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## AUTOMATIC SYSTEM FOR LEXICON CONTROL OF ICONOGRAPHIC DESCRIPTION

### In the Accademia Carrara Painting Database

Matteo Panzeri  
Accademia Carrara  
Italy

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#### A question of details

We have to go back to an essay on iconography and iconology written by Erwin Panofsky in 1939 to find a complete conceptual description of the theoretical operations involved in the research of iconography (Panofsky 1939).

From the point of view of the application of computer science to art history, the modernity of this basic essay derives mainly from the formal and rigorous character of the conceptual description: according to Mario Borillo observations (1984, p.39) we can say that in the application of computer science to humanities we are faced with problems of representation (formal description) of human knowledge and with problems in processing this representation. In fact, in merely starting from a formal description of the topic, we are able to individualise the logic operations necessary for the solution of the problems and, consequentially, to develop adequate software.

In 1955 Panofsky himself, in the introduction to the first American edition of his Meaning in the Visual Arts - which included the essay on iconography and iconology - felt it important to remind the reader that all the essays of the volume testified to his respect for Flaubert's conviction that "le bon Dieu est dans le détail". Certainly the work of Panofsky is based on the singling out of the variations in the minute but meaningful details in the representations of the same subject produced in different cultural contexts. Probably that is the level of analysis that we have to reach in our formal description in order to obtain useful data processing for art history.

But the level of identification of meaningful details, which is a degree of deepness, does not correspond to the three levels proposed by Panofsky - the pre-iconographic description, the iconographic description, and the iconological interpretation - which are

conceptual levels. Each one is related to a different logic operation, each one demands a high degree of precision<sup>1</sup>.

Starting from the idea that the iconological interpretation involves knowledge operations too difficult to describe in a conceptual model, this contribution intends illustrate the hypothesis on which we are trying to develop an automatic system that is capable of surpassing the level of iconographic subject classification and of reaching the level of a (possibly) formal iconographic description.

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### **Text-image relation in information retrieval**

This contribution, particularly, in the context of a conference on multimedia, could offer some reflections on the relations between image and text or, more specifically, between art images and their textual description.

It is likely that in the future we shall have at our disposal image-recognition software able to penetrate the world of art representations. At present we are able to process art images in their digital form but, if we need to retrieve information on the subject or on the meaning of images we are forced to pass through a textual description. Automatic image recognition in art history, if possible and profitable, requires complex algorithms. If computer science can help to define algorithms, art history must offer the base of knowledge, in a formal representation, on which to instruct the software.

From this point of view any effort to produce a system of formal iconographic description exceeds its importance on information retrieval in textual form and means a step towards the future.

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### **Two objectives and the related linguistic aspects**

The textual description of images and the retrieval of information contained in the description are two important objectives of an automatic system for iconography. If we consider the lexical aspect of the two objectives a contradiction may appear.

On one hand the lexicon necessary for a good iconographic description should be rich, various and specific. In other words it should be capable of representing, together with general concepts, all the minute and meaningful details of an art image. On the other hand the efficacy of information retrieval, expressed by good ratios of recall and precision, is related to a formal documentary lexicon based on a controlled number of monosemic terms (Salton, MacGill 1983, Lancaster 1986, Trigari 1992).

If Panofsky can offer an important conceptual model for iconographic description, the lexicon for the description will come from the language used by art historians in the practice of their work. In general terms this lexicon, closely connected to images and their meanings, has a character more connotative than denotative, is strongly influenced by historical conditions and, as any other language, is in continuous evolution. Its richness in polysemy and in polyhierarchic relationships can not be reduced in a classical thesaurus. Doing this would mean the loss of specificity demanded by Panofsky and most of all the other art historians.

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1 The terminology we use refers to the 1939 edition of the essay; for the difference in concept and terminology between the two editions of 1939 and 1955 see: Previtali (1975)

The solution of the contradiction existing between the lexicon of the description and the lexicon for information retrieval is, at present, the question to be resolved.

