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Restauro:
temi contemporanei
per un confronto
dialettico

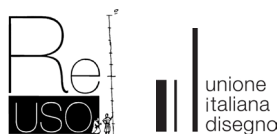


a cura di
Giovanni Minutoli



UNIVERSITÀ
DEGLI STUDI
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DIDA
DIPARTIMENTO DI
ARCHITETTURA



simposio internazionale **REUSO 2020**

Restauro: temi contemporanei per un confronto dialettico

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Una rete di ricercatori, studiosi che operano nel campo della conservazione e della salvaguardia del patrimonio ha costituito l'associazione ReUSO ETS il cui scopo è l'organizzazione e la gestione di attività culturali, attività editoriali e l'organizzazione di convegni scientifici. Gli studiosi che condividono le finalità dell'associazione potranno quindi aderire e partecipare alle attività dell'associazione stessa. Tutti gli associati avranno diritto di eleggere gli organi associativi, di essere informati sull'attività dell'associazione e partecipare a tutte le iniziative e le manifestazioni promosse dall'associazione stessa.

L'accento è posto sulle tematiche della documentazione, della catalogazione, del rilievo, delle conoscenze specifiche nell'ambito della storia del restauro e della valorizzazione, con la consapevolezza che il patrimonio stesso si evolve e necessita di un adeguamento costante alle esigenze della società della quale costituisce memoria e testimonianza fisica.

ReUSO è un acronimo nato dalla combinazione dei concetti di "restauro" e "uso" in chiave contemporanea e suggerisce quindi lo studio applicativo di diversi campi del sapere, un'applicazione teorica e pratica di tematiche che esprimano in maniera significativa ed emblematica le diverse e possibili modalità di declinazione della conoscenza del Patrimonio e dei relativi processi o progetti di conservazione e riqualificazione.

La diffusione di queste conoscenze e del dibattito relativo a livello internazionale costituisce inoltre lo scopo fondante dell'associazione: questo è dimostrato dall'ampio spettro dei contributi presentati nelle varie edizioni dei nostri convegni, provenienti in sostanza da numerosi paesi europei ed extraeuropei, dove è sentita o inizia a sentirsi la problematica della conservazione del patrimonio come elemento fondante della cultura e della società.

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Restoration and History of Architecture role in international courses: Master's Degree in Architecture (Restoration) learning experience, at Sapienza University of Rome.

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Abstract

The paper shortly illustrates the Master's Degree in Architecture (Restoration), managed by Sapienza University of Rome, whose main purpose is imparting to students a general and unitary method in approaching architectural heritage. Developing the "critical sense" is firmly based on specific knowledge such as history, survey, conservation, restoration and construction techniques, technology, physics, and management of regeneration and urban recovery, in order to manage the whole environment transformation process.

Teaching is addressed to students coming from the five continents, from the most diverse regions, so that each student, already partially trained in country of origin, can develop a common basic method in approaching architectural heritage. In this frame, international courses offered by Master's Degree in Architecture (Restoration), in addition to the main education goal, generate important opportunities in meeting and integrating students from very different backgrounds.

Keywords

restoration, history of architecture, university education, international courses

Introduction

The Master's Degree in Architecture (Restoration), managed by Sapienza University of Rome an LM4 class degree (Italian regulation for Faculties: Architettura e Ingegneria Edile Architettura as in Ministro dell'Istruzione, dell'Università e della Ricerca -decreto ministeriale n.47 del 30 gennaio 2013) over time has increasingly emphasized its international vocation -through an *ad hoc* path, notably rich in educational possibilities-, welcoming and accompanying students coming from five continents and, therefore, characterized by different backgrounds.

Basing on this consideration, Master's Degree in Architecture (Restoration) main purpose is imparting to students a general and unitary method in approaching built heritage, valid in any context, at least initially. Starting from this principle, supported by a strong theoretical and technical-practical groundwork, each student is progressively encouraged to acquire those skills to independently de-

veloping projects and works. Including in-depth critical analysis of a wide range of significant and representative architectures, the Programme aims at training professionals able to competently coordinate specialists and operators in many fields, such as architectural restoration, building renovation, reuse, re-development, urban regeneration and protection of environmental assets.

