



graphic design dida**communicationlab** Dipartimento di Architettura Università degli Studi di Firenze

Susanna Cerri Stefania Aimar Federica Giulivo Simone Spellucci



Dipartimento di Architettura Università degli Studi di Firenze via della Mattonaia, 8 Firenze 50121

© **2019** ISBN 9788833380629 Printed on pure cellulose paper Fedrigoni Arcoset







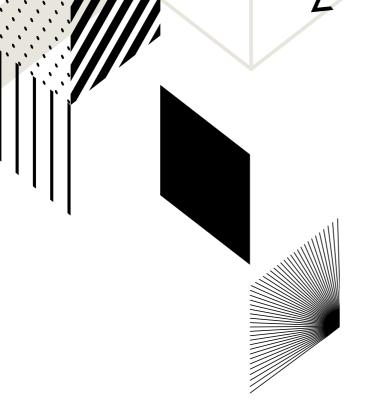


In February 2018, the Department of Architecture of the University of Florence (DIDA) promoted an open and public analysis and evaluation of the research carried out by the Department during its first five years of existence in order to define its strategy, the relationship with third and second cycle education, the role of experimental research and the DIDA-LABS laboratory system, as well as of research units and inter-university research centers.

The objective of the DIDA Research Week, through the documentation, communication and evaluation of the activites carried out by the Department in national and international research projects or in individual or exploratory projects, is an analysis and an in-depth reflection on the research activites at all levels carried out during the first five years of the Department: a wide and transparent reflection which communicates what the research carried out by DIDA is in all its different forms, calling the most qualified colleagues in Florence, Italy and abroad to discuss and to evaluate it and to contribute to the identification of future goals, strategies and actions.

The transparency strategy in scientific communication developed by the Department plays a central role not only concerning the dissemination of knowledge but above all for the effective evaluation by the entire scientific community, certainly more effective than the current assessment procedures. The increasingly international dimension of research and education requires the maximum possible transparency and accessibility of research results.

The Department's commitment to supporting scientific journals, the DIDAPress publishing, the Communication Laboratory and the first DIDA Research Week itself aims to meet this need.



DIDA RESEARCH WEEK 5 YEARS OF RESEARCH BY THE DEPARTMENT DIDA 2013-2017: AN ASSESSMENT FOR THE FUTURE PROGRAM.

19-23 February 2017 Santa Teresa, via della Mattonaia 8, 50121 Florence

Monday 19 February

Disciplinary research Interdisciplinary and multidisciplinary research

Tuesday, February 20

Competitive research, horizon 2020, industrial research, design research, research for the third mission Research communication, magazines and scientific publishing

Wednesday 21 February The Ph.D. Course in Architecture

Thursday 22 February

Research, training and profession. DIDALABS, Research Units and Research Centers Applied research experiences *Round table*: Research, training, profession: DIDA Open perspectives

Friday 23 February

Research, training and profession in the design area: scenarios and strategies for the design and project area

DIDA RESEARCH WEEK BOOK 2018



TABLE OF CONTENTS

INTRO

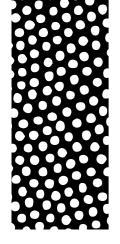
DIDA Research Week. Overview of DIDA research environment from 2013 up to 2018 Saverio Mecca	15
Map 1 Research Map	18
DIDA RESEARCH STRATEGY A general view	
Projects and relations between fields of knowledge Giuseppe Lotti	23
Towards an innovative doctorate Giuseppe De Luca	27
Didalabs. Clusters and applied research Giorgio Verdiani	31
Map 2 DIDAlabs. Inside Research	34
Understanding research through communication. Concept, methodologies and tools of DRW Susanna Cerri	37
Setting Connections. Inter-university Centres Roberto Bologna, Paola Gallo	41
Map 3 Internationalisation of research	44
DIDA RESEARCH MAP 2013-2018 DIDA Research Systems	47 55
Inter-university centres ABITA_CIST_TESIS ABITA TESIS	57
Laboratories AGP - Architecture & Project cluster Architecture and Auto-construction LAA	97 99
Prato Laboratory Laboratorioprato	
Technologies for the Mediterranean Area Laboratory TAM Lab	
Theatre Architecture Laboratory TEARC Lab	
Urban Design Laboratory UD	
AHCV - Architectural Heritage Conservation and Valorisation cluster Architectural Heritage Restoration and Conservation LARC	113
Architectural Survey Laboratory LRA architecturalsurveylab	
Cultural Heritage Management Laboratory CHM_Lab	
Heritage City Laboratory Heritage City_Lab	
Materials and Structures Testing Laboratory LPMS	