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## **Basic references: Iconclass and the Thesaurus iconographique**

**Iconclass** (Van de Waal, 1973-1985) and the **Thesaurus iconographique** (Garnier, 1984) are the two well-known systems adopted in automatic data processing in iconography<sup>2</sup>.

Although different from each other, the first one being mainly a system for subject classification and the second one being more oriented towards the description, the two systems have some common general characteristics. They are both general purpose instruments, their field of application is said to be all occidental art from its origins to the present, their structure and hierarchical organisation should be able to accept all the representations of this universe of knowledge. Both have a top-down approach to the lexicon, both are pre-coordinated systems and their descriptors, both monoterm and multiterm, are monosemic.

We tested both systems for the compilation of the iconographic description field in our painting data base. The principal problem comes from the language, being the first one written in English and the second one in French. Almost immediately the task of translating the systems appeared enormous to us, requiring a high degree of specialisation, and being full of queries as well: the lack of an exact correspondence of meaning between the terms existing in the two languages involved revealed problems of variation in the hierarchies.

Moreover, in our work, limited to the micro-universe of the Accademia Carrara collection, those two systems, because of their general characteristics, appear oversized and, for the same reason, insufficient in the analytical description.

At present different groups are working at enriching the list of descriptors of both systems: this will certainly permit a higher level of analysis. Our interest in this operation regards the way in which new descriptors will be integrated into the old hierarchies.

Of course the two systems have a great importance to our work.

In particular we are thinking about using the "notations" of Iconclass to introduce a coded descriptor in our subject field, not in the iconographic description field. To start this project we are waiting for the results of the translation of the system presently being undertaken at the Istituto Centrale per il Catalogo e la Documentazione of Rome.

The quotidian comparison with the **Thesaurus iconographique** helps us in the choice of the descriptors as well as in the definition of the classes offering us the minimum of required pre-coordination.

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## **An inductive approach**

Starting from the lexicon of artistic literature on the paintings of the Accademia Carrara, ours is a bottom-up approach. Following an inductive logic and aided by automatic treatment of the data we are trying to post-coordinate the lexicon. The only rules we adopted in the beginning were those of the literary and user warrants as stated in

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<sup>2</sup> For a recent presentation of the two systems see Corti, 1992, pp. 237-309 (as above).

Lancaster, 1986). In other words, summarising and simplifying the propositions of Lancaster, we concluded that:

- a class could only be justified if at least one descriptor of that class exists
- a descriptor is justified for inclusion in the lexicon only if it is of interest to the user.

Regarding a more general point of view we can say that the scheme deriving from these choices is not theoretically based but is empirically derived from the literature.

Faced with the problem of polisemy we decided to include in the lexicon descriptors with more than one meaning simply relating the descriptors to the different semantic context using a hierarchical mode. So the term "savonarola" means a kind of chair in the class "casa" but indicates a person in the class "personaggio". In the data base it should be entered in these two ways:

- Casa: sedia (savonarola)
- Personaggio: Savonarola (frate).

Of course in the same semantic context we eliminate synonyms and control the near synonyms.

Using a thesaurus terminology this could mean the division of our "thesaurus" into many micro-thesauri.

At present we have a three level hierarchy (see the sample lexicon list in appendix 3). In the first one there are the context descriptors (descrittori d'ambito), now there are 18:

Architettura (architecture)	Madonna(Madonna)
Armi (arms)	Musica (music)
Casa (domestic life)	Paesaggio (landscape)
Costume (costume, fashion)	Personaggio (person)
Cultura (culture)	Religione (religion)
Fauna (fauna)	Santo (saint)
Flora (flora)	Scultura (sculpture)
Gesú (Jesus)	Società (social life)
Luogo (place)	Urbanistica (town-planning)

Identifier descriptors (identificatori) are to be found in the second level. The third level is devoted, with some exceptions, to attribute descriptors (*attributi*). The hierarchy from the first to the second level is based on a genus/species relationship, but from the second to the third level we have both genus/species and whole/part relationships.

