

INTRODUCTION

Unlike most metrological systems throughout Western Europe, the Italian developed during the Middle Ages and Early Modern era without any reference to a commonly accepted set of national-ethnic standards. In England the Winchester, and later the London, standards served as prototypes for bringing all of the thousands of local units into eventual alignment. In France the weights and measures of Paris occupied this position. But Italy, with its many kingdoms, duchies, communes, and the like, was never able to attain any level of metrological standardization outside the confines of severely restricted, small, independent, political jurisdictions. Generally not until the middle of the nineteenth century, and practically not until unification was achieved in 1871, were Italian weights and measures given a totally national character. And it was the metric system, and not a conglomerate of units from the old, that finally accomplished the task. This book presents a quantitative compilation, synthesis, and analysis of the principal pre-metric weights and measures employed throughout Italy and in those areas controlled or influenced by Italy from the Later Middle Ages to the age of metrification in the later nineteenth century.

The tables that follow will aid the reader in using the dictionary. Table 1 is an alphabetic listing of all

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the abbreviations used throughout the work. Among weights and measures only common metric, United Kingdom (UK), and United States (US) customary names have been abbreviated -- to do likewise with the principal units of the premetric Italian system would only produce confusion and unnecessary cross-reference work for the reader. Table 2 lists the principal multiplication factors, prefixes, symbols, and units of the metric or SI system employed throughout the world. Each unit is defined in terms of its most common submultiples, and is converted into UK imperial and US customary equivalents. This table will enable the reader to make further correlations between metric and nonmetric units that are beyond the scope of this book. Table 3 defines all of the terms used to describe the weights and measures in the entries, while Table 4 explains the meaning of important dates found in the entries. Finally, Table 5 consists of a list of regions and a list of cities cited in the text. This table provides the province and region in which each city (generic for town, hamlet, etc.) is located; they are arranged alphabetically by the spellings most commonly accepted today with the exception of those beginning with "San," "Santa," or "Santo" -- these have been abbreviated to "S." as a space-saving device.

The dictionary uses a number of textual devices to help the reader gain rapid and accurate access to the material. All entry headings are in capital letters, and a dash separates

them from their variant spellings (e.g., ANFORA -- 1 L amfora; 1-7 L anfora; 1-9 L amphora; 4 amfora ...). The variants are arranged according to the centuries in which they were most commonly used; the numbers preceding them identify the centuries:

1=pre-12th century	6=16th century
2=12th century	7=17th century
3=13th century	8=18th century
4=14th century	9=19th and 20th centuries
5=15th century	?=no century given in source

If there is no citation for a certain variant spelling within an entry, its source reference is indicated in parentheses (e.g., BALLETTA -- 4 baleto (Edler 1); 5-9 balletta; 9 balletto (Edler 1) ...). The abbreviation L preceding a variant indicates that that variant was a Latin form used in scholarly treatises in Italy.

The etymologies, always in square brackets, immediately follow the variant spellings and they have been compiled from the works of the following authors (arranged alphabetically by code name which refers to a corresponding title in the bibliography): Battaglia, Battisti, Gabrielli, Giacchi, Martinori, Meyer-Lübke, Palazzi, Petrocchi, Prati, Rohlf, Wagner, and Zingarelli. Cognate words having identical or similar etymologies are listed last within the brackets and are in capital letters (e.g., BALLONE ... [It ballone, large bundle of merchandise ... see BALLA, BALLETTA, BALLONCIELLO]). If

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no etymology is given, an asterisk (*) indicates that the derivation of the word is unknown.

Following the etymological comments either a general explanation for the unit is given or, if there are variations within the unit, each major variation or group of variations is discussed in a separate paragraph or subsection. Depending on the complexities of the variations, they will be arranged either by size (normally smallest to largest), by city, provincial, or regional alphabetical order, or by some other appropriate arrangement. If a local standard were identified traditionally by a particular descriptive phrase (e.g., "braccio da panno" or "catena architettonica") it will appear in the text either in quotation marks or in parentheses for every city in which it was employed. All units are explained within the Italian system and in Italian nomenclature -- equivalencies in English, French, German, Spanish, Dutch, and other systems may be gleaned from the citations. Every time the name of a unit other than the entry unit appears in the explanation it will appear in capital letters the first time it is used and readers may refer to entries for these other units to gather additional information. If a unit's measurement or description is identical to that of another more commonly known unit, the words "equivalent to" follow the etymological comments. If the unit were different by definition from another unit, but commonly associated with it due to identical physical properties or dimensions, the terms "sy-

nonymous with" or "used interchangeably with" are employed. Terms used throughout the work to refer to historical periodization conform to the commonly accepted definitions; hence, Early Middle Ages (c500 to c1000), High Middle Ages (c1000 to c1250), Later Middle Ages (c1250 to c1500), Early Modern period (c1500 to c1800), and Modern period (c1800 to the present). Whenever possible, metric equivalents are included in parentheses; the equivalents have been carried out to two decimal places for the approximate units and usually to three decimal places for the exact.

After each major metrological variation or group of variations there are citations from the appropriate sources:

The date at the beginning of these citations always represents the year in which the manuscript or book or other source was written and never the publication date.

The code name and numbers after the date identify the source and page reference (e.g., 1307 Veneziane III. 92: Quodlibet bonum barille de medio bigoncio ...).

The code name always refers to a corresponding title in the bibliography.

A Roman numeral following the code name, but preceding the period before the page number, supplies the volume (e.g., 1499 Sanuto II. 872).

An Arabic number in such a position refers to one of several books listed under that particular code name

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in the bibliography (e.g., Tavole 1. 618 refers to the first book under the code name Tavole).

The number after the period is always the page number.

If there is no volume number and the bibliographical code name has only one title listed under it, the page number immediately follows the source reference (e.g., Martini 747).

It should be noted that in the illustrative quotations all manuscript abbreviations have been expanded and underlined (e.g., "centū" or "quinq̄" is changed to "centum" or "quinque"). Also, letters superscripted in the source have been placed on the same line as the rest of the word (e.g., "43^m,186" becomes "43^m,186"), except for the adjectival form of certain French and Italian numbers. Similarly, whenever Roman numerals in manuscripts were written above another numeral (e.g., ^{xxx}M) or elevated to the right of some number (e.g., M^{xxx}), they have been placed on the text line, with brackets indicating the change. If multiplication or addition is involved, the appropriate arithmetical sign has been placed between the numbers (e.g., V^xVII=57 is changed to V [x] X [+] VII=57). Other abbreviations, such as lb. or lib. for libra or libbra, and the apothecary symbols **℥** for scrupolo, **℥** for dramma, **℥** for oncia, and **℥** for apothecary libbra, have been retained as in the original source.

The bibliography is divided into two sections. In the first are the sources that were used in the data compilations

and in the illustrative quotations. The second contains additional sources that were not cited in the text but which provide further information about Italian weights and measures and which discuss some of the problems of premetric Italian metrology. No fictional sources are included.