

Optimal Air Gap Length Design in Powder Core Inductors

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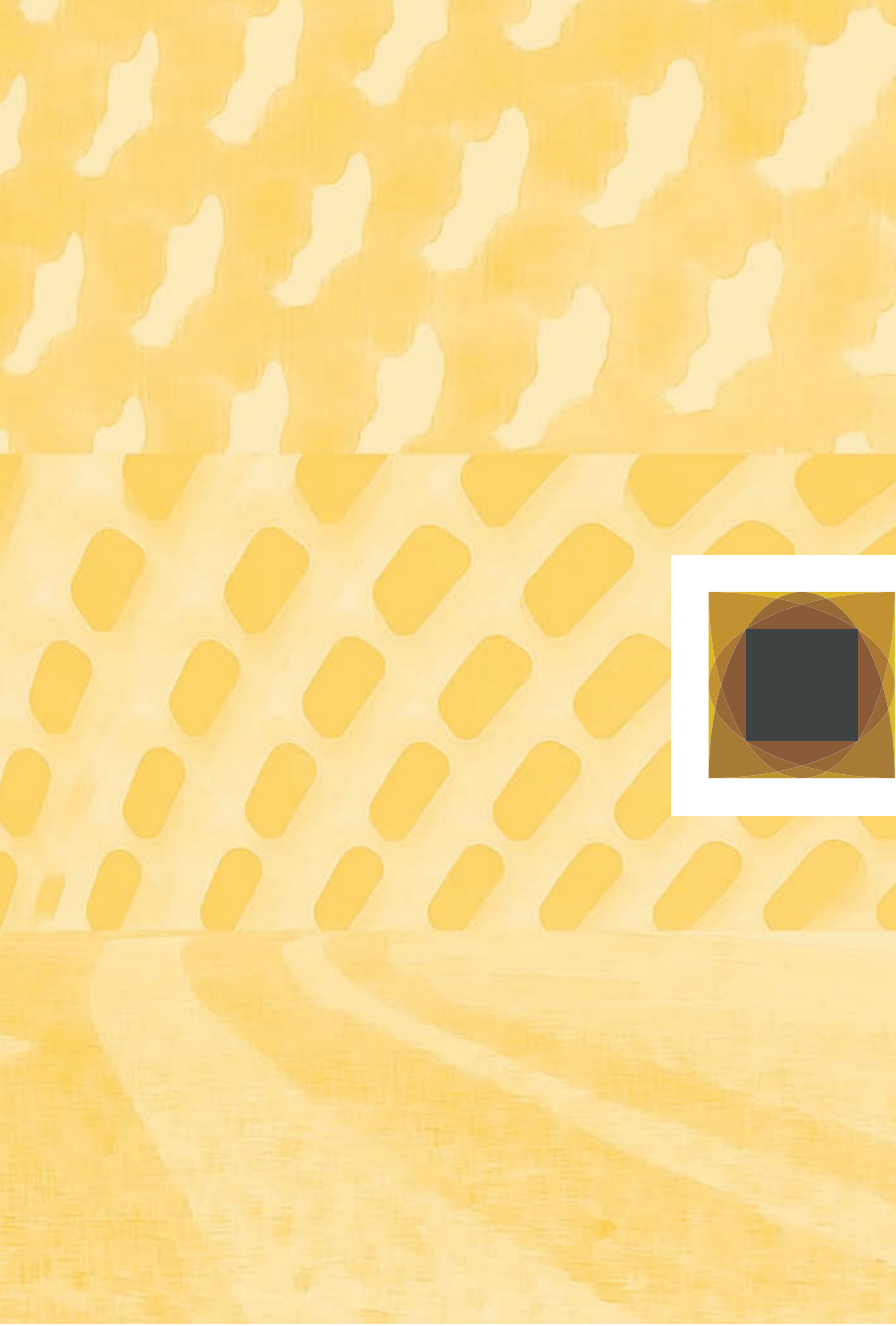
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INVESTIGATING AND WRITING ARCHITECTURAL HISTORY:
SUBJECTS, METHODOLOGIES AND FRONTIERS

Papers from the Third EAHN International Meeting

Edited by Michela Rosso

INVESTIGATING AND WRITING ARCHITECTURAL HISTORY:
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 21 Andrew Leach, "Choosing history: Tafuri, criticality and the limits of architecture," *The Journal of Architecture* 10, n. 3 (2005), 235-6. In doing so, Tafuri criticized the method of among others Sigfried Giedion.
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1.2.4 Idealism and Realism: Augusto Cavallari Murat