DSI - Design and Sustainable Innovation cluster	143
Communication Laboratory didacommunicationlab Design for Kids	
Italian Design for the train DIT lab	
Ergonomics & Design Laboratory LED	
Modelling Laboratory for Design LMD lab	
Multimedia Architecture Interaction Laboratory mailab	
Reverse Engineering Interaction design Rei Lab	
Sustainable Design Laboratory sustainabilitylab	
ICT - Information Communication Technologies cluster	189
Informatic Laboratory of Architecture informaticlab – LiA	105
Cartography Laboratory LCart	
Photography Laboratory LfA	
Architectural Model Laboratory LMA	
Architecture Video Laboratory VI.D.A. lab	
TEL - Territories, Ecosystems and Landscapes cluster	205
Critical Planning & Design	
Laboratory of Sociological Research on Design, Architecture and Planning LabSo	
Landscape Design Lab	
Laboratory of Ecological Design of Settlements LaPEI	
Plans and Projects for the City and the Territory PPCT	
Regional Design Lab	
PhD Programs	241
PhD Programs Architectural and Environmental Survey and Representation	241
-	241
Architectural and Environmental Survey and Representation	241
Architectural and Environmental Survey and Representation Design	241
Architectural and Environmental Survey and Representation Design History of Architecture and the City	241
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture	241
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture	241
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture Urban and Regional Planning and Design	
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture Urban and Regional Planning and Design Research Units	
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture Urban and Regional Planning and Design Research Units Cities and Regions Across Local Boundaries A.VAST Area Vasta	
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture Urban and Regional Planning and Design Research Units Cities and Regions Across Local Boundaries A.VAST Area Vasta COmmunities REsilience CORE	
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture Urban and Regional Planning and Design Research Units Cities and Regions Across Local Boundaries A.VAST Area Vasta COmmunities REsilience CORE Documentation and Management of Small Historical Settlements DM_SHS	
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture Urban and Regional Planning and Design Cities and Regions Across Local Boundaries A.VAST Area Vasta COmmunities REsilience CORE Documentation and Management of Small Historical Settlements DM_SHS Exploring Landscape Architecture ELA eu.med.	
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture Urban and Regional Planning and Design Kesearch Units Cities and Regions Across Local Boundaries A.VAST Area Vasta COmmunities REsilience CORE Documentation and Management of Small Historical Settlements DM_SHS Exploring Landscape Architecture ELA eu.med. Florence Accessibility Lab FAL	
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture Urban and Regional Planning and Design Research Units Cities and Regions Across Local Boundaries A.VAST Area Vasta Communities REsilience CORE Documentation and Management of Small Historical Settlements DM_SHS Exploring Landscape Architecture ELA eu.med. Florence Accessibility Lab FAL Heritage and Euro-Mediterranean Design Dar_Med	
Architectural and Environmental Survey and RepresentationDesignHistory of Architecture and the CityLandscape ArchitectureTechnology of ArchitectureUrban and Regional Planning and DesignResearch UnitsCities and Regions Across Local Boundaries A.VAST Area VastaCOmmunities REsilience COREDocumentation and Management of Small Historical Settlements DM_SHSExploring Landscape Architecture ELA eu.med.Florence Accessibility Lab FALHeritage and Euro-Mediterranean Design Dar_MedInternational Group on Urban and Architecture Design INTEGRO_UAD	
Architectural and Environmental Survey and RepresentationDesignHistory of Architecture and the CityLandscape ArchitectureTechnology of ArchitectureUrban and Regional Planning and DesignResearch UnitsCities and Regions Across Local Boundaries A.VAST Area VastaCOmmunities REsilience COREDocumentation and Management of Small Historical Settlements DM_SHSExploring Landscape Architecture ELA eu.med.Florence Accessibility Lab FALHeritage and Euro-Mediterranean Design Dar_MedInternational Group on Urban and Architecture Design INTEGRO_UADLandscape, Cultural Heritage. Project PPCP	
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture Urban and Regional Planning and Design Research Units Cities and Regions Across Local Boundaries A.VAST Area Vasta COmmunities REsilience CORE Documentation and Management of Small Historical Settlements DM_SHS Exploring Landscape Architecture ELA eu.med. Florence Accessibility Lab FAL Heritage and Euro-Mediterranean Design Dar_Med International Group on Urban and Architecture Design INTEGRO_UAD Landscape, Cultural Heritage. Project PPcP Local and Indigenous Knowledge Systems and Innovation INN-LINK-S	
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture Urban and Regional Planning and Design Research Units Cities and Regions Across Local Boundaries A.VAST Area Vasta COmmunities REsilience CORE Documentation and Management of Small Historical Settlements DM_SHS Exploring Landscape Architecture ELA eu.med. Florence Accessibility Lab FAL Heritage and Euro-Mediterranean Design Dar_Med International Group on Urban and Architecture Design INTEGRO_UAD Landscape, Cultural Heritage. Project PPCP Local and Indigenous Knowledge Systems and Innovation INN-LINK-S Projects on Environment, Cities and Territories in the South ProjECTS	
Architectural and Environmental Survey and Representation Design History of Architecture and the City Landscape Architecture Technology of Architecture Urban and Regional Planning and Design Research Units Cities and Regions Across Local Boundaries A.VAST Area Vasta COmmunities REsilience CORE Documentation and Management of Small Historical Settlements DM_SHS Exploring Landscape Architecture ELA eu.med. Florence Accessibility Lab FAL Heritage and Euro-Mediterranean Design Dar_Med International Group on Urban and Architecture Design INTEGRO_UAD Landscape, Cultural Heritage. Project PPCP Local and Indigenous Knowledge Systems and Innovation INN-LINK-S Projects on Environment, Cities and Territories in the South ProjECTS	

