

A Reflection on the Spanish Expresión Gráfica Arquitectónica at the Zaragoza Congress “Pinguí Minerva”

José María Gentil Baldrich

Introduction

It is hard to choose a topic for intervening in a conference of this kind. It is a decision especially difficult if one wants to consider representing the general character of Spanish assistants away from academic concerns and personal extravagances (as one may even say). Indeed, not everyone usually agrees about the great interest of these two aspects, although one is convinced of it. For such a reason, I have chosen a supposed ‘survey’ about the current studies and interests of the Spanish Expresión Gráfica Arquitectónica: a state of art’s synchronous cut. Of course, there is no such survey. However, a procedure has been used: a contributions’ analysis from the last congress of EGA. Such analysis allows access to a reflection similar to a survey and provides an approximate view of the whole. The last meeting of EGA titled *El Patrimonio Gráfico. La Gráfica del*

Patrimonio (The Graphic Heritage. The Graphic of Heritage) was held virtually between the 4th and 6th of June 2020 in Zaragoza. The meeting was the number XVIII, a sign of continuity since the already distant first congress held in Seville in 1986. Before Seville, a previous meeting was held in La Coruña in 1984. Since the congress held in Valencia in 1990, the meetings started to be called ‘International’, as a way of expansion outside our borders. Nevertheless, ‘International’ is a bit pretentious denomination: these congresses should be called ‘Hispano-Italians’ or ‘Italo-Hispanics’, referring to the two core nations that support them. There is limited external participation: only a few Portuguese and Latin American participants can be found. Besides the quality achieved within the congresses and the naive use of English for a better diffusion, our works’ incidence is very small in the Anglo-Saxon world if not non-existent. And I suspect that something similar must happen with the Italian congresses.

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The Spanish Expresión Gráfica Arquitectónica

In Spain, the Expresión Gráfica Arquitectónica Area of Knowledge comes from the fusion of old subjects from the traditional curricula: Descriptive Geometry, Technical Drawing and Architectural Forms Analysis. The theoretical reflections on graphic language were almost inexistent in the sphere of Spanish architecture before the 1970s. At that time, such a conceptual lack applied not only to our academic field but also to others. Back then, there were scarce but significant writings in the worlds of Architectural Composition or Architectural Project that inevitably had to incorporate (consciously or unconsciously) the graphic matter that supported their ideas. What could have been read in those years that affected our area of knowledge were either drawing cards or academic discourses. Today's Area of Knowledge was constituted and carried out in the first half of the eighties. The foundational theoretical body and the names of teachers who intervened in its consolidation and changed completely the situation have been written down and can be found [Gentil 2003; 2016; Montes 2010].

Nowadays the dissemination and development of the Spanish Expresión Gráfica Arquitectónica ideas are based on two pillars: the *EGA* Journal and biannual congresses. The former is directed by Ángela García Codoñer: it has been published since 1993 and it is already in its 40th issue. The journal has achieved a scientific prestige that makes it one of the most important in the academic world of architecture: it has been internationally indexed and is fundamental within the recognition of academic merits in Spain. Also, in 2013 it has been included within the Italian ANVUR as an A-class journal for the scientific sectors of architecture. Several bibliometric analyses of *EGA*'s production had been carried out [Linares 2010; 2015; 2018], providing an overview of addressed topics. Spanish journals like those in Architectural Composition or Project would also like to be included in similar considerations by following the example of *EGA*. Nevertheless, they do not reach the same level of recognition: the existing important journals to date are historical journals in arts and construction promoted by official bodies. On the other hand, the second important column is our biannual congresses, which reached the XVIII call in 2020. The number of academic papers presented in these meetings is higher than those presented in the journal, despite the former is held every two years. In fact, in the last celebrated encounters [Linares 2016], the number of presented articles approached two thousand.