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ABSTRACT

In the late 1960s, when Andreina Griseri and Richard Pommer published their works on Piedmontese Baroque architecture, *Forma urbana e architettura nella Torino barocca. Dalle premesse classiche alle conclusioni neoclassiche* (1968) was published in Turin, the outcome of national research projects coordinated by Augusto Cavallari Murat since 1962. An engineer who graduated from the Politecnico di Torino, then professor and director of the Istituto di Architettura tecnica at the same university, Cavallari Murat produced many publications now included among the milestones of architectural history and restoration. *Forma urbana* chose Turin, in particular the space bounded by city walls considered the historic centre, as a case study to introduce and explore an approach to the built environment. The method presents its results in a conjectural philological survey, a tool to provide a unified configuration of the historical urban center, after it merged into the UNI standard. The author examines the Baroque period in depth (seventeenth and eighteenth centuries), because it 'gets to the roots of the appearance and of the concrete planning more distant in time, all the way to the prior operations of tracing out by Roman colonization [...] and to the subsequent uses of theoretical principles and practical operating modes of the city's architecture' in the nineteenth century.

The paper highlights the methodology of research undertaken by scholars from the Politecnico di Torino in the 1960s, likening it with the scholarly literature produced during the same period on Piedmontese Baroque architecture. The comparison between these contemporaneous studies highlights Cavallari Murat's position, today perhaps idealistic, regarding the concepts of 'historic centre' and 'monument'. However, the historical research method applied by Cavallari Murat and his survey technique still crop up as an emblematic reference for 'making history' today. Thus, *Forma Urbana*, almost 50 years after its publication, remains relevant.

KEYWORDS

Cavallari Murat, method, research, survey, Baroque, Torino



Title page, Istituto di architettura tecnica del Politecnico di Torino, *Forma urbana e architettura nella Torino barocca (dalle premesse classiche alle conclusioni neoclassiche)* (Torino: Unione Tipografico Editrice Torinese, 1968).



Augusto Cavallari Murat, in Vittorio Marchis (ed.), *Progetto cultura società. La scuola politecnica torinese e i suoi allievi* (Torino: Associazione Ingegneri e Architetti ex-allievi del Politecnico di Torino, 2010), 162.

In the late 1960s, when Andreina Gri-seri and Richard Pommer published their works on Piedmontese Baroque architecture, *Forma urbana e architettura nella Torino barocca (dalle premesse classiche alle conclusioni neoclassiche)* (1968) was published in Turin, the outcome of national research projects coordinated by Augusto Cavallari Murat since the beginning of the decade. Cavallari Murat was born in Chiavenna (Sondrio) in 1911. He graduated in Civil Engineering from the Politecnico di Torino in 1934 where Giuseppe Albenga was his teacher. In the 1950s, he became a lecturer on campus in Turin and then professor of Technical Architecture at the University of Cagliari. A regular teacher in Padua, he came back to Turin in 1961 where – as a full professor from 1962 – he taught Technical Architecture, Architectural Documentation, Architecture and Architectural Composition until 1976. He was the founder and the director of the Istituto di Architettura tecnica at the Politecnico di Torino. Based on various didactic experiences and research projects, he introduced a new method for analyzing an area with a multidisciplinary perspective. Fellow of important cultural associations, a well-known engineer, historian and critic, he died in Turin in 1989.¹ Cavallari Murat produced many publications now included among the milestones of architectural history and restoration. He wrote in the same period during which the objectives of new disciplines that explored urban history, the history of the city and regional history were outlined. *Forma urbana e Architettura nella Torino barocca*, a great scientific publication of nearly 1500 pages, is the outcome of a

work that involved an important team of researchers - Pier Giovanni Bardelli, Vincenzo Borasi, Gualtiero Borelli, Luigi Cappa Bava, Secondino Coppo, Mario Flamenì, Mario Oreglia, Giovanni Picco, Paolo Scarzella, Adele Scribani - who also wrote some sections of the study.² The publication is divided in two volumes, opening with a dedication to Carlo Promis, the first teacher of Architecture at the Regia scuola di applicazione per gli ingegneri in Torino, which later merged with the Regio museo industriale, Politecnico di Torino. The first volume, in two books, treats “Method and the critical text” and the second integrates the theoretical framework with “Maps and Regulations”, essential reference for scientific research. Beginning with the first chapter of the book, he inquired into the history of city planning and its purposes. He wrote the new discipline had to identify ‘the range of phenomena of aggregation and composition that was needed to serve the activities of some characteristic cultural operators’.³ The history of the city is considered as ‘a multifaceted cultural event’⁴ that, to be understood, had to be studied by researchers with different competencies in history, geography, art, economy and city planning, and who exchanged views amongst themselves.