On these premises, Master's Degree course constitutes the second stage of the "3 plus 2" educational path in Architecture, offered by the Faculty of Architecture- Sapienza University; the English language Programme provides the same training of the course traditionally carried out in Italian language, integrating humanistic, technical and artistic knowledge. As mentioned above, the Course primarily aims at preparing professional figures in dealing with complex cognitive, creative and hands-on processes peculiar to Architecture, with a distinctive reference to new building construction, as to conservation, restoration and requalification of historic buildings, including the so-called widespread building pattern. For instance, students are called to reach the professional maturity in integrating, in a balanced way, historical, critical, compositional morphological, constructive, technical, issue, as urban planning, regulatory, and economic-managerial, respecting historical -architectural and environmental- values.

Brief historical outline

The main bottom lines distinguishing the Master's Degree Course are a natural fulfillment -with regulatory adjustment- of the two Courses activated during the academic year 2002-2003 by Sapienza University of Rome: a) *Specializing Degree Course in Architecture and Restoration*, managed by Faculty of Architecture Valle Giulia; b) *Specializing Degree Course in Architecture - Restoration of Architecture*, managed by Faculty of Architecture Ludovico Quaroni.

After the teaching system modification (Ministerial Decree 509), during the academic year 2004/2005, the current Master's Degree in Architecture (Restoration) was established. The new Programme was the result of an intense meditation on Restoration as a discipline, lively debated in Italy, and especially in Rome. Over the years, a continue effort has been carried out in making the course even more qualified to meet the professional world, also including agreements with firms and companies, and collaboration with field stakeholders. Moreover, during the academic year 2016-2017 with all the courses imparted in English, the international course was opened; it is constantly growing in the number of candidates. After the running-in period, on 2017-18, 267 applications were submitted, on 2018-19 the applications were 526, and on 2019-20 the conspicuous number of 1092 has been reached. Candidates applications are submitted from five continents; most of them are originate from Asia (85%), then by Africa, Europe, North and South America and, Australia and New Zealand. Since the year 2019-2020 the educational is managed by Sapienza on an international pre-selection platform, hosting both English and Italian language course -promoted by Embassies and Cultural Institutes, receiving requests from foreign candidates also interested in the Italian language course.

Currently, teaching staff commitment is promoting the interaction between the two courses -Italian and English-, both to facilitate the insertion of off-site students in Rome, and to promote and spread Italian architectural culture, and, in particular, that of Restoration, in its autochthonous language.

