling them '*pepiones*' because of the supposedly child-like nature of the

bust) is absurd and unbecoming of what is otherwise a perfectly good numismatic conclusion. Comprehensive coverage should not necessarily require the recapitulation of everything ever written about a coin type or series.

Finally, the balance of material in the regional survey chapters runs the risk of indulging the research interests of the authorial group. The chapter on Castile-León, for example, is 224 pages long, in comparison to the chapters on other regions, which range from 10-66 pages each. This in part reflects a real density of evidence and the fact that no previous study has brought together the entire coinage history of Castile-León, while the other regions represent substantially the English-language presentation of syntheses available elsewhere, often by the authors themselves. At times, however, the Castile-León chapter nonetheless feels unduly intricate and dominant in the volume.

Despite these criticisms, the regional survey is a strong backbone to the book, supported by an extensive range of useful appendices. Appendix 1 offers a list of hoards and single finds in the Iberian Peninsula. These are arranged by kingdom, then categorised by individual and hoard, each subdivided into the three chronological periods (see below) highlighted in the second, synthetic chapter of the volume. This is an invaluable resource, especially since each entry is provided with relevant bibliographical references. The first appendix retains the classification of individual and hoard finds, but also a third category, of 'cumulative finds' (referred to elsewhere in the volume, e. g. p. 20, as 'cumulative hoards'), which is derived from Grierson's early work on numismatic methodology.⁴ It is not a category which has gained much traction elsewhere, unlike the fundamental distinction between single and hoard finds, and this volume demonstrates why. 'Cumulative find/hoard' is an inherently imprecise category: coins which came from the same place (the same field? The same square metre? The same village?) but which do not show evidence of having been deposited together. It is unclear what the parameters for determining such a find are, and what the further requirements of such finds would have to be to extrapolate historical meaning from them. Many coins found in the same field, for example, *might* indicate a concentrated area of market activity or an army encampment, but in either case would require further archaeological or textual support for such a conclusion. The effort made to fit this group into the appendix demonstrates its equally limited use as an organisational label. In order to integrate 'cumulative hoards/finds' into the appendix the authors treat the coins as individual finds, listing each coin chronologically by regnal date of minting, and as hoards. Hoards in the appendix are arranged chronologically by *terminus post quem* of deposition, so cumulative finds, which can span very large periods, are in turn sub-divided into groups that fit into the broader chronological phases that hoard finds are sorted into. This introduces repetition and confusion into the list with no clear interpretative advantage.

Constructing a list such as Appendix 1 out of a combination of museum collections, sales data and bibliographic records of discoveries required inevitable compromises, which are explained in principle at the beginning of the appendix. It would have been helpful to have provided some indication of where they occur in practice. The decision was made, for example, to assign the arbitrary sum of 2 to published references to 'some coins' where no number can now be recovered, 200 to 'some hundreds of coins', or similar formulations, 2000 to 'thousands of coins', etc. This solution enables the incorporation of partially recorded finds, and allows quantitative comparison. It

⁴ P. Grierson, 'Numismatics' in J. M. Powell (ed.) *Medieval studies: an introduction*, New York: Syracuse University Press, 1992, 2nd ed., pp. 114-61, p. 118

would have been helpful, however, to indicate by a star or other mark when '2/200 coins' in the list actually represents a record of 2 or 200 finds, or the numerical rendering of more vague terms.

Appendix 2 lists the mints of the Iberian peninsula in alphabetical order, with useful summaries of activity and references. Appendix 3 offers a similar treatment of 'heraldry', which is equally useful though it is less clear how it helps to support this volume rather than scholarship in general. As the introduction to the appendix notes, it is now increasingly clear that heraldry did not emerge as a coherent visual language until the thirteenth century, making it largely inapplicable to most of the coins covered by this book. Furthermore, many of the entries, for example, on colours, seem in any case unsuited to a book about coin design. This is a resource which will hopefully be of value to studies covering a wide range of medieval subjects, provided that they think to look in a numismatic publication for it.

Appendix 4 is best dealt with shortly in a consideration of the synthetic interpretative aims of the study. Appendix 5, mentioned above, follows other *MEC* volumes in providing a prosopographical overview of the historiographical landscape of the region of study, in the form of mini-biographies of the numismatists of the Iberian Peninsula, arranged chronologically. This serves to highlight the almost exclusive role of scholars from within the peninsula within the study of its coinage, thereby underlining the need for a volume such as *MEC* 6, but above all, it conveys something of the very human side of scholarship, an activity which as it is presented publicly can sometimes seem both dryly detached from the human, and structurally objective in its aims and outcomes. A biographical overview of scholarship, on the other hand, giving, especially for the major nineteenth-century figures, the academic fathers and grandfathers of the book's authors, details of wider life and background, including employment, family and other interests, embeds the research in personal values, ambitions and interests which make clear the indissolubility of present research and the people who created its context.