This empirical approach has an interesting conceptual aspect. This lexicon is a taxonomic instrument which does not permit the control of iconography knowledge, but permits the control of the forms of knowledge representation in iconography.

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### **Some aspects of the Accademia Carrara cataloguing data base**

Since 1986 the Accademia Carrara Museum of Bergamo has been developing a computer aided cataloguing system for its rich collection of paintings. The model of the data is designed in such a way to accept in text form, together with identification and description

data, all the information deriving from historical sources and artistic literature. Each record includes one painting and is divided into 53 fields (the structure is shown in appendix 1). In some cases, it can reach a length of 10,000 characters (a record sample is given in appendix 2).

Further information on the cataloguing system of the Accademia can be found in Panzeri (1990), in this contribution I shall limit myself to few considerations which concern the topic of iconography more directly.

First of all it is important to point out that for the retrieval of information we use a true Information Retrieval System (IRS) and not a more common Data Retrieval (DR; for the difference between the two systems in art history applications see Signore, 1986).

So, searching in the text of the records, we are able to use all the search operators of the IRS (AND, OR, NOT, ADJ, SENT, and so on) which allow us to do analytical research in specific contexts.

Moreover, within the structure of the record, we have some fields which offer complementary information for iconographic research. They are: Scuola (school), Data (date), Soggetto (subject), Titolo (title) and Fonti letterarie (literary sources). In a fashion similar to the Thesaurus iconographique, this allows us to relate the iconographic descriptions to the historical and literary sources and to the context of production of the works of art.

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## **The iconographic description field: structure and content**

The field is logically divided into two subfields. In the first one there is a short "general description" of the image, almost free in lexicon and in syntax, concerning the nature and the disposition of the principal elements of the artistic representation. The second one, called descrizione lessicale (lexical description) contains only terms or locutions (the descriptors) organized in semantic sequences and in a three level hierarchic structure. In this subfield the software works to produce the lexicon.

Here is an example of the description regarding the painting by Alvise Vivarini Three Saints:

San Ludovico da Tolosa, San Francesco d'Assisi e un santo vescovo benedicente un devoto, in piedi, a figura intera, affiancati; sfondo con paesaggio. Costume: sopravveste (saione), borsa alla paltroniera. Flora: albero (quercia ?). Paesaggio: prato, monte, fiume (ansa), roccia, cielo (nuvola). Religione: benedizione, croce. Personaggio: ignoto (mercante). Santo: Ludovico da Tolosa (vescovo, gigli di Francia, mitra, piviale, pastorale, libro). Santo: vescovo non identificato (barba, mitra, piviale, croce, cartiglio, benedicente). Santo: Francesco d'Assisi (saio francescano, stimmate). Società: mestiere (mercante).

It is important to remember that our level of description corresponds, for the reason given in the first paragraph, to the second level of Panofsky scheme, namely iconographic description. Also for the point of view of the user we think that iconological interpretation should be left to users of the system who are specialist in iconographic studies. For the compilation of the field, the descriptors are derived from the artistic literature on the painting, selected and hierachised by comparison with an existing lexicon list produced as will be seen in the next paragraph, and entered in semantic sequence within each context following very simple punctuation rules. In particular the context descriptors are preceded by a fullstop, identifier descriptors by a colon or a comma, and attribute descriptors by a parenthesis or a comma.

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## Automatic production of the lexicon

The software we use to produce the lexicon list is rather simple. Scanning the subfield lexical description of each record it individualises the descriptors and their hierarchical level on the basis of punctuation. Then the descriptors are extracted and the repetitions are eliminated. Finally a print program presents all the descriptors divided in their hierarchies and sorted alphabetically.

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## A lexicon sample

The sample list of the lexicon shown in appendix 3 is the first page from a selection of records regarding 63 paintings of various periods (from 14th to 18th centuries), schools (of north and central Italy) and category of subjects (portrait, landscape, religious, historical, literary, secular). The full sample includes 863 descriptors.