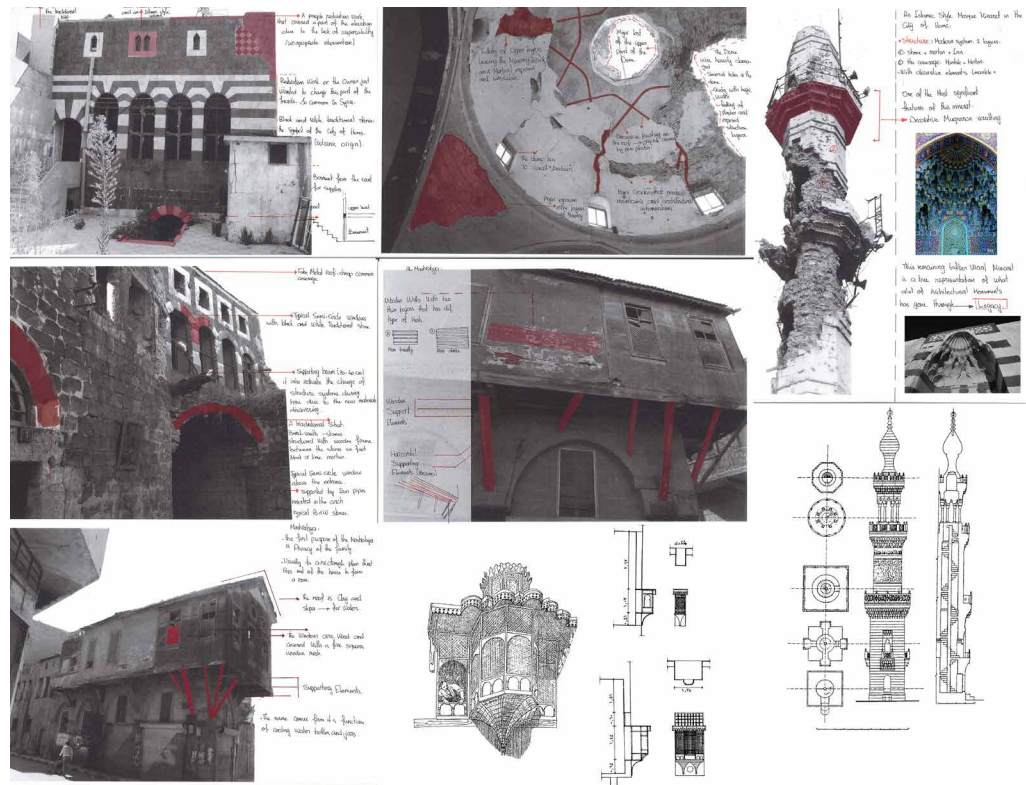


Fig. 1
Graduation thesis; Syria
From Dusk till Dawn -
Reconstruction after War;
student R. Saade, supervisor
N. Santopuoli.

Closing this brief excursus, it is worth mention that, among many, three significant figures of teachers, who strongly contributed in improving the Master's Degree Course, step by step, from its institution, until today. First names are Profs. Paolo Fancelli and Giovanni Carbonara, Monuments Restoration full professors and Restoration Roman School reference figures; they hold the chairs of Restoration Studio, now passed to the full Professor Daniela Esposito, lively training and updating the School, maintaining a close contact with the professional field, constantly changing. At the same time, "Strumenti e metodi della ricerca storica" courses held by Profs. Paola Zampa, and Alessandro Viscogliosi and Guglielmo Villa, are to be mentioned; for three years now, it corresponds to the English language course "Tools and Methods for Historical Research".

Actually, in the live debate, more intense in the last years, about the usefulness of History, and specifically of History of Architecture, the need to conclude the teaching action towards a methodology aimed at achieving an interdisciplinary approach emerges; History teaching is not imparted as a self-referential subject, dissociated from the process of disciplines inter-connection [Bollettino, 2018; Bruschi 2009.]. Therefore, the course aims at providing students with a strong training base in the field of History, namely addressed to establish a dialogue with the architectural design field. Moreover, teaching historical awareness contributes in preserving the material heritage of the past, to be safeguarded by specialized figures trained to play this specific role, in the more general context of the architect's profession. Providing students, future architects, with the tools of historical processes recognition, allows them to act in the conservative and restorative field with consciousness, according to the significative indication expressed by Prof. Augusto Roca De Amicis,