Finally, in Spain, two other university organizations are sharing some common interests: those coming from the area of

Engineering and those from the Building one. The former, INGEGRAF (Graphic Engineering) brings together the area of knowledge of Graphic Expression mainly from Engineering. The latter, APEGA (Graphic Expression Applied to Building) is present in the then Middle Degree Technical School and gathers indistinctly the two areas of *Expresión Gráfica* in Engineering and Architecture. Although these organizations do not have such a solid and continuous presence with their journals magazines as *EGA*, they have had plenty of activity holding congresses: INGEGRAF meets annually and has reached the XXIX meeting, while APEGA its XIV edition. The Italian presence has been common within these congresses. In particular, Vito Cardone was invited as a speaker to the last edition of APEGA to be held in Seville in February 2019. He sent the article although he could no longer attend personally to expose it, unfortunately [Llorens et al. 2019].

These areas of knowledge elaborated their bibliometric analyses as well, and they can be found and consulted [Rojas-Sola et al. 2008; López-Chao, Amado 2020]. It should be emphasized that unlike in Italy (I think), these organizations are completely separate from the architecture, although very often there is crossed collaboration among teachers due to their common interests.

A current analysis

Two main publications emerged from Zaragoza's Congress: a full edition published by Springer International [Agustín et al. 2020a], and a narrowed volume of proceedings published by the University of Zaragoza [Agustín et al. 2020b]. The former has three volumes with a total of 2032 pages and has been mandatorily written in English. To perform an analysis of a material with such a length would imply a disproportionate dedication, not even consonant with a general panorama. On the other hand, the unique volume of the proceedings brings together all the articles in 885 pages in a format limited to four pages per communication. In this case, the contributions have been written indifferently in Spanish, Italian and some in English, according to the choice of the participant. Paradoxically, it happens that in this reduced version appear 203 communications while in the extended publication only 173. Perhaps, this happens because some participants do not have sources enough for the translator. Note that a total of 266 articles appeared in the first seventeen years of *EGA*, which helps to realize the significance of the number of contributions used for this reflection [Linares 2010].

The above-mentioned bibliometric studies always emphasized a larger presence of the general architectural subject above the specific one for drawing. Yet, this latter subject should have been the predominant one by logical derivation of its name. The same happens with the communications collected in the Zaragoza congress, but this does not represent any surprise since it had already been expressed: "This means that our interests and fields of study are very broad, not limited only to Graphic Expression. Far from understanding this as a criticism, I believe that this is what one would expect. In fact, our teaching community is characterised by Architecture teaching and mainly for the training given by the profession, rather than graphic disciplines or the Area of Knowledge" [Montes 2010, p. 16].

The thematic section *Architecture* appears predominantly within the previously mentioned analyses. Nevertheless, it is established generically, usually without specifying the aspect in which these contributions can be integrated into the teaching of architecture. During the twentieth century, 'drawing' did not appear in articles' titles within the works on architecture. In contrast, it must be highlighted that nowadays 'drawing' (or some synonym) does appear in the vast majority, whether this is the main subject of the study or not. There is a large variety of particular cases. However, the heritage subject had a notable influence among Zaragoza congress' works. Even so, it is still feasible to do a reflection '*Pingui Minerva*' about them since participants have 'patrimonialised' their studies. I will refer to these topics excluding authors' names, as a full collection would both need an endless bibliographic reference and would go further a logical extension for this article.

There is a predominance of building studies and their different considerations among the Spanish and Italian architectural referred articles. It can be observed that many contributions of these studies would not differentiate this congress from another one hypothetically dedicated to the monumental restoration or the conservation of heritage. If this studies' rate follows, the latter consideration applies up to the extent that it might be soon difficult to find examples to be addressed. In general, specific aspects analyses of Renaissance and Baroque classical buildings abound among the articles. As well, there are modest constructions cases inserted in local areas and popular architecture of undoubted interest. A special mention must be made to the many architectural studies of the Modern Movement or later; both from famous architects (such as Le Corbusier, Wright, Scarpa, Kahn, Parent, Virilio, Toyo Ito, Bo Bardi, Foster etc.), as well as other less-known designers. The inclusion of this latter group relies on the historical