Scientific Journals

Firenze Architettura Contesti Territori Scienze del Territorio Opus Incertum Ri-Vista

DIDA Research Programs AGP - Architecture & Project Archtecture & Project	359 363 346
AHCV - Architectural Heritage Conservation and Valorisation	485
Architectural and Environmental Survey and Representation	486
Conservation of Architecture and Cultural Heritage	572
History of Architecture and the City	604
Materials and Structures	648
DSI - Design and Sustainable Innovation	697
Design	698
Technologies of Architecture	714
TEL - Territories, Ecosystems and Landscapes	745
Landscape Architecture	746
Urban and Regional Planning and Design	752



Architectural and Environmental Survey and Representation

Food Markets in Florence

Scientific Coordinators

UNIFI | DIDA Alessandro Merlo UNIFI | SAGAS Giuseppina Carla Romby

Survey and restitution

Alessandro Merlo Gaia Lavoratti Andrea Aliperta

Agreement details

Agreement between P.O. Archivi e Collezioni Librarie e Storiche del Comune di Firenze and DIDA (prot. 249541 del 14/09/2015)

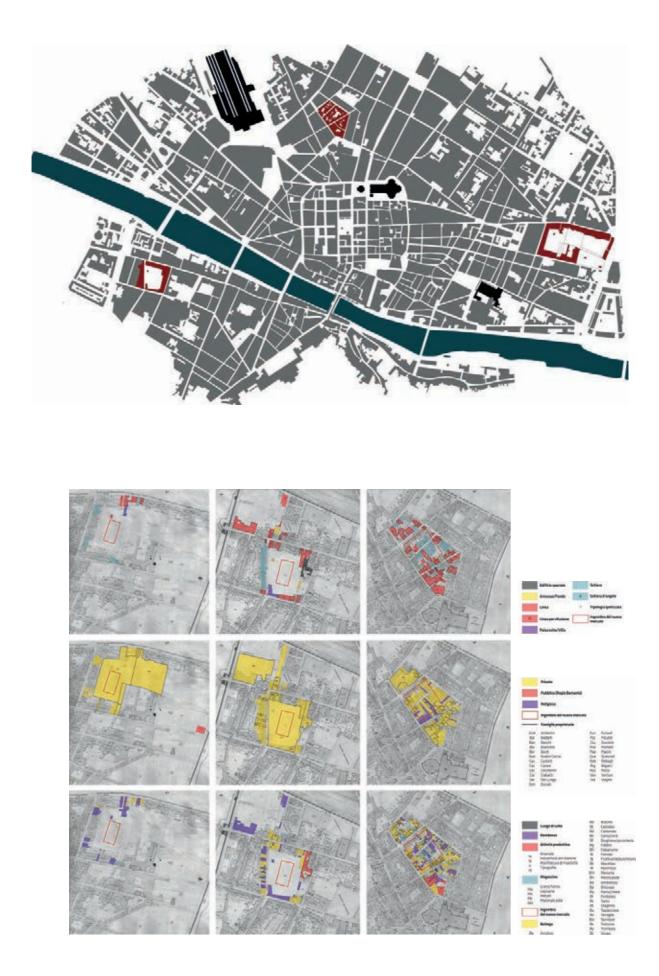
Thematic Seminar

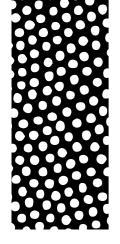
"Reverse Engineering and Cad Modelling for the study of historical architecture"