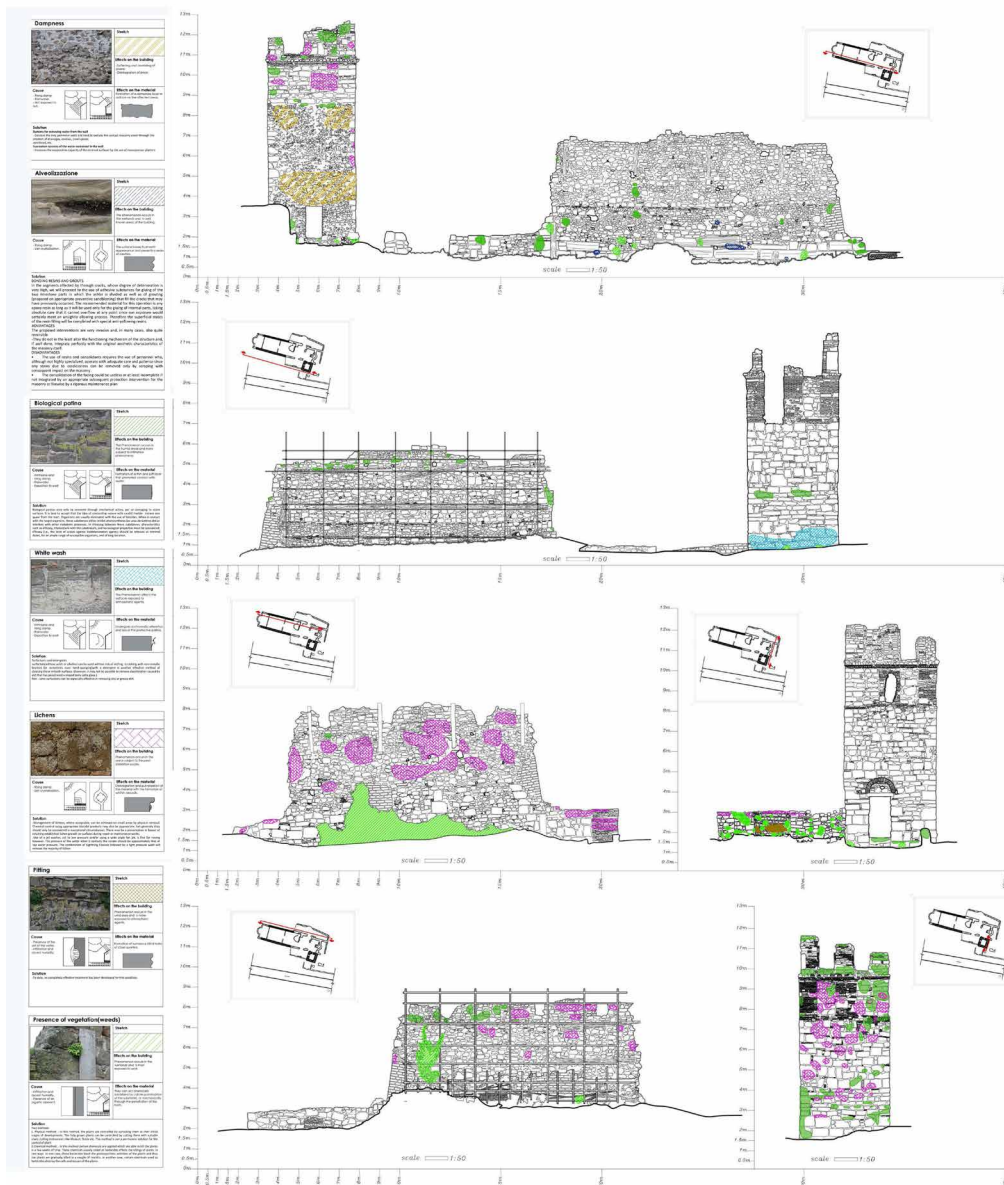


Fig. 2
 Graduation thesis;
 The Future of the Past:
 Towards Conservation of
 Archaeological Sites and
 Buildings: The church of San
 Primitivo in Gabii (Rome);
 student S. S. Chamarti,
 A. Maduri, supervisor R.
 Mancini.

that is looking at the *intentio operis* [Roca De Amicis, 2015] of architecture, having understood its language, its shape, as structure, construction, function, and its role in the space; therefore, historical sensibility can guide the action projected towards the future, with firm awareness, looking innovative and respectful solutions in conservative and restorative terms.

Teaching a method

The two-year Master's Degree course aims at deepening the skills acquired in the previous three-year degree course, not only in quantitative but -above all- qualitative terms, supporting the development of a strong critical skill in the architectural field, both historical and technical. The training course programme has been carefully designed, aiming at ensuring that future specialist architects can gradually acquire the right cognitive and methodological tools, namely regarding the conservative and restorative field, in order to:

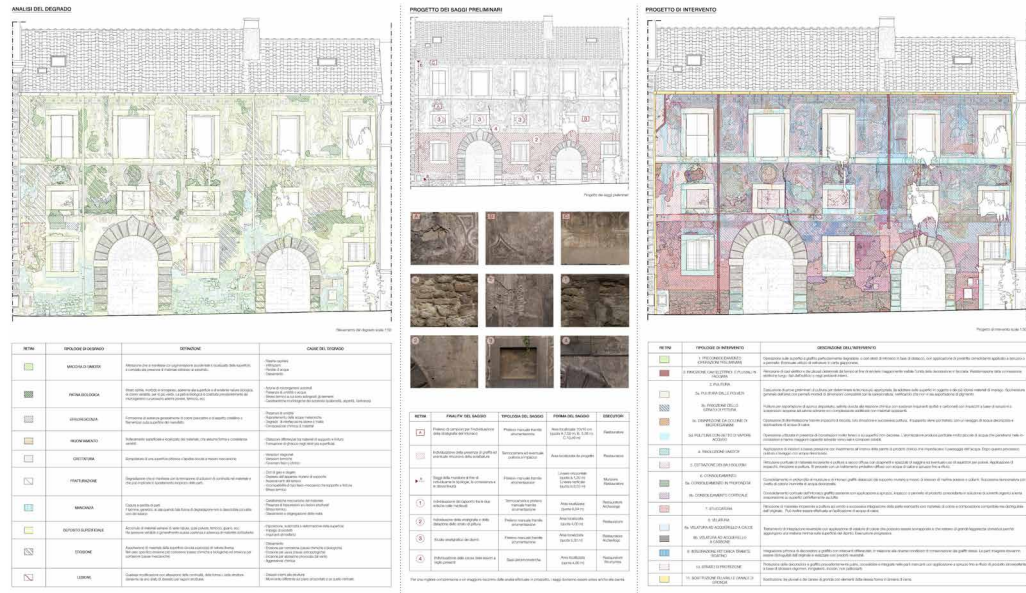


Fig. 3
Graduation thesis; *Lo Sgraffito a Viterbo. Analisi murature Ex Scuderie di Palazzo Nini a Viterbo: studio storico e proposta per la conservazione e il restauro*; student D. Ricciardello, supervisor D. Esposito.