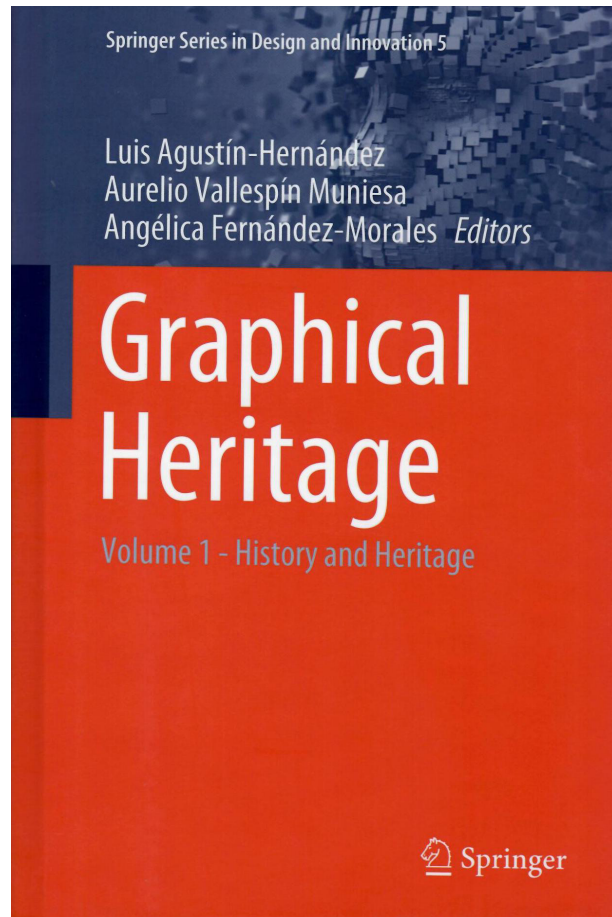


Fig. 1. Agustín Hernández, L., Vallespín Muniesa, A. Fernández Morales, A. (2020). *Graphical Heritage: XVIII International Congress of Architectural Graphic Expression*. Cham, Switzerland: Springer. [Agustín et al. 2020a]. Cover.

claim for its importance within their particular contexts. Very often, these works result in themselves an important contribution to the History of Architecture, although they were approached through the excuse of drawing. The selected examples have different variants from which we highlight: a first group containing built and existing buildings, a second one bringing together built but disappeared buildings, and a

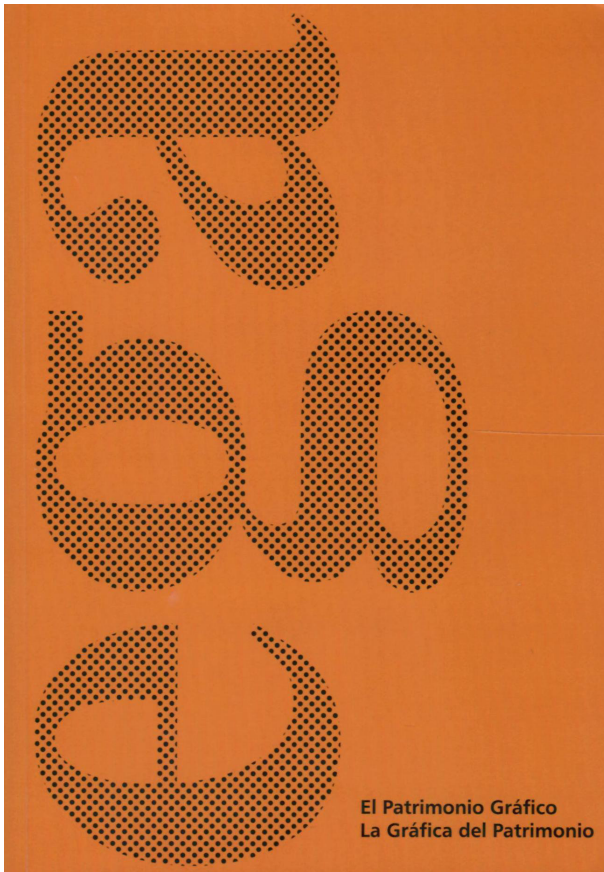


Fig. 2. Agustín Hernández, L., Cerveró Sánchez, N., Sancho Mir, M. (2020b). *El patrimonio gráfico. La gráfica del patrimonio: XVIII Congreso Internacional de Expresión Gráfica Arquitectónica*. Zaragoza: Universidad de Zaragoza. [Agustín et al. 2020b]. Cover.