The list probably would demand a long commentary. Before entering into some details we would like to point out that, in general, there is no conceptual homogeneity within the descriptors of the same level of hierarchy.

For example, on the first level we find together general and specific terms such as *Architettura* and *Gesù*. But this lack of homogeneity derives from the character of the studies in art history. We thought it much better to stay close to the specific art history knowledge rather than to building a logical but abstract scheme. The most important intervention we performed on the language of the literature derives from the necessity to maintain the semantic autonomy of the descriptors: some terms have been put together in location descriptors.

Entering into detail I would like to point out that attribute descriptors regard different aspects: objects attribute of a saint (an arrow for Saint Sebastian), physical aspects (long hair for Saint Mary Magdalene), attitudes (crying for Saint John the Apostle) and themes (*Vir dolorum* for Jesus or *Noli me tangere* for Saint Mary Magdalene).

Finally, it is important to remember that we are able to produce our lexicon lists on the base of a selection of records. This means that we could control the lexicon used in the description of groups of paintings selected by subject, period, school, artist, author of studies, literary sources, or any other keyword existing in the records.

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## Lexicon, thesaurus, and in the future?

Everyday, whilst enriching our iconographic descriptions we are faced with the problem of introducing new descriptors in the lexicon. For now the structure appears flexible enough but as regards the future we ask ourselves: will a three level hierarchy be sufficient? Will the augmentation of the number of context descriptors lead us to a excessively high level of redundancy?

At present our lexicon list is mainly a tool to control the form of representation of iconographic description. Actually we already use it to control the lexicon of the new entries.

In the future it will very probably become a true authority list for our data base. Certainly it is not a thesaurus: we do not have all the relationships typical of thesauri (SN, UF, BT, NT, RT, TT and so on) but, what is more, we do not respect the basic rule of monosemy of descriptors.

In fact, more than an indexing language - typical field of application of thesauri - the approach to iconography demands a formal descriptive language.

At present pre-coordinated thesauri, quite useful for a correct subject indexing, appear to be too abstract. In more general terms we are not yet convinced that a thesaurus in its classical form could be the best solution to lexical problems in iconographic description.

Appendix 1 Structure of the record in the Accademia Carrara painting database

010 DATI CODIFICATI

NDOC  
D/R  
INV24/76  
INVTEN  
SCUOLA  
SECOLO  
PERIODO  
ALT  
LARG  
CONS  
REST  
DATCOM  
DATAGG

AMBITO COMPILAZIONE

012 Autore/titolo conven.  
015 Compilatori  
017 Variazioni

AMBITO COLLOCAZIONE

020 Stato  
025 Città  
030 Luogo  
035 Ubicazione  
040 Tipo di collocazione  
045 Stato giuridico  
050 Cataloghi/inventari  
055 Storia ubicazioni

AMBITO ATTRIBUZIONE

060 Scuola  
065 Autore  
070 Anagrafe  
075 Data  
080 Altre attribuzioni

AMBITO OGGETTO

085 Tipologia  
090 Insieme  
095 Tecnica  
100 Misure  
105 Cornice  
110 Soggetto  
115 Titolo  
120 Titoli storici  
125 Iscrizioni  
130 Simboli e marchi  
135 Destinazione

AMBITO ICONOGRAFIA

140 Descrizione iconografica  
145 Fonti  
150 Relazioni  
155 Studi  
160 Elaborazioni  
165 Varianti  
170 Repliche  
175 Copie  
180 Derivazioni  
185 Riproduzioni  
190 Illustrazioni  
195 Note iconografiche