The bibliography, catalogue and indices form the remainder of the volume. The merits of the bibliography have already been mentioned. Reference to other forthcoming *MEC* volumes in places looks overly optimistic, given the emergence rate of these publications and the fact that some listed (notably 16 and 17) did not appear to have acquired a named commissioned author at the time *MEC* 6 went to press, but with its hefty price tag and usefulness it is to be hoped that *MEC* 6 will, indeed, provide a lasting resource still current and when these volumes do eventually emerge.

The catalogue provides an overview of provenance, including the background of the main collections which made up the Fitzwilliam Museum holdings and any other major collections consulted. This is followed by a sylloge which is easy to use and features superb quality, actual-size images. The decision to image the coins at actual size, while clearly the right choice for a volume so aimed and constructed, and which allows easy and useful comparison of the visual sweep of Iberian coinage, at times makes it difficult to check fine details cited in the text, and this could have been combatted by including a greater number of enlargements in the text to facilitate discussion. Overall, *MEC* 6 is presented well, with remarkably few typographical errors for such a large and complex multi-author work. The index of coin inscriptions and the general index are helpfully constructed. It would have been useful for there to have been a consistent policy on translation.

Some, especially longer quotations in Latin or vernacular languages of the Iberian Peninsula are translated, but by no means all.⁵

The regional survey, catalogue and appendices would have amounted to a substantial volume of over 800 pages, which would have been of lasting value to anybody interested in coinage of the Iberian Peninsula, its sub-divisions, or in another body of material to compare with other coinages of the Middle Ages. The front matter further emphasises the difficulties of this compilation feat. The volume makes an effort to balance a variety of languages (in particular, Castilian, Catalan and Portuguese are given full equality throughout) and acknowledges the messy overlap between these languages and polities in which they were spoken (pp. xxvi-xxviii). The naming and numbering of monarchs posed issues of regional diversity and recombination as kingdoms combined, invaded and negotiated (pp. xxviii-xxix).

The remaining 65 pages of the volume, however, take a step further, and one that is only made possible by the great breadth of expertise brought together by the three authors. As Balaguer and Crusafont are keen to point out in the acknowledgements, the vision of the volume grew out of Philip Grierson's almost unparalleled involvement with virtually every coinage of the medieval Mediterranean. They build on this foundation to produce a historical introduction, a chapter drawing out common themes spanning the entire volume and a background to the Muslim coinages of the Iberian peninsula.

The first of these chapters is split into 'essential characteristics' of the historical context and an overview of the Christian coinage of the peninsula. Above all, the historical context seeks to emphasise the extent of plurality, and indeed, conflict, between the various Christian states of the medieval Iberian peninsula, and the co-existence of this situation with a constant Muslim-Christian dichotomy. While this was antagonistic at the political level, the point is also made that both situations shaped the monetary and economic history of the region. The separation of the peninsula into various fractious states is pointed out even for the Visigothic period (pp. 2-4). The largest single fault line is considered to be that between Muslims and Christians. Despite their contentious relationship with one another, it is pointed out that all of the states shared a common context between a Muslim state and the rest of Christian Europe, along with an increasingly clear ideology of conquest, and that this is expressed in their coinage, for example in a default reliance on the billon standard currency of Europe, though with some integration of Muslim types or weights (pp. 47-53). Nevertheless, common developments, changes and processes, while discernible, did not take place at the same time, last for the same duration or necessarily emerge from exactly the same causes in each of the different polities. The discussion entitled 'Historical evolution' and this introductory chapter in general is not entirely clear about whether it is supposed to be tackling coinage or history more generally. It opens with the comment that the earliest coinage has been extensively dealt with in *MEC* 1 and then offers an extremely abbreviated historical narrative with little connection to coinage but, apart from a paucity of maps to support the narrative, is useful.

