

finds, group finds (Kollektivfunde), grave finds and hoards. Where objects other than coins were found in or with a hoard this is sometimes mentioned in the general introduction to the entry. Of all the entries one hundred thirty-one separate finds describe discoveries with just one coin, thirty-three of just two coins, and one-hundred and five contain more than three coins. There are sixty-four entries of grave finds totalling two hundred forty-seven coins, five of group finds totalling four hundred fifty-three coins, and fifteen of hoards totalling thousand nine hundred twenty-three coins. At this point in a very dull summary it may be useful to break off to qualify some of those very simple statements and so to comment on the work involved in making them. The first entry is numbered 2001, the last, 2377, so why have three hundred eighty-three entries been mentioned? There are examples of numbers with an ›a‹ or a ›b‹ added; there are also two entries listed as ›without a number‹. Therefore in order for me to be totally accurate, and in such a distinguished series anything less would be unacceptable, it is necessary to work through every entry to add on those with ›a‹ or ›b‹, or no number. Any critic will object that I have not followed my own principles because I have vaguely referred to ›well over six thousand seven hundred eighty-three coins‹. Why such an exact number qualified by a totally inexact phrase? This brings out the twenty-five (at least) entries in which it is made quite clear that what has been described is not an account of the full find, for other coins are known to exist, or to have existed, but nothing is known of them – whether number, condition, or date.

So how many ancient sites do these three hundred eighty-three entries describe? Is it one entry per site? That can easily be answered by reference to Altdorf which site takes up entries 2154 to 2188; Froitzheim can be found in entries 2033 to 2037; Jülich (area of the city) is found in entries 2217 to 2297.

Other volumes in the series have used a more detailed numbering system in which a modern place is given an entry number (2056) and individual find-spots within that modern place are listed as sub-units (2056.1, 2056.2). For perfectly good reasons it seems unlikely that the number of sites referred to can be worked out. The number of modern place names or administrative units could be counted, but there is no way of knowing whether two separate groups of coins from one place name or unit belong to one find spot, or archaeological site, or two. Exactly the same problem is of concern to those working on the interpretation of coin finds in the British Portable Antiquities Scheme where even a detailed map reference still involves an area of a square kilometre and many finders are reluctant to be that specific about their find-spots.

At this point we can return to description. The entry number (2154 etc.) refers to volume two of the coins of the region of Aachen which belongs in section six (Nordrhein-Westfalen) of the complete *Fundmünzen* series. This numbering also applies to other second volumes

Holger Komnick, Johannes Heinrichs and Bernd Päffgen, *Die Fundmünzen der römischen Zeit in Deutschland. Abteilung IV: Nordrhein-Westfalen, Band 2: Reg[ierungs]bez[irk] Aachen, [Teilband 1:] Landkreise Düren, Erkelenz, Jülich*. Publisher Philipp von Zabern, Mayence 2008. 569 pages.

This volume is one of the last of a well-known series that will be published on Roman coin finds in Germany. When its companion volumes in the last batch are in print there will be a complete record not only of coins existing in the present, but of coins found and mentioned in print in the past and now untraceable. There have been many short reviews of different volumes as they appeared but to attempt a more detailed summary to mark the completion of the project is a challenge which I think is well worth taking up.

This volume contains three hundred eighty-three entries of Roman (including Celtic and early post-Roman) coins found in parts of the area (Regierungsbezirk) of Aachen, specifically administrative districts (Landkreise) Düren, Erkelenz and Jülich. The entries list well over six thousand seven hundred eighty-three coins described as separate finds (Einzelfunde), votive

such as that for Pfalz which is the second volume of section four (Rheinland-Pfalz), so to make any reference to an entry unique the section (state, ›Land‹) number must also be quoted. Within each entry every coin has a serial number and this allows a unique and easily traceable reference number to be quoted for every coin in the corpus. Thus the single find of a larger copper coin of Gratian minted between 378 and 383 found in the area of Muldenau could be quoted as VI-2083-1. Clearly the inclusion of more than one entry »without number« causes difficulties for such precision.

The question of serial numbers, lines of text, and identical coins varies from place to place in the series. Early volumes used up a considerable amount of paper by describing the first of a group of identical coins in full and then printing each example on a separate line with marks to say the description was the same for each. The reason for using a line of print for each coin was clearly because each identical coin had different information (such as museum registration numbers) attached to it. Some later volumes economised on space, gave the serial numbers as (for example) 17–21, meaning that coins 17, 18, 19, 20 and 21 all had the same descriptions, and then gave any differences in footnotes in small type. This volume continues firmly the old tradition so that the eighteen coins of the Vindelici of type Ziegeus VD in entry 2358 (Steinstrass Celtic hoard) museum numbers 79.1348, 14 to 31 take up most of page 522.