a) deeply understand architecture by critical conscience (Prof. Carbonara would speak of “autoptic historical-critical reading”) -for example, being able to recognize historical phases and stratifications of material, both the individual artifact and the whole building, historical and modern, up to the urban, and landscape scale;

b) design and carry out cutting-edge projects, keeping in mind awareness and respect for Heritage.

Achieving a “critical conscience” means to get a conscious look at the city and at architecture composing it, as the result of the increasing adoption of appropriate cognitive and methodological tools that allow architects to express an opinion regarding architecture. The described goals are obtained by an analytical method, in order to understand the historical phases and the linguistic and material stratifications of which architecture is made, up to achieving the ability to know how to recognize the components of an architecture and its context -that is to manage the tools to understand different constitutive levels of which a building is composed and to operate on it, and on the context with the awareness and knowledge that the theme requires, in its convolution.

The skills to develop the “critical sense” are firmly based on History of Architecture specific knowledge such as survey, conservation, restoration and construction techniques, technology, physics, and management of regeneration and urban recovery -including in historical centers-, necessary to manage the whole environment transformation processes.

Besides, integrated subjects concerned the acquisition of further competences namely in the following sectors: diagnostics, traditional and new materials, and construction science. Regarding Restoration, special lessons are included, such as Structural Performance in Seismic Area, Atelier of Structural Masonry, and Technological Design for Architectural Requalification.

The considerable effort to offer students an increasingly multi and inter-disciplinary methodological approach, also through the planning of appropriate synergies between the different subjects, has to be underlined.



VIEW TO THE SITE MONUMENTS



SOUTH ENTRANCE TO THE COURTYARD



TOP VIEW

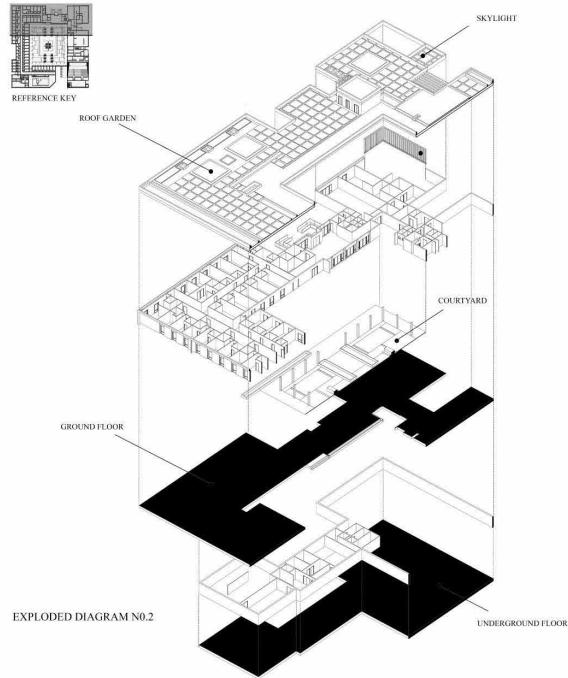
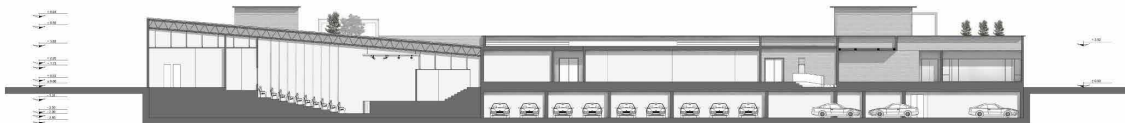


Fig. 4
Graduation thesis;
*Architectural Design of
conference/tourist facilities
in a remote archaeological
and landscape area of Iran;*
student S. Fotovat, supervisor
A. I. Del Monaco.