Students Alessandro Bernardini Lorenzo Fecchio Flavia Fuochi Marica Gasperini Xavier Godia Marco Pescini Laura Serafini Valentina Tavani Carolina Tozzi Sara Verrazzani Marta Zacchei From the documents prepared for the construction of the new 'Mercati delle Vettovaglie' in Florence, it was possible to recreate, with the use of infographic tools, an unpublished image of the urban form demolished by the end of the 19th century in order to make space to new pavilions. The analysis of the documents host at the Historical Archive of the City of Florence, together with data obtained from digital survey campaigns concerning the existing built heritage, permitted the realization of 3D models that illustrates the events related to these interventions. The combination of historical analysis and three-dimensional modelling gave the chance to create a video (by the Multimedia Service Centre of the University of Florence) that shows, in new ways, the evolution of the urban form during the construction of the 19th century market.









Architectural and Environmental Survey and Representation

Survey and documentation of Mayan Architecture Guatemalan Petén

Scientific Coordinator Alessandro Merlo

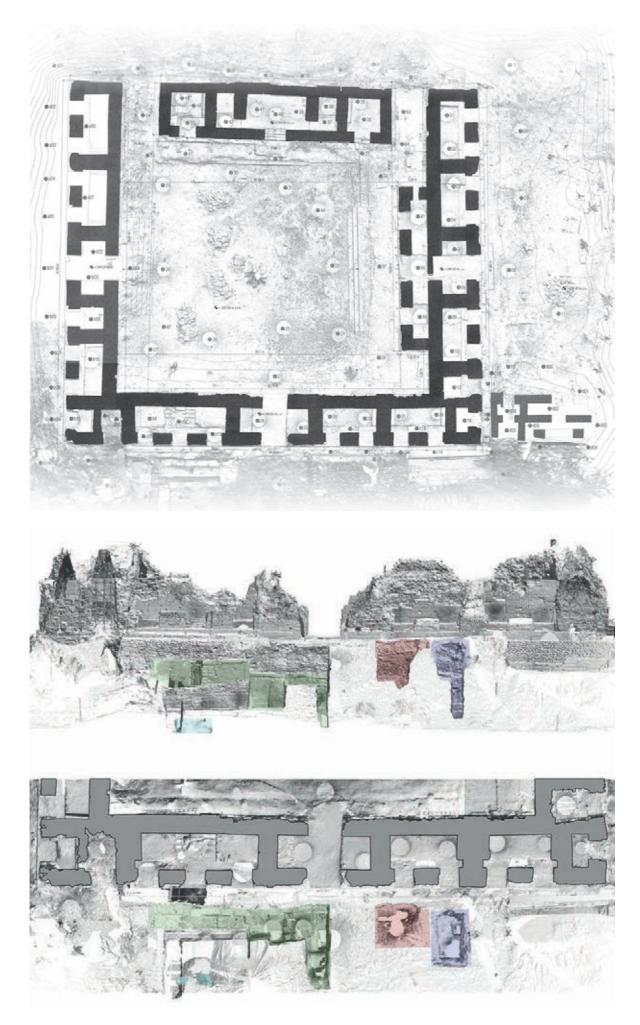
Research Group Survey and restitution Alessandro Merlo Andrea Aliperta Riccardo Montuori