Forma urbana chose Turin, in particular the space bounded by the city walls considered the historic centre, as a case study to introduce and explore an approach to these new branches of knowledge and the built environment. The method presents its results in a conjectural philological survey, a tool to provide a unified configuration of the historical urban centre in two and three-dimensions, then merged into the UNI standard rule 7310/74. Determining methods of description and classification of blocks, the study presents ideograms documenting the volume of the buildings, others distinguishing the type of space and its characteristics, still others representing cartographic symbols.

In 1968 Cavallari Murat published the two volumes presenting the survey of Turin, considering only the area built within city walls during Baroque period and built above the line of the Baroque additions in the nineteenth century, thus emphasizing the value of seventeenth and eighteenth-century culture. The author examines the Baroque period in depth because – he writes in the preface – ‘it goes to the roots of the appearance and of the concrete planning more distant in time, all the way to the prior operations of tracing out by Roman colonization [...] and to the subsequent uses of theoretical principles and practical operating modes of the city’s architecture’⁵ in the nineteenth century. In later years he published *Antologia monumentale di Chieri* (1968-9), *Lungo la Stura di Lanzo* (1972), *Tra Serra d’Ivrea, Orco e Po* (1976) and many essays gathered in *Come carena viva* (1982), a compendium of his studies, which included some research regarding the conjectural philological survey. The writings show Cavallari’s ‘ability to investigate

technical and scientific phenomena with a historian's methods'.⁶

The study of documents, in addition to the survey itself, is essential for the research project; the material - illustrated or not, belonging to public or private archives - was analyzed with scientific methods, realistic and meticulous, still employed today. His works, likening them to the scholarly literature on Piedmontese Baroque architecture produced during the same period, for example by Mario Passanti or Nino Carboneri, show Cavallari Murat proposing a similar methodology of historical research, but present the differences between his survey and multidisciplinary perspective in contrast with other modes of studying. For example, when Cavallari studies Turin's southward expansion, the first expansion of the city founded on the choice of structural integration with the existing one, he draws a pattern based on critical historical cartography in which the main street, the Contrada Nuova, and the main square, Piazza San Carlo, are the centre of land management at the beginning of seventeenth century. Cavallari examines the main axes of the project and then he writes about (and he draws) each parcel and its shape. Therefore he considers each palazzo in its architectural composition, comparing historical documents - quoted in the footnotes - with the existing buildings and with the first schemes of survey, thus integrated with new information. When Passanti, in his *Architettura in Piemonte*, studies the same area, he also writes about the three expansions of the city and he prints a fundamental scheme of them too. However, the perspective is completely different: Passanti, in fact, does not draw a critical survey of the parcels, but he draws and writes about each building with an historical and mathematical approach. A complete, complex comparison of approaches is beyond the scope of this paper. Now it will suffice to emphasize that both researchers (and Politecnico teachers) wrote, and taught, with the same purpose: to propose a method for analyzing the buildings in order to understand architecture and, then, design. Both left their marks on the school of Turin. Cavallari Murat immediately became an important reference for insights not only about local culture. His method, applied to the Baroque city, became fundamental for the research of many scholars at the Politecnico di Torino like Vera Comoli, among others. She published *Torino*, in the series "La città nella storia d'Italia", and further studies about 'bene culturale', 'bene ambientale' and landscape. Comoli wrote about 'the unnecessary debate about the historic centre [...] instead to agree to a policy more constructive and more culturally correct, introducing analysis not addressed to "the structure of the historic city", but to the "historical structure of the city"'.⁷

In Cavallari's works, the 'structure' is the 'urban scape', understood as a 'feeling of artistic totality',⁸ as a scene with unbounded limits that it binds 'to the times of the premises and to the time of the subsequent evolution and

future'.⁹ The result is a reading of the 'whole', placed in a historical periodization, in which the historic centre, already defined in 1958 by the engineer as like a 'flap of existing urban fabric' in which you recognize 'historical, cultural and artistic statements',¹⁰ is linked to newer parts of the city. The city, in fact, is no longer read through the stories of individual monuments, but through looking at the same 'whole'.