AMBITO FONTI

200 Sacre scritture  
205 Fonti letterarie  
210 Fonti storiche  
215 Eventi  
220 Referenze tematiche

AMBITO MERCATO

225 Committenza  
230 Provenienze  
233 Ingresso  
235 Valutazioni  
240 Esposizioni

AMBITO TESTIMONIANZE

250 Testimoninze

AMBITO OSSERVAZIONI LESSICALI

255 Note lessicali

AMBITO CONSERVAZIONE/RESTAURO

260 Storia degli interventi  
265 Stato di conservazione

AMBITO ARCHIVIO FOTOGRAFICO

270 Fototeca

AMBITO FONTI E BIBLIOGRAFIA

275 Voci



**Fig. 1** Antonio Vivarini, *Saint Ambrose baptises Saint Augustine*, c. 1400, wood, 40,3 x 26,5 cm. Bergamo, Accademia Carrara, n. 499.

Acknowledgements: Accademia Carrara, Bergamo



**Appendix 2** Sample record: Antonia Vivarini, *Saint Ambrose baptises Saint Augustine*, Bergamo, Accademia Carrara, n. 499. (Fig. 1)

DOCUMENTO ==>> CA000161

NDOC 00499 D/R R INV24-76 00281 INVGEN 00499 SCUOLA 141  
SECOLO 15 PERIODO 4 ALT. 0403 LARG. 0265  
CONS. 6 REST. 3 DATA C. 31/01/1989 DATA A. 18/06/1991

**AMBITO COMPILAZIONE**

Compilatori

Francesco Rossi (SN, IM). Matteo Panzeri (SN).

Variazioni

Primo aggiornamento: 19/07/1989. Revisione: 28/09/1992.

**AMBITO COLLOCAZIONE**

Stato

Italia.

Citta' Localita'

Bergamo.

Luogo

Accademia Carrara.

Ubicazione

Sala 3 (CC), vetrina, lato est.

Tipo collocazione

Appeso in vetrina.

Stato giuridico

Proprieta' Comunale. 1866, Legato Guglielmo Lochis (1866, Verbale).

Cataloghi/Inventari

1881: L19. 1924, 1967: 281. 1965: 143. 1976, 1979, 1988: 499.

Storia Ubicazioni

1870, 1881: Sala Lochis 1 (CA). 1912: Sala 17 (CC). 1924, 1930, 1934: Sala 17 (CA). 1954, 1967, 1976: Sala 1 (CA). 1982, 1985: Sala 3 (CC), vetrina. 1987: Sala 3 (CC).

**AMBITO ATTRIBUZIONE**

Scuola

Veneziana.

Autore

Vivarini Antonio.

Anagrafe

Murano, Venezia, 1425 circa - Venezia post 1476.

Data

1440, datazione critica.

Altre Attribuzioni

(A1) Donato d'Angelo, Bramante. (A2) Suardi Bartolomeo, Bramantino, scuola. (A3) Lombarda, scuola. (A4) Ignoto.

**AMBITO OGGETTO**

Tipologia

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## Append. 2 cont'd.

Dipinto. Scomparto di polittico.

**Insieme**  
Pala di Santa Monica, già a Venezia, chiesa di Santo Stefano. Londra, Courtauld Institute: Nascita di S. Agostino, inv. 000. Detroit, Institute of Arts: Conversione e morte del marito di S. Monica, inv. 000. Venezia, Gallerie dell'Accademia: Matrimonio di S. Monica, inv. 237. Milano, collezione privata (già Londra, collezione Koetser): S. Monica in preghiera.

**Tecnica**  
Tavola. Tempera; oro.

**Misure**  
Alt 40,3; larg 26,5.

**Cornice**  
Secolo XX; listello; rettangolare; legno, oro (foglia). Alt 41,5; larg 27,6.

**Soggetto**  
Sacro: Sant'Ambrogio battezza Sant'Agostino.

**Titoli Storici**  
Battesimo di Sant'Agostino.

**Inscrizioni**  
In basso, lungo il margine in una fascia bianca, secolo XV: "qui e como sancto ambrosio baptezo ... / augustino ... ebb de .adita....", in caratteri gotici.