third one gathering buildings neither built nor existing. The first group's buildings are normally collected during or after an intervention. These structures are usually surveyed with new technologies, then compared with previously performed analyses made using Graphic Expression techniques so to expose their final version. The second group gathers buildings fully or partially destroyed, that is, structures either not existing anymore or from which just some parts still remain. Since

these buildings have disappeared, they are nowadays only visible through drawings and photos. Their historical vindication through graphic reconstruction is not devoid of nostalgia. The third group corresponds to buildings that never existed but that are interpreted and analysed from their existing graphic proposals. Such graphic pieces allow the visualization of what will or what could have been within the urban and historical areas of their time. Note that here Graphic Expression techniques are key for the definition and analysis. The new computer procedures also allow the graphical reconstruction in the form of 3D virtual models, especially in the second and third groups. But actually, these models are nothing more than animated perspectives in the computer in most cases. On some occasions, the 3D model is a previous step before the passage to a physical model with the help of CAM, yet they are much less abundant in the Fab Labs. Likewise, some communications also treat the architectural model as a project process' element. A separate group refers to Archaeology although is somehow connected to the previous ones. In this case, drawing always had a very important presence, equal or superior to photography. This happens since the representation is a partial and interesting interpretation of what we could consider the 'photo-chemistry point cloud' from traditional photographic printing (talking in a photogrammetric language). This latter group addresses several examples of archaeological remains from buildings, fortifications and cities. The examples belong mainly to the Roman period due to the Italian-Spanish character of the congress with the logical interpretation of the congress' celebration place: the Caesaraugusta city of Zaragoza. Nevertheless, there are also discussions about Moroccan, Egyptian and Armenian examples. This section opens up a clear field of activity for the Area of Knowledge thanks to the wide graphical interpretation capacity provided by both the old practices and the new technologies mastered in our academic field.

Moreover, there are studies of sites and places among Zaragoza's works: a great diversity of themes and approaches for analysing urban complexes such as landscapes, gardens and cemeteries. For example, landscape analyses go from visions in painting and historical prints to the reinvention of the Costa del Sol in Malaga. By its side, the gardens include examples from Madrid, Caserta, Tirana examples (among others). There are also articles studying general views and travellers' graphic routes (with the Way of St. James as a classic) up to the planimetric and historical analysis of some particular chosen typologies. Furthermore, some articles deal with the insertion of architecture into the landscape, rural architecture, towers and

isolated military defences and industrial constructions. Even, it is addressed the hospital typology through an example in Seville: the analysed healthcare establishment is still in use, despite being the oldest in the city and possibly in all Europe. Another interesting contribution studies panoramic views of the territory, made by the Italian CTV for gunnery shooting during the Civil War on the Ebro front (although it calls “*Comando*” to the “*Corpo*”).

The landscape subject links to works dedicated to Cartography, territorial analysis and Urbanism, with a notable presence of urban complexes’ historical maps studies. Among territory analyses, cartographic works of the Army’s Geographic Service appear twice and there are also addressed cultural and tourist landscapes management, specific itineraries, agricultural fields of olive grove, the Roman Via Appia, etcetera. On the Urbanism side, there are studies about certain neighbourhoods with the application of the well-known graphic itineraries. Also, there are analyses addressed to the urban growths, citizen collaboration in the design, the Doxiadis’ graphic-theoretical proposals and Sert’s lessons in Harvard. There are even communications on territorial representations applications aim at the prevention of seismic risk.

Some contributions focus on some particular aspects of the construction and covering a wide catalogue: there are studies on pavements, locksmithery, ceilings, mural painting. An important theme in this section is stone cutting (stereotomy). The stonework trace has been previously treated on numerous occasions and it has been very present historically in Spain and France, yet less common in Italy. The Descriptive Geometry hogs exclusively these studies in Spain, ahead of any other area of knowledge. Effectively, there are three studies collected from three Spaniard groups of Descriptive Geometry researchers from Madrid, Cartagena and Valencia among Zaragoza’s articles.