The concepts of monument and historic centre, however, state an idealistic and abstract position, today they are only elements for studying the historical structure of the city. Nevertheless, the historical research method applied by Cavallari Murat and his survey technique still crop up as an emblematic reference for 'making history' today. Thus, Cavallari's method, updated with contemporary studies and modern information technologies, is the same historical research method in use today and his writings, almost fifty years after their publication, still remain relevant.

1 Riccardo Nelva, "Augusto Cavallari Murat," in Vittorio Marchis (ed.), *Progetto cultura società. La scuola politecnica torinese e i suoi allievi* (Turin: Associazione ingegneri e architetti ex-allievi del Politecnico di Torino, 2010), 162-3.

2 The researchers worked with Augusto Cavallari Murat 'under the auspices' of the Consiglio nazionale delle ricerche (CNR). (Istituto di architettura tecnica del Politecnico di Torino, *Forma urbana e architettura nella Torino barocca (dalle premesse classiche alle conclusioni neoclassiche)*, Turin: UTET, 1968), XII.

3 'gamma dei fenomeni aggregativi e compositivi che serve alle attività di alcuni tipici operatori culturali'. Augusto Cavallari Murat, "Il compito restaurativo nel paese stabilizzato e l'equivoco del falso storico," in Istituto di Architettura Tecnica del Politecnico di Torino, *Forma urbana e architettura*, 6.

4 'un fatto culturale poliedrico', Ibidem, 10.

5 'affonda radici negli aspetti e nella concretezza urbanistica più lontani nel tempo sino

alle antecedenti operazioni di tracciamento delle romane colonizzazioni [...] e sino alle successive utilizzazioni di principi teorici e di modi operativi pratici dell'architettura della città,' Ibidem, XIII.

6 'capacità di indagare le fenomenologie tecniche e scientifiche, con metodo storico.' Roberto Gabetti, "Augusto Cavallari Murat: commemorazione letta dal socio corrispondente Roberto Gabetti nell'adunanza del 15 novembre 1989," *Atti della Accademia delle Scienze di Torino* 124 (1990), 121-5, in "Roberto Gabetti. Scritti per atti e rassegna tecnica", *Atti e Rassegna tecnica della Società degli Ingegneri e degli Architetti in Torino* LV-3 (2001), 91.

7 "l'inutile dibattito sui centri antichi [...] per aderire invece a un criterio più costruttivo e più corretto culturalmente, introducendo analisi rivolte non alla "struttura della città storica", ma alla "struttura storica della città". Costanza Roggero Bardelli, "Architettura e storia per il progetto: Vera Comoli Mandracci," in "Vicende e dibattiti torinesi,"

Atti e Rassegna tecnica della Società degli Ingegneri e degli Architetti in Torino LXI-1 (2007), 28.

8 'sensazione di totalità artistica'. Augusto Cavallari Murat, "Il compito restaurativo nel paese stabilizzato e l'equivoco del falso storico," in Istituto di Architettura Tecnica del Politecnico di Torino, *Forma urbana* 10.

9 'si lega ai tempi delle premesse ed ai tempi delle evoluzioni successive e future.'

Augusto Cavallari Murat, "Il compito restaurativo nel paese stabilizzato e l'equivoco del falso storico," Ibidem.