Chapter Two provides the real intellectual meat, however. How does one bring together coinage systems of an entire region? What are the appropriate terms of comparison? What are the

⁵ For example, two short texts in Castilian and Catalan on p. 48 are not translated, but are paraphrased in the preceding description. This is also the case for a Latin text on p. 213. Text in Latin on p. 248 is neither translated nor offered as a detailed paraphrase; its meaning must be inferred from context. The same is true of a Latin text on p. 274.

underpinning methodologies of such a comparison? There are various ways in which this could have been approached, and the authors are mostly clear about their own aims and methods. In particular, they use contact and mutual influence as their basis for comparison. Chapter Two takes up the thread of the Introduction in emphasising diversity, but it was a diversity, they argue, which was nonetheless internally coherent. The scope of the volume is, in practice, determined in part by the wider publication agenda of the Fitzwilliam Museum. The structure of the *MEC* series is regional, and the Islamic coins are to be published separately. This makes the Iberian Peninsula on the face of it a peculiar unit of analysis, lacking as it is, the regions under Muslim control. The authors, however, have used these constraints as an opportunity to think about what did make the Christian polities of the Iberian Peninsula into an interpretative unit. Their conclusion is that throughout the period under study, even though coinage systems were determined by internal political and economic agenda, circulation of coinage crossed political boundaries and issues of design and composition were always conceived with reference to those of neighbouring regions. A useful overview of the Islamic coinages of al-Andalus provides enough context to understand this point of intersection, but the case is made strongly that it was a shared Christian monetary tradition, which developed from parallel Carolingian (Catalonia-Aragon) and indigenous (Navarre) traditions into a shared dependence on billon coinage with a thin layer of gold coming and going on top and occasional copper-alloy issues below.

Having determined that circulation is the thing that constitutes the basis for comparison, or the unitary structure of the volume, Chapter 2 explores patterns in circulation, divided into circulation of locally produced coins, general circulation, hoard data and influence overseas. These foci of analysis are in turn treated chronologically, drawing out three key periods: 1) from the beginning of regular minting to the thirteenth century, during which time, the authors argue, the highest value coinage from which local production took its cue came from al-Andalus; 2) from the mid-thirteenth to mid-fourteenth century, when circulation was mostly in the form of billon deniers in all kingdoms and 3) from the middle of the fourteenth century to the first quarter of the sixteenth, when the various kingdoms experimented with the creation and stabilisation of high-value silver and gold coinages (pp. 23-9).

While this is an analysis which will no doubt provoke criticism and inspire others to refine and redefine its edges and parameters, it highlights the utility of describing broad and long-term trends within a disciplinary structure which necessitates close-grained, detailed work, both for promoting debate and causing scholars to incorporate a comparative perspective into their fundamental intellectual frameworks. This is highlighted by the argument that Catalonia-Aragon and Castile-León should be understood as representing two distinct modes of managing the stability of a coinage system with, in turn, wider applicability to other pre-modern monetary systems (summarised pp. 48-50). On one hand Catalonia-Aragon was characterised, the authors argue, by a strong link between royal authority to mint and regulation by a strong commercial class, which insisted that the obligation of subjects of a king to accept royal coinage, avoid forgery etc. was balanced by the king's obligation to maintain monetary stability and so enable effective trading. On the other hand they argue that in Castile-León such a commercial regulation did not develop in this period, causing coinage to fluctuate with the vicissitudes of royal policy and difficulty, and simultaneously hindering inter- and intra-regional trading structures. While no doubt such broad swathes of interpretation will be challenged in specific cases, the conclusions seem to this reviewer to provide a useful framework with which to approach other monetary systems.

While the historical interpretative methodology of such a broad comparative approach offers real food for thought to other numismatic studies, the structural element of comparison is somewhat weaker. In order to talk about and understand similarities and differences between different regions it is vital to have control over a vocabulary of categories. It matters not only that authors and readers know what a term means, but also that it means the same thing throughout. This issue is not fully resolved. One thousand years of history played out across several linguistic borders and political structures generated a wealth of different uses for shared terms, inheritances from earlier or foreign systems. The use of terms on an *ad hoc* basis to cover diverse situations was, perhaps, inevitable. The authors reflect on the various different ways in which terms such as ‘denier’ and ‘sueldo/*solidus*’ evolved, in their text, but they do not necessarily then specify the meaning being employed in each individual use-case. It is here that the glossary, provided in Appendix 4, should help, but does not always. For simply checking unfamiliar terms the glossary, like the other appendices, represents a significant effort to enable engagement with a huge breadth of scholarship and can be helpful for clarifying or reminding oneself of whether a term is a coin, a minting technique or a legal detail, or for checking whether two similar-looking words are cognate. Terms are given and cross-referenced in Castilian, Catalan, English and Portuguese.