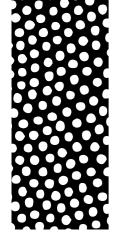
Agreement detail

Proyecto La Blanca (Universitat de Valencia, Universidad Politécnica de Valencia) From 2012 a DIDA research group has been collaborating with *La Blanca Project* – a program originated within the framework of international cooperation and aimed at the safeguarding cultural heritage of the ancient Mayan settlements of *La Blanca* and *El Chilonché*, parts of an archaeological area of the south-west of the *Departamento de Petén* (Guatemala) – documenting through the most recent digital technologies the architectural artefacts that emerge during the excavation campaigns. The 3D models are an increasingly indispensable tool in archaeological research too, because they support the excavation campaign, allow a 'desk analysis' of collected data and effectively disseminate the results, with irrefutable impact on their intelligibility.









Architectural and Environmental Survey and Representation

Valleriana Documentation and enhancement

Scientific Coordinator A. Merlo

Research Group

Survey, restitution and 3D modelling L. Aiello, A. Aliperta, S. Bertacchi, S. D'Amico, E. Del Grande, F. Fantini, G. Galeotti, E. Ganghereti, M. Gasperini, F. Grillotti, G. Lavoratti, A. Merlo. D. Troiano, U. Velo, G. Verdiani, M. Zucconi Topographic survey E. Tioli History E. Bechelli, G. Benvenuti, E. Maccioni, F. Mari, G. C. Romby, R. Vanni Archaeology F. Andreazzoli, A. Meo Landscape I. Agostini, S. D'Amico, E. Morelli Iconology and

Iconography C. Jelencovich, E. Pellegrini

Geology S. Di Grazia

Architectural technologies and building's structures A. Bove, P. Gallo

Restoration S. Franceschi, L. Germani

Architectural and urban project R. Butini

Agreement details

Progetto Valleriana (Comune di Pescia, Museo della Carta di Pescia)

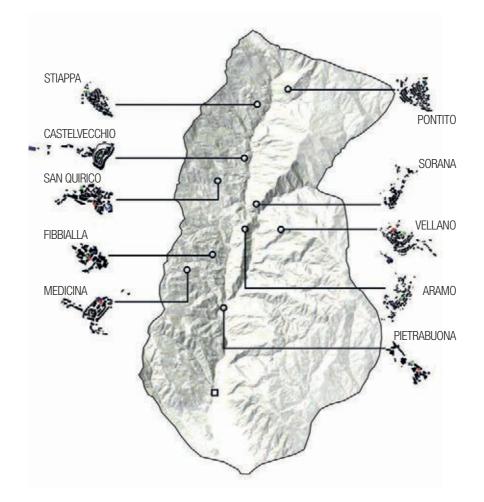
Thematic Seminar

"Documentation and Management of Small Historical Settlements" students (A.Y. 2011/2012 | 2012/2013) Valleriana has an extremely recognizable landscape, characterized by the presence of ten early medieval settlements that still today show their very flourishing past.

In 2012, the urbanistic tools used by the Municipality of Pescia recognized the historical, environmental and cultural value of the Valleriana and signed its integral protection identifying this area as a structural invariant. The enormous patrimony kept in the valleys of the torrent of Pescia and its tributaries, however, is continually threatened by carelessness, incorrect uses and lack of funding. The Municipality, sensitive to these issues, have been welcoming the initiatives promoted by the DIDA that is trying to analyse scientifically the settlements and to promote an integral project aimed at recovery, conservation and enhancement of the urban form.











Printed by Rubbettino Print | Soveria Mannelli (CZ) for **dida**press **Dipartimento di Architettura** Università degli Studi di Firenze April 2019



DIDA, the Department of Architecture of the University of Florence, performed an open and public analysis and evaluation of the scientific research carried out during the first five years of activity since its establishment, in order to define its research strategies, their relationship with the 2nd and 3rd cycle education, the role of experimental research and the system of labs at DIDA (DIDALABS), as well as the role of research units and interuniversity research centers.

The aim of the DIDA Research Week Book 2018 is to communicate the results of such research, in all the aspects which were carried out at DIDA during its first five years of activity.