**Destinazione**  
Sacra, pubblica.

### AMBITO ICONOGRAFIA

#### Descrizione iconografica

All'interno di una basilica Sant'Ambrogio vescovo, in primo piano al centro, battezza Sant'Agostino, inginocchiato davanti a lui, in presenza di Santa Monica, di un vecchio e due chierici.

Architettura: basilica (veduta interna), abside, pilastro, volta, pavimento (piastrelle). Scultura: fonte battesimale. Costume: piviale, cotta, tiara, mantello, velo, brache, bastone. Religione: Battesimo, vescovo, aureola, aspersorio, chierico. Santo: Ambrogio (vescovo, tiara, libro, brocca, Battesimo). Santo: Agostino di Ippona (aureola, brache, inginocchiato, Battesimo). Santo: Monica (aureola, mantello nero). Cultura: libro, scrittura (caratteri gotici).

### AMBITO FONTI

#### Sacre Scritture

Agostino da Ippona, Confessioni, IX, 6, 14.

#### Eventi

Episodio avvenuto a Milano, 24 aprile 387.

### AMBITO MERCATO

#### Committenza

1440 circa: Venezia, Chiesa di Santo Stefano (1581, Sansovino Francesco).

#### Provenienze

1581, 1604, 1648, 1663, 1664: Venezia, Chiesa di S. Stefano, altare a sinistra (1581, Sansovino Francesco; 1604, Sansovino Francesco; 1648, Ridolfi Carlo; 1663, Sansovino Francesco;

## Append. 2 cont'd.

1664: Boschini Marco). 1733: rimozione, per rinnovo altare (1733, Boschini Marco). 1846: Bergamo, collezione Guglielmo Lochis (1858, Lochis Guglielmo).

### Ingresso

1866, Legato Guglielmo Lochis.

### Valutazioni

1864: Giovanni Morelli, Napoleoni d'oro 6, stima inventariale (1864, Morelli Giovanni). 1989: Lire italiane 400.000.000, stima patrimoniale (1989, Direzione).

## AMBITO TESTIMONIANZE

### Testimonianze

"Santo Stefano ... Et in chiesa ... alla sinistra la Palla di Santa Monica, nella quale si veggono diversi abiti antichi de vinitiani, de medesimi Vivarini." (1581, Sansovino Francesco, 50). "Giovanni et Antonio Vivarini ... seguirono poi a dipingere ... nella Chiesa di S. Stefano alla porta del campo ... altra di Santa Monaca con picciole historiette intorno della vita sua..." (1648, Ridolfi Carlo, 21). "Chiesa di S. Stefano Frati. ... Vi sono poi due Altari, uno di S. Girolamo, e l'altro di Santa Monaca, tutti due del Vivarini." (1664, Boschini Marco, 116). "(S. Stefano)... Le tavole de' Vivarini non si veggono rinovandosi gl'altari" (1733, Boschini Marco, 174).

## AMBITO OSSERVAZIONI LESSICALI

### Note Lessicali

Palla. Historiette.

## AMBITO CONSERVAZIONE/RESTAURO

### Storia Interventi

1974: Trattamento antitarlo con gas.

### Conservazione

1864: "Molto ridipinto" (1864, Morelli Giovanni). 1897: "potrebbe nullameno riuscire non ispregevole e un po' piu' decifrabile se venisse liberata dal gramo restauro che la deturpa" (1897, Frizzoni Gustavo). 1951: "il prezioso cimelio e' sfigurato dai ritocchi" (1951, Zeri Federico). 1962: "in cattivo stato di conservazione" (1962, Pallucchini Rodolfo). 1973, 1984: Mediocre; supporto un poco imbarcato, con segni di tarlo; cadute di colore, estese nella scritta, piu' piccole ma gravi sui volti di S. Ambrogio e del vecchio; tassello di pulitura in basso a destra. 1989: Mediocre; supporto imbarcato, riparato con tassello in legno nell'angolo in basso a destra; forti segni di tarlo; fessura verticale in basso a sinistra; cadute di colore, estese nella scritta e nell'angolo in basso a destra (forte ritocco in sotto tono); lacune piu' piccole sui volti di S. Ambrogio e del vecchio sacerdote.