From the point of view of quick reference or use these two slightly different systems have very small draw-backs and benefits. The old system means that when you are extracting from the lists coins of a certain type or date or mint you can ignore the serial number, run your eye down the page of description, count up the number of lines of text and so obtain a total for your chosen type. Where the new system is in use you have to notice the fact and take account of the small groups of identical coins as your eye moves, counting, down the page. An alternative would, of course, be to note the first and last serial numbers of the chosen type and do a quick subtraction sum. Grouped serial numbers on the other hand definitely save space. The important point at issue here is the fact that the volumes are firm statements of established fact and never stray into the least path of interpretation even to the extent of basic summaries. Individual coins are seen as facts, summaries of assemblages are presumably seen as forbidden interpretation.

Where it has been possible each serial number identifies its coin by a standard work of reference – most often Roman Imperial Coinage (RIC). No one can possibly deny that this is the right thing to do, and now that the whole series of RIC is available it is the right reference to use. Yet the life of the *Fundmünzen* spans the publication of RIC volumes VI, VII, VIII and X so that the early books referred back to Henry Cohen (*Description historique des monnaies frappées sous l'Empire Romain* [Paris 1880]) and other problematic

works. The main problem with Cohen now is not so much occasional unreliability and active imagination, but the simple fact that most libraries have removed it from the shelves so that it is no longer available. It is true that it has been reprinted, but few librarians can be persuaded to invest in a new copy of a publication the old copy of which was thrown out years ago.

This gives the numismatist who wants to compare the coin finds in, say, different areas of the city of Trier great difficulty for the volume on the finds from the Altbachtal was assembled before the late volumes of RIC and even before Late Roman Bronze Coinage (R. A. G. Carson / P. V. Hill / J. P. C. Kent [London 1960]) was in common use. Clearly it is impossible to do the work all over again so what is needed is a web site which gives a concordance for Cohen and RIC so that all workers may make their own ›translations‹ with only a short connection to the web. Mention of the web must involve great regret that the attempts that have been made to produce a digital form of the *Fundmünzen*, which could be consulted on the web, have so far failed; we must hope for success sometime in the future. But this cannot be taken as a criticism of the work under discussion because the lifetime of the *Fundmünzen* has seen computers shrink from machines filling air-conditioned rooms accessible only by highly trained experts to lap-tops for all.

Two interesting questions remain to be considered. What do the coins found represent, and what points can a summary of them in this volume lead to? The answer to the first question seems obvious. The coins found do not represent anything other than themselves, they are the coins found, as the title of the series has always proclaimed. But are they a random or representative sample of all the coins that could possibly have been found? One way of considering this would be to look at the coins of the precious metals, good silver and gold, of the ›long‹ fourth century (circa 294 the reform of Diocletian to circa 415 after the fall of Jovinus). The totals, with all the uncertainties mentioned above, are about five gold coins and five of good silver. Is this what might be expected? Judging from material gathered from excavations in Britain a total of about four thousand separate coins found might produce between three and five good silver coins of the fourth century. On this basis the coin finds are ›normal‹. The gold finds, compared with the evidence of excavations in Britain are very much abnormal, for excavations in Britain and, a first quick survey suggests, in the rest of Europe, rarely produce gold coins. Yet work in progress by Roger Bland and Xavier Loriot (personal communication) shows that several hundreds of gold coins have been found in Britain. How should ›normality‹ of coin finds be defined?

This short summary may sound incoherent yet when argued out in full it highlights a number of aspects of coin finds which have to date hardly been considered. The coins published in this volume give the chance of interpreting this collection of information

from a limited area of Germany with anywhere else in the Roman Empire. But first the rules of comparison have to be worked out. One obvious question involves geographical areas, and here it is important to note that the idea of national corpora has spread widely to many areas of Europe. Though Wales is well served by the excellent work of Peter Guest and Nick Wells (*Iron Age and Roman coins from Wales. Collection Moneta 66* [Wetteren 2007]) research in England, Scotland and France, for example, has been less systematic. Is the comparison used above between coins from a personal survey of Britain and coins from Germany valid? Should we expect coins in different areas to show uniform representation of metals, denominations, chronological periods and mint origin? The answer at present is that we do not know. Regional differences have been suspected, but, so far, seldom if ever demonstrated.

But the *Fundmünzen* shows us the way in which the problem can be investigated, for a first step would be to summarise the information in the volumes so that the South (Bavaria) may be compared with the North (Lower Saxony). Those states (Länder) are far enough apart not only to provide a good testing ground for a demonstration of geographic and ancient political regionality in coin finds but also to provide similarities and differences which can be followed up elsewhere. The project is reasonable in its demands on time and knowledge. I was able to produce a rough spreadsheet of all the information in this volume in about ten hours. It could probably be checked for accuracy in at most another ten hours. One worker could reduce two volumes of the series in a forty hour week. The result could not only be used for detailed research and comparison, but could also act as a general guide to the contents of each book. As an example, such summaries would demonstrate that this book only lists about nine coins to be considered as regular or official, struck in the period 275 to 294, so students of this period would clearly find more material in other volumes.