When it comes to terms of analysis, however, the glossary becomes less helpful. To take the example of the ‘sueldo’ or *solidus*, this appears at times to have been a term of weight and at others a unit of account, in ways which cannot be considered mutually inclusive. It is used throughout the volume, usually as it is used in relevant contemporary documents, but this makes it extremely difficult to establish any kind of comparative perspective on what a sueldo denoted, or how coinages to which it is applied in the documents were similar or different. In the early period the writers consider it to have been a unit of account made ‘possible by means of fixed equivalencies of monetary values with particular goods. So in the Galician-Portuguese region, the Galician gold sueldo was equated with the value of an ox or a cow’ (p. 208). Apart from the untenable implication that a *solidus* should be considered to have had a single value, understood across society and maintained over several centuries without any corresponding physical issue, on the basis of an apparent equivalence with something as variable as an ox or a cow (a fat cow, a thin cow, an old cow, a pregnant cow?), it is here clear that a *solidus* could not correspond to any weight or purity of metal.⁶ Later, it starts to function within the text as a unit of weight or value (whether relative or absolute), as in the case on p. 285 of the value of two billion issues in relation to their gold unit of account: ‘1 gold maravedi alfonsi = 7 1/2 sueldos of burgaleses; 1 gold maravedi alfonsi = 15 sueldos of pepiones’. The authors, however, offer no schematic analysis of the different types of meaning the term could have or when and how they are applied.

The definition of a denier is even more difficult to apply comparatively throughout the volume. Multiple definitions are inevitable because of how the term was used historically, but no indication is usually given of which definition is in play whenever it is used by the authors for analytical purposes. Here the cross-referencing of all local variations on the name (dinero, diner, dinheiro, denaro, penny, pfennig) to the same master entry further obscures any regional variations which may have existed in use, since all are defined as:

⁶ For a discussion of the use of *solidus* and related terms as a ‘unit of account’ and the inherent variability of value visible in surviving records see J. Jarrett, ‘Bovo Soldare: a sacred cow of Spanish economic history re-evaluated’ in R. Naismith, M. Allen and E. Screen (eds) *Early medieval monetary history: studies in memory of Mark Blackburn*, Farnham: Ashgate, 2014, 187-204.

1. In the Carolingian period, a silver monetary denomination weighing 1.7 g., which quickly fell to 1.2 g...
2. In the early medieval period and in the Catalan counties, a silver monetary denomination originally weighing 1.2g like the Carolingian denier...
3. From the eleventh century onwards, the denier was minted in varying qualities of billon in the Catalan counties, Navarre, Castile-Leon and, from the twelfth century onwards, Portugal...
4. Unit of fineness, or silver content, with pure silver equivalent to 12 deniers.

The fourth definition, in which one denier of silver means that silver makes up 1/12 of the weight of whatever is being measured for fineness is clearly incompatible with either of the first two definitions, based on the absolute weight of a coin, or the third, which uses the term simply as a denomination name. Such wide and flexible use of a term inherited from the Carolingians underlines the general historical point of the interconnected nature of the Christian Iberian coinages but complicates more precise comparison.

Chapter Two of *MEC 6* is a component for which the book deserves to be widely read. It lays down a challenge, even if it does not always meet it perfectly, to attempt broad and comparative study which nevertheless engages with the intricate details of the systems being compared. It also exposes the wider need within numismatic and any other archaeological or historical research to develop robust methods and vocabularies for such comparison. Is it possible or even desirable to create languages of analysis which eschew the terms employed by the users of coins in favour of universal ones developed for comparability, or is it preferable to use historical terms and then find ways to represent their diversity of meaning clearly? In either case it is perhaps necessary to express in abstract terms the varied ways in which words might be used and what this tells us about relationships between categories of meaning for their users. The corpus of material presented in *MEC 6* will hopefully contribute as significantly as its synthetic chapters to developing answers to these questions.

Finally, while *MEC 6* overall makes a major contribution to the scholarship of medieval Europe and numismatics, no review could avoid drawing attention to perhaps the most persistent bugbear of the volume: the lack of full and effective references. There are simply too many statements in this book, be they points of detail, large-scale historical conclusions, or debate-altering assertions that are not accompanied by any reference at all.⁷ Ironically, the crippling effect of a failure to reference on scholarly debate is recognised by the authors, who comment of earlier studies that '[u]nfortunately some authors have not always cited their documentary sources as precisely as is desirable' (p. 184). Well said.

⁷ A few of many possible examples: p. 12 on the origins of the Maravedí in Castile and its lasting impact there; p. 167 on the use of the phrase 'having many doblers' as a term for a wealthy person in modern Majorca; p. 186 on the background to the reign of Charles III 'the Noble' of Navarre; p. 203 on 'indications that the mint at Santiago de Compostela was active before [other mints]' in the eleventh and twelfth centuries, with no reference, either to external works or elsewhere in the volume of what those indications might have been; p. 308 documentary evidence for Alfonso X issuing doblas is cited as being provided 'by the Cortes of Palencia in 131 and the Cortes at Burgos in 1515' with no reference to where the documentation of these meetings might be found.