## AMBITO ARCHIVIO FOTOGRAFICO

### Fototeca

BN, VN: 499. Foto Lotze (1897).

## AMBITO FONTI, DOCUMENTI, BIBLIOGRAFIA

### Voci

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**Append. 2 cont'd.**

REPERTORI ==> 1866, Elenco, s.p. n. 44 (A1). 1870, Catalogo, s.p., n. 1 (A1). 1881, <LOCHIS Carlo - BAGLIONI Francesco>, 62 (A1). 1912, RICCI Corrado, 63 (A2). 1912 - 1976, Catalogo, (A2). 1930, RICCI Corrado, 104 (A2). 1934, MORASSI Antonio, 46 (A3). 1955, <WITTGENS Fernanda>, 3. 1965, Elenco, 5. 1964, OTTINO DELLA CHIESA Angela, 82. 1967, RUSSOLI Franco, 23. Dal 1976, Inventario, s.p., n. 499. 1979, ROSSI Francesco, 47. 1981, Accademia, 15. 1984, Accademia, 19. 1987, ROSSI Francesco, 91. 1988, ROSSI Francesco, 315.

MANOSCRITTI ==> 1864, Morelli Giovanni, 74 (A3).

A STAMPA ==> 1581, Sansovino Francesco, 50. 1604, Sansovino Francesco - Stringa Giovanni, 87b. 1648, Ridolfi Carlo, 21. 1663, Sansovino Francesco - Martinioni Giustiniano, 129. 1664, Boschini Marco, 116. 1733, Boschini Marco - Zanetti Anton Maria, 174. 1858, Lochis Guglielmo, 74 (A1). 1897, Frizzoni Gustavo, 43 (A4). 1914, Ridolfi Carlo, I, 37. 1951-1, Zeri Federico, 46. 1953, Suida William, 136 (A2). 1955, Moschini Marconi Sandra, 35. 1955, Ottino Della Chiesa Angela, 48. 1957, Berenson Bernard, 00. 1958, Berenson Bernard, 203. 1962, Pallucchini Rodolfo, 26 e 97. 1967, Ottino Della Chiesa Angela, 30. 1976, (Vivarini Antonio), XI, 362. 1978, Magagnato Licisco - Passamani Bruno, 116.

Architettura

abside  
architrave  
    palmette  
arco  
    lobo  
    modanatura  
    tirante  
balaustra  
    graffa metallica  
    pietra  
    specchiatura a rombi  
basamento  
base  
basilica  
    navata  
    veduta interna  
battistero <?>  
bifora  
campanile  
capanna  
    traliccio  
casa contadina  
castello  
chiesa  
colonna  
    base  
    capitello  
cornice  
cornicione  
cupola  
fastigio  
gradino  
lanterna  
lastricato  
lesena  
merlatura  
mura  
muro  
muro diroccato  
nicchia  
    conchiglia  
oculo  
parapetto  
    marmo  
pavimento  
    cotto  
    piastrelle  
pedana

pilastro  
porta lignea  
portale  
    architrave  
    timpano  
portico  
sepolcro  
soffitto  
    cassettoni  
tetto  
    canne  
torre  
torrione  
volta  
    pennacchio

Armi

armatura  
    arnese  
    bracciale  
    celata all'italiana  
    celatina  
    celatina con gronda  
    cosciale  
    cubitiera  
    falda  
    fiancale  
    gambiera  
    giaco di maglia  
    ginocchiello  
    goletta  
    guardareni  
    maglia di ferro  
    panziera  
    petto  
    scarpa  
    scarpa di maglia  
    schiniera  
    scudo  
    spallaccio  
    stincaletto  
armi in asta  
    lancia da torneo  
    picca  
    spiedo  
    spiedo da caccia