Or would they? Are the low numbers of this period (Probus, Carus, Diocletian before the reform) in this volume simply a reflection of reduced production in the mints? Very large hoards of this period make it quite clear that to the contrary new mints were being established and coin production was booming. Is the low representation in this group of finds a statement that such radiate coins occur mainly as hoards rather than separate finds? A very sketchy and out of date summary of finds in western Europe (R. Reece, *Britannia 4*, 1973, 227–251) shows that such coins are very common in the Mediterranean area, Italy and the south of France. So why are so few of them being found in the area round Aachen (and, it can confidently be said, in Britain)?

At last the discussion has widened out from an enthusiast's concentration on small round bits of metal which most students of the ancient world regard as useful for little more than providing a portrait of a named emperor or empress, or an obscure deity, to a problem which even ancient historians might care to consider.

What is the area afflicted by this dearth of new coinage? Once this has been established what historical model can be constructed to explain this separation from smooth coin supply? Do the area and date involved connect up with other information from written sources or epigraphy to amplify any models constructed? How does this episode connect up with the foregoing Gallic Empire and the following Tetrarchy?

This discussion does highlight one trap which the *Fundmünzen* sets for the unwary student. Only about nine coins in the lists are given dates between 275 and 294. A student without any knowledge of coins might well conclude that this represents the coinage in circulation at the time and start to construct a model in which all official Roman administration broke down after the fall of the Gallic Empire only to be re-established somewhere before 300. This would be strongly contested by anyone with numismatic knowledge because so many of the coins in the volume are described as »Tetricus 270–4 barb« – meaning a coin purporting to be of the emperor Tetricus, who ruled from 270 to 274, but in fact a barbarous or unofficial copy. Since Tetricus was only retired in 274 those copies belong to later years and provide the basic small change for the apparently coinless period. The distribution of these Barbarous Radiates seems to be the mirror image of the distribution of the regular coins of the period 275 to 294, which, if true, makes good sense. Is their distribution within the borders of modern Germany, from the foothills of the Alps to the northern coastal plain uniform? A few days with a complete set of the *Fundmünzen* will help us. It cannot give us a final answer because the recognition of a ›barbarous‹ radiate varies from person to person. The matter could only be settled by the production of an electronic data base which included photographs of the suspect coins so that all researchers could make up their own minds.

The completion of the *Fundmünzen* has only been achieved through the hard, detailed, and exact work of a group of scholars who were working to one end – the gathering and publishing of information on Roman coin finds in Germany and its publication. The work has given birth to a companion series, *Studien zu Fundmünzen der Antike*, and those volumes have explored different aspects and problems of coin studies. But apart from the excellent work of Frank Berger (*Untersuchungen zu römerzeitlichen Münzfunden in Nordwestdeutschland* [Berlin 1992]) the problem of what to do with the *Fundmünzen* has not been tackled. Indeed, it has not been seen as a problem. A corpus is a corpus, and the aim is to make it as accurate and complete as possible. What others may do with, or to, the corpus when it was complete was not the business in hand. If that subject had reared its head during work on the project it would have led to a large amount of wasted time with people sitting at desks thinking beautiful thoughts about coin-finds instead of doing their job. This means that a superb corpus has been produced, but there are few people who are trained to use it for re-

search. Fundmünzen therefore differs from the great corpora of ancient inscriptions because those were, and are, compiled for use by people who are trained in epigraphy. Coins need to catch up.

Use of the Fundmünzen will not just happen because it is there, people need to be trained to use the information provided by coin finds. This cannot be done in two lectures on ›sources for ancient history‹ or ›archaeological material‹ because those do not involve students in doing anything – they require only an ability to absorb the information given, record it, and regurgitate it if necessary in an examination. Ability to use the material, or to take an interest in it can only be provoked by a requirement to sit down with a volume of the Fundmünzen, extract some specified information, and then do something original with it. And that can only be done when the student in question has a basic knowledge of the Roman coinage and how it behaves in use and loss.

So I celebrate the whole project and the manner in which it has been executed, and I give my strongest congratulations to those who have founded and directed it and the many scholars who have worked on it. Everyone who approaches the volumes to gain information for projects on which they are engaged will have specific requirements. They will all feel a passing annoyance because the corpus is not organised in the way that would immediately give them the information they want. But this is the whole virtue of the corpus – that it is not tailored to the needs of one type of researcher. All possible information is there in such a form that with a little effort all may find what they need. The challenge now is to educate all students of the Roman past to use this superb source of information.

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