WEST ELEVATION
SC 1204



SECTION CC
SC 1204

Observing in a wider view, the disciplines imparted include both characterizing teachings, and integrative ones: the characterizing are particularly focused on the ability to read and interpret architecture, and urban plans, primarily about Heritage conservation and restoration. In order to provide students with specialized tools, the following disciplines are given: Architectural Design (first and second year), Methods of Architectural History, Survey, Technical Physics, Construction Technique, Building Technology Architecture (first year), Restoration Project (second year) and Management of Regeneration, Building and Urban Recovery in Historic Centers (second year).

Over the years, diversified origins of the students have been increased: not a few of them belong to countries where dramatic conflicts have severely damaged significant parts of the cultural heritage, especially architectural; some come from regions where many historical structures are traditionally maintained through continuous substitution of parts or complete replacement; others originate from territories where many problems arise from the material consistency of the built heritage, perishable for its own nature.

Therefore, considering such a varied cultural audience, each student has the opportunity to customize the educational path, by choosing optional credits and degree dissertation theme, supported by tutors, figures playing a crucial assistance and orientation role, all long the duration of the academic path.

Excellency path, and professional work.

The students enrolled in a LM4 Degree Course in Architecture (Restoration), notably worthy and interested in a specific study path, can accede the Excellency Path established by the Council of the Didactic Area of Architectural Sciences and Landscape. The Excellency Path training activities -consisting of disciplinary and interdisciplinary insights, seminars and traineeships- are shared in advance with each student, supported by a teacher or tutor, also regarding the organization and practical information.

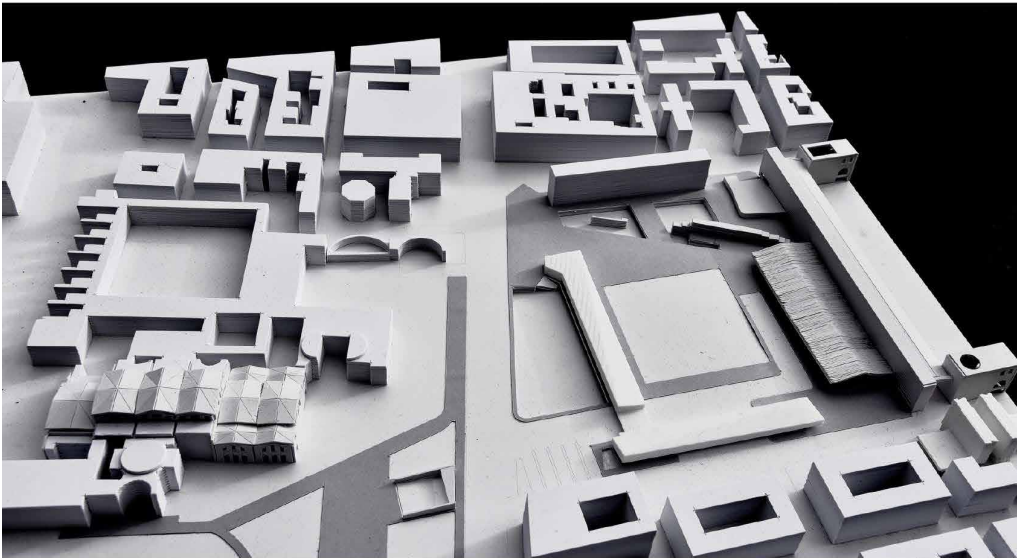
Furthermore, to encourage professional establishment of all students, all long the course, and more in the last phase, apprenticeships and internship outside the university are frequently organized. Students can come directly in contact with a wide range of professionals, from institutional bodies, public and private companies, and design studios, operating in the fields of construction, transformation, restoration and conservation, from the scale of the individual building to urban space. So that, completing the path, at the same time students have acquired knowledge and experience, and touched many of the professional tasks they are going to face: from theoretical to practical issues or economic-managerial, social and cultural.

Didactic experiences: some examples.

Some particularly significant didactic experiences, among the many, can be briefly mentioned. Master's Degree Course help students in developing the autonomous capacity of critical consideration, together with an interdisciplinary approach, facing questions characterizing real situations -such as conservation and restoration projects, redevelopment management, building recovery in historical centers, planning and monitoring urban and local transformations. A first experience can be represented by the numerous training courses, including international univer-



Fig. 5
Graduation thesis; *La casa delle culture e la riqualificazione di piazza dei Cinquecento di Roma*; student G. Pinci, supervisor M. Raitano.



sity stays; exemplifying the experience carried out at the University of Edinburgh offering, among others, History and Theory of Conservation, Building Analysis, Culture and Performance in the History of Construction, Urban Conservation, Building Description, Conservation Technology.