But the thematic set is even broader: It also encompasses purely theoretical and speculative analyses: the dance’s immaterial heritage, furniture, color, graphic design, architectural journals, architectural typography, sketches and painting, gnomonic, structural geometry and cinema. In particular, the latter in its dual aspect of productions’ ephemeral architecture, and the early films’ translucent shadow image and their subsequent influence. There are also more sophisticated subjects, such as hands and pencils’ presence in the image of architects. The data of the bibliometric analyses mentioned above gets confirmed: although drawing presence is generalised to a greater or lesser extent, the proportion of topics specifically dedicated to the graphic section is not the majority. Nevertheless, there are

some communications on the traditional sketches’ practice and *Urban Sketchers*. In particular, there are reflections about three significant draftsmen: José Luis Picardo (an Andalusian who was active in Madrid), Luis Berges from Jaén and the Mexican Jorge Tamés. These illustrators focus on gathering the architectural heritage and their contributions have an undoubtedly homage character both for the authors and for natural drawing.

There is an outstanding presence of new computer techniques applied to architectural representation, geographic and management techniques (e.g., GPR, BIM, GIS). Sometimes these works are specifically dedicated to some of these technologies. If this is the case, in most cases the work focuses on their use for the proposed topics. It is important to note that the architectural drawing’s fundamental object in its broadest conception should not be overshadowed by the fascination for these modern tools. Sometimes the computer’s results are very valid for being displayed on a screen, but difficult to interpret as a scientific communication’s illustration, and above all not very aesthetic.

There is a final reflection to be made based on the provided studies’ geographical location. There are themes and authors from Spain, Italy and Portugal. Other European references go to France (Le Corbusier’s place), Albania, Montenegro and Finland. We also as European a reference to Russia for being Italian the author of project studied. As well, there is a big interest from the United States, Mexico, Costa Rica, Colombia, Brazil, Argentina, Armenia, Egypt, Morocco and Japan. Curiously, the Anglo-Germanic world is almost non-existent, except for a few theoretical references.

Conclusions “*Pingui Minerva*”

Does the thematic diversity described above imply a dispersion of ideas and motivations of the Spanish *Expresión Gráfica*? I think not, since the common denominator within the presented papers is almost always a reference to a specific and determined subject, even in the theoretical reflections. And architecture is a practical discipline whether we like it or not, even more in Spain. Indeed, the architecture in Spain also includes building Engineering which has to deal necessarily with specific problems. Other areas of knowledge have often drifted towards speculations that take them away from their essential tasks. These speculations bring them closer to Metaphysics, if not to Theology, hagiographies included. On other occasions they limit their interest merely to technical-legal questions or to philosophical and political ones: that is

to say, they can approach esotericism. It is not uncommon for us to find professors from other subjects outside strict drawing publishing (or trying to) in the EGA journal and participating in our congresses. This happens because when they have topics of interest, we are almost the only ones who pay attention to them.

To end, there is a paper quite indicative of the reached level that deserves a special comment and from which we have taken the Latin expression that heads this text: the one presented under the title *Pinguiore Minerva: una nota al Tratado de la Pintura de Leon Battista Alberti* [Montes 2020]. The subject has little to do with the congress' theme (masters usually write whatever they want), but it is a brilliant and original philological erudition on just a couple of words generally misinterpreted up to the present, which makes us see the incursion of Graphic Expression to other fields of knowledge. We take the meaning of the expression '*Pingui Minerva*' from this article: the sense of the sentence comes from the

one used by the Genoese author in *De Pictura*: "Alberti is referring to the fact that he will deal with painting in a broad sense, in broad strokes, without too much depth" [Montes 2020, p. 41]. The sense that the treatise's writer gave to his painting exposition is the one we have wanted to give here to the reflection about the Spanish *Expresión Gráfica*.

Dedicated to Javier Seguí, who wrote for Zaragoza's Congress and left us while this text was being written.

Acknowledgements and Memories

First of all, I am grateful for the kind and (I believe, mistaken) invitation to speak at the UID's *Giornata di Studi*. I especially thank the UID's president Francesca Fatta, who allowed me to narrow down my talk into a written and more ordered report. I would also like to greet my dear and admired Mario Docci and to congratulate Luis Agustín for the magnificent documentation submitted for EGA's Congress. Last but not least, I express an emotional memory of Vito Cardone, a beloved friend who recently passed.

Author

José María Gentil Baldrich, University of Sevilla, jmgentil@us.es

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