**Paul T. Craddock:** *Scientific Investigation of Copies, Fakes and Forgeries.* Elsevier, Amsterdam 2009. ISBN 978-0-7506-4205-7, 628 pp.

In 2009 the prestigious editor Butterworth-Heinemann/ Elsevier published an impressive volume, written by the well-known scholar Paul Craddock, an expert in ancient materials, who, from the beginning of his very long career and until his retirements in 2007 has been one of the supporting pillars of the prestigious Research Laboratory (which changed its name several times, and also recently) of the British Museum.

The book has over 600 pages, richly illustrated in b/w and colour photographs, and already its impressive bibliography (from page 525 to page 594) can give an idea of the vast amount of topics discussed in the volume. As stated in the Foreword, the book "is intended as a comprehensive guide to the technical and scientific study of a wide range of antiquities and artistic creations", and it illustrates various methods employed in the scientific and technical studies on authentication.

The work clarifies many important issues, beginning with the differences between forgeries, fakes, pastiches and imitations. A short, but important section is dedicated to the legal aspects of authentication studies and the risks they can involve. The author also discusses the questions of disclosure of the methods and the publication of details of such studies, which might suggest to forgers more ways and treatments to create an antique appearance. The conclusion is that the "increased range of knowledge on technology is more useful in detecting forgeries than facilitating better ones. One does not fight fraud with ignorance." I believe we fully agree.

The topics are distributed over 20 chapters, dedicated to different problems. In the first four the sources, approaches and analytical methods, as well as the production of three-dimensional copies are discussed in great detail. The topics of chapters 5 and 6 are physical dating techniques: radiocarbon dating, thermoluminescence and dendrochronology, with their principles and related problems.

Then the authentication of different materials and the questions posed in the different cases are addressed. Two chapters are dedicated to metals, their composition and production and working techniques, with special attention to coins. Ceramics, with many case studies, are discussed in chapter 9, glass and enamels in chapter 10, stone (even including prehistoric flints) and sculpture in chapter 11. The chapter on paintings contains a table of pigments of different colours with date of discovery, date of industrial production, where they are described and by which artists they were used, and also sections on methods of analysis, examinations of different kinds; and, finally, special topics, such as varnishes, craquelure and the work of the famous forger Han van Meegeren.

Chapter 13 is dedicated to paper (but also papyrus), prints and documents, with details on watermarks and filigranology, ageing, ink, watercolours etc., with detailed photos and micrographs of forged pieces.

Chapter 14 is dedicated to the patination of copper, chapter 15 to gold and silver and chapter 16 to gemstones and jade. Chapters 17 and 18 concern organic materials,

both natural (ivory, antler, bone, horn, leather, wax, amber, lacquer, wood etc) and synthetic (plastics and their identification by different methods), and their "substitutes". Chapter 19<sup>th</sup> is dedicated to famous frauds, and in particular to Charles Dawson.

Chapter 20 deals with conservation and restoration problems, how much attractive appearance and visibility of repair conflict with authenticity. Many cases in which conservation goes "into the realms of deception" and "disguises the true extent of damage and replacement" are reported. Several case studies illustrate the many possibilities of concealment, cleaning and how de-restoration can be carried out.

The volume is excellent, clear and pleasant to read, and no existing publications are comparably useful, rich and complete. It will become a standard work and a cornerstone of the research and scientific examination of antiquities and works of art.

However, objectively, there are some things which should have been done better.

First of all, in the text there are myriads of small errors, oversights and wrong spellings, which an attentive reader – possibly familiar with the vocabulary, the bibliography and the world of art and archaeology – would have readily spotted.

As an example, on page 403, in just a few lines of the section on pearl simulants, there are three mistakes: the fish *Alburnus lucidus* is called "Albunus lucidus", the component from its scales, used for making pearl imitations, is mentioned as "guarnine" instead of guanine, and the title of the 15<sup>th</sup> century treatise *Segreti per Colori*, with several recipes for making pearls from fish scales, is given as "Segretti per Colori". A pity.

Secondly, the index at the end of the volume shows an extremely peculiar structure (probably not the author's fault), with entries like "Amiens Chalice and Slade Gup (sic)", "Combat of nude men, Pollajuolo, after cast proved to be 15<sup>th</sup> c.", "Misrepresentation" (without specifying that it is here a legal term) and "Omnipresent coal" (?!). But a term like "brass" can be found only by looking under "Copper alloys". The famous Russian forger Botkin is found under "Enamel fakes and forgeries", while under "The Etruscan terracottas" there is also the entry "major doubts began to emerge".

Despite these (unfortunate) lapses, this remains an excellent book, which will be of valuable assistance to all engaged in the professions of art history/conservation.

Alessandra GIUMLIA-MAIR

**Daniela Sedran** (ed.): *Il peso nell'antichità. Pesi e misure nel Friuli romano*, catalogo della mostra (San Vito al Tagliamento, Museo Civico "Federico De Rocco", 26 settembre 2009 –15 febbraio 2010). San Vito al Tagliamento 2009, 159 ps.

L'agile volume a cura di Daniela Sedran, inserito nella collana "Quaderni Sanvitesi" e nato come catalogo della mostra omonima, suggella anche il primo ventennio di attività della Società Friulana di Archeologia, celebrando