A second one includes the project proposals related to *Design studio 1* and *Design Studio 2*, concerning new architecture design and monuments restoration, elaborated in *Conservation Design Studio* course through a careful critical analysis and the drafting of multiple plates, with a special attention to an efficient communication.

In addition to the study of significant buildings, from a historical and artistic point of view, in many cases, architectures related to the geographical and cultural context of the candidate were deliberately chosen. So was for the dissertation dedicated to the Syrian heritage, damaged by recent war events. Looking at this, the project can help student to face his future professional activity.

Actually, History of Architecture teaching is increasingly directed towards students coming from the most diverse regions. To develop a 'critical' awareness of each student, already partially trained in the country of origin -where he obtained the title of junior architect, as in the case of the course of Sapienza aimed at students of the specialist degree- is a main goal.

By means of critical conscience, is to obtain the ability to know how to recognize the components of an architecture and its context, which can be summarized in the always valid *utilitas*, *firmitas* and *venustas* expressed by Vitruvio. These conceptual categories represent the valid basis of the historical knowledge for a building: knowing how to interpret the plan according to its functions; the structure according to the construction systems, and the architectural expression according to the forms, allows the simple observer to be transformed into an architectural technician, and into an expert analyzer of the historical processes that led to the creation of a specific constructed object.

The teaching aims at equipping students, characterized by strongly differentiated backgrounds, primarily with common tools, and consequently with a general method. To achieve the first intent, to choose a common thread joining the architectural experience almost uninterruptedly is necessary, as to equip students with a specialized vocabulary allowing them to use an appropriate lexicon, both constructive (*firmitas*) and expressive (*venustas*), also understand the usefulness of the building, its functions, and consequently to gain the necessary mastery for a subsequent hands-on approach, and on the state of conservation addressed at the restorative work.

Conclusion

The present contribution aimed at describing, even if briefly, the evolution over time of the Master's Degree in Architecture (Restoration) managed by Sapienza University of Rome, above all in order to stimulate a constructive consideration regarding the current educational path quality, improving the educational system in architects, specialists and restorers training. In this frame, new choices are emerging in a short term, both because in recent decades, considering the constant cultural and social growth, the problem of the architectural heritage protection in Italy and in the world, has become increasingly felt and actual, and of current world crisis due to the ongoing pandemic.

Certainly, looking at the road taken, not only at Sapienza but in Italian academic institutions, despite having a clear awareness of various critical issues, we are conscious the education has been moving in the right direction for some time. Considering the foundation of the first Italian School of Architecture (Rome, 1919-20), disciplines as Restoration and the historical-technical Stylistic and Constructive Features of the Monuments have been promptly introduced. In this regard, the training system based on a dual level, strictly academic within each Faculties or Departments (especially Letters and Architecture), and post-degree within the Specialization Schools, has also proved to be positive.

Further investigating these general reflections is not possible in a brief paper but, as a summary, Christoph L. Frommel, authoritative art and architecture historian (various other authors could be remembered) can be quoted, regarding the Italian education: "has, in the context of Cultural Heritage, the structure by far better [...]"

Already starting from Adolfo Venturi, the study has been increasingly completed by the School of Specialization [...] Compared to Germany, the chairs and lessons of architectural restoration are anchored more permanently and frequently in the program of the Faculty of Architecture” [Vaccaro, 2001].

Furthermore, Master’s Degree in Architecture (Restoration) institution allowed an inter-exchange environment, in which disciplines related to the field of Restoration, closely interacting with all the others mentioned above (in particular, Design and History), contributes in training young architects, teaching students a mature relationship with existing buildings, imbued with knowledge, understanding skills and respect for Heritage.

At least, as mentioned, peculiar historical moment we are living, characterized by epochal changes, also between our old Europe and the countries of the Middle and Far East and South America, is to be taken in account. In any case, we believe that Europe plays a crucial role in supporting other countries, especially in developing country, to achieve an effective awareness of the value of their cultural heritage, that can become an opportunity for social growth, as well as an economic resource. In this consideration, we are sure that the opening of international courses generates, in addition to the main issue of training, important opportunities in meeting and integrating students from very different countries and, unfortunately, sometimes in war between them.

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