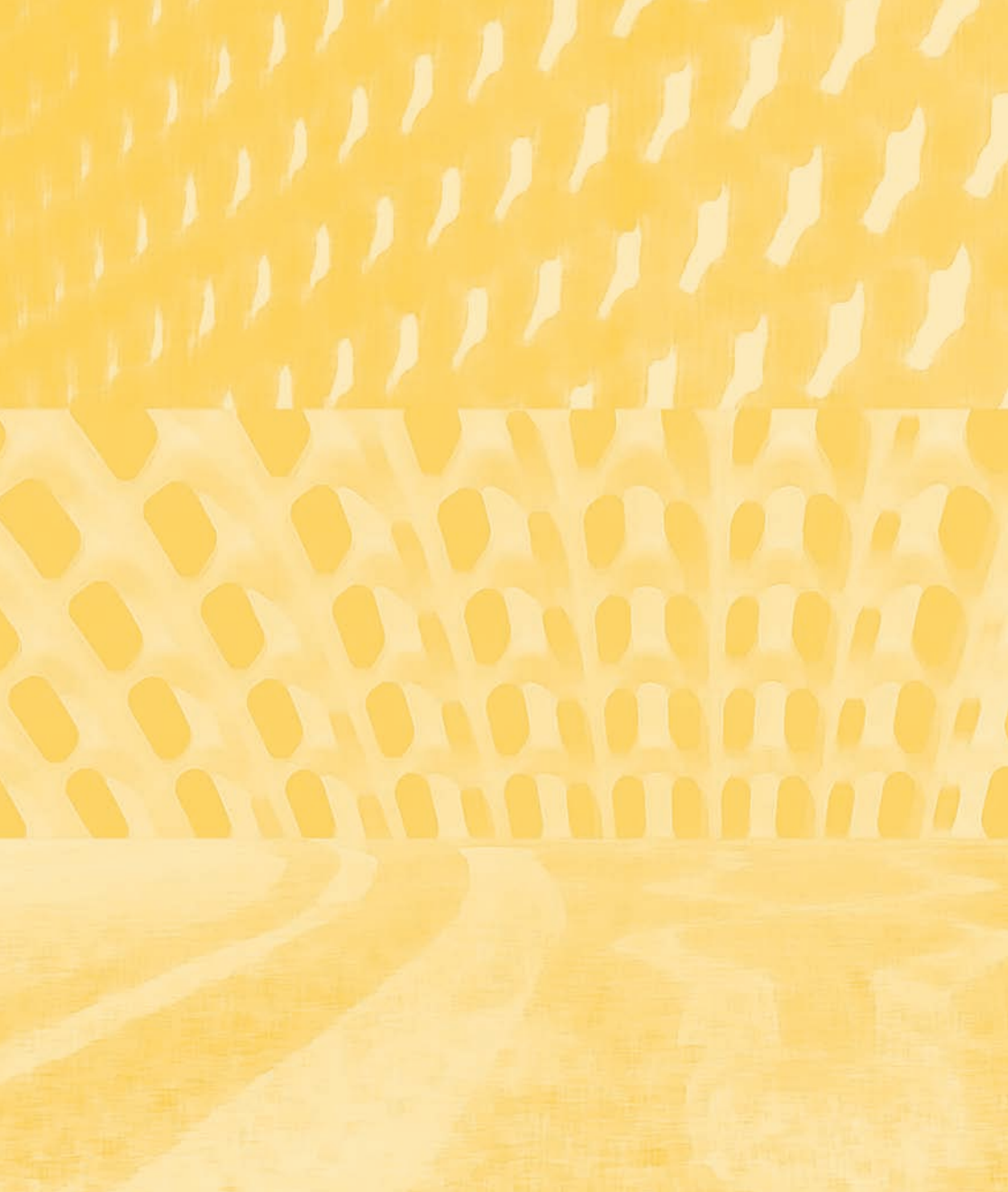
10 "l'lembo di tessuto urbano preesistente" in cui si riconoscono "testimonianze storiche, culturali ed artistiche." Augusto Cavallari Murat, "Centro storico e città moderna," *Atti e Rassegna tecnica della Società degli Ingegneri e degli Architetti in Torino XII-4* (1958), 116-8.

1.2.5 A Regional Artistic Identity? Three Exhibitions in Comparison

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The *Mostra del Barocco Piemontese* organized by Vittorio Viale in 1963 suggested the recognition of a strong architectural identity in the historical experience of Piedmont. The exhibition inspired major initiatives of study that led an international contingent of art and architectural historians to wonder about the personality and work of artists such as Guarino Guarini, Filippo Juvarra and Bernardo Vittone. Subsequent research shifted the interest to urbanism and history of the city, while the exhibition *Diana Trionfatrice. Arte di corte nel Piemonte del Seicento* (Turin 1989) recognized the engine of the artistic development in the dialectical relationship centre-periphery between the provincial areas and the capital of Savoy. The exhibition *I Trionfi del Barocco. Architettura in Europa 1600-1750* (Stupinigi 1999) intended to illustrate the development of architectural types in seventeenth and eighteenth-century Europe, and pointed out the innovative role played by Piedmontese architecture in the development of exemplary models. This discussion position critically compares the results obtained by these three exhibitions in outlining the research issues that still need to be addressed.



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