

Editorial

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In 2018, the 40th Conference of Teachers of Representation Disciplines took place in Milan: the first edition of these meetings was held on 3-4-5 May 1979 in Santa Margherita Ligure.

The Italian Union for Drawing (UID) will appropriately remember this recurrence, effectively kicking off a two-year celebration, considering that the 40th anniversary of the foundation of our scientific society (formally constituted on August 4, 1980) will fall in 2020.

The article by Mario Docci –who was one of the founders of the UID and today is its Honorary President– that opens this third issue of *diségno*, actually inaugurates this path, intended as an occasion for reflection on, as we say, “who we are, where we come from,” but also on “where

we are going” or rather: on where “we must go.” It is no coincidence that Docci focuses mainly on the events of the last half century, with particular reference to our history –which is now an integral part of the more general history of graphic representation– and the teaching of Drawing in the Faculty of Architecture of Sapienza University of Rome, where he sees the birth of a “Roman school” starting in Italy, “the creation of a new discipline: architectural representation.” Docci concludes his contribution by expressing the hope that “young people will dedicate themselves to historical research in the field of representation, because although some studies have been tackled in the fields of survey and freehand drawing, the History of Representation is still largely to be written.”

It seemed therefore natural, more than appropriate, to dedicate the first thematic issue of the journal, i.e., the first not dedicated to the annual UID conference, to the history of representation.

This theme has been present since our first conferences and the UID has always supported its cultivation, considering history fundamental for the definition of the identity of the scientific-disciplinary sector. It is worth mentioning that at the end of the first (and at the time not yet "International") Conference of the Teachers of Representation Disciplines in the Faculties of Architecture and Engineering, it was decided that the following Conference would have as its theme *The history of drawing for a didactic method*.

In fact, in that second appointment, which took place from 29 to 31 May 1980, again at Villa Durazzo in Santa Margherita Ligure, things went much further. "The history of drawing, or of representation, (but I would be satisfied – since there's quite enough– with the history of drawing!) allows us to understand, rediscover, create and recreate drawing; history of the theories on art or architecture, history of the criticism of art and architecture and finally history or criticism of drawing, in the many variations of their forms, mean the gaining and the possession of a historical-critical spirit," Gaspare De Fiore stated in his *Introduction*. And the first paper, by Luigi Vagnetti, had the significant title: *Drawing and Representation. An invitation to history*.

That approach has meant that the attention to historical contextualization has always characterized the most qualified scientific research in the sector and, therefore, even the most significant contributions that have been recorded at our annual events. The eleventh edition of the Conference –held on 16-17-18 October 1989, at Villa Marigola in Lerici– had as its theme precisely *The History of Drawing*.

To inaugurate that edition of the Conference was Edoardo Benvenuto, Dean of the Faculty of Architecture of the University of Genoa, which organized these events. He opened with an erudite lecture entitled *Representation in the history of scientific thought*, which therefore went far beyond representation in the sphere of architecture and engineering. Thus, even if in broad terms, the scenarios that would later have fascinated some of us –at the time, young people at the beginning of their academic careers – leading us to be interested in the whole of visual representation, not only graphic, and therefore of all images, for any purpose they were produced: starting from those that

fall within the area of science or the artistic field, thus no longer only those functional to architecture, design and engineering.

Furthermore, 2018 is a Mongean year, because it marks the bicentenary of the death of Gaspard Monge, the founder of descriptive geometry.

It is known that he did not invent, nor has he ever been credited with the paternity of the method of orthogonal projections, which later took his name, but limited himself to strictly codifying it. Monge, however, systematized the traditional empirical practices of graphic representation adopted at the time and concretized the intuitions of many artists, architects, engineers and surveyors who had preceded him –from Piero della Francesca to Albrecht Dürer, from Philibert de L'Orme to Girard Desargues, from Guarino Guarini to Amédée François Frézier– in complete and successful conceptions and formulations. He thus outlined a real scientific discipline, previously non-existent as such: having a solid coherent theoretical framework –based on abstractions, idealizations, identification of the only elements and laws essential to representing objects according to constant general rules– of practices of theoretical speculation and organized specific research, which is even dedicated to the development of teaching materials. The subsequent development of these studies, up to the current formulation in an organic disciplinary body, not only cannot disregard the founding principles of Monge, but is also incommensurable with his work.

This also because he not only dealt with theoretical questions, but also addressed –and this is perhaps one of the greatest expressions of the inseparable bonds between science and technique and between theory and practice that characterized all his scientific industriousness and his teaching– concrete applications and, therefore, extended his interests to the technique of representation. Thus, he consciously initiated the elaboration of a more general "theory and technique of graphic representation of a technical nature," based on a homogeneous and in many ways autonomous disciplinary body that goes beyond the boundaries of applied mathematics (into which, precisely following his initial approach, he repeatedly attempted to include it) and which revolutionized the approach to the drawing of all objects, not only of architectural artefacts, and the representation of the territory.

Dedicating an issue of our magazine to this master would have been inappropriate, especially considering that last

year, in anticipation of the anniversary, I myself wrote a new book on his incomparable scientific itinerary, as professor, politician and organizer of higher studies.

It was instead considered natural –given the very recent printing of the Italian edition– to dedicate the Readings/ Rereadings section to Piero della Francesca's *De prospectiva pingendi*. Laura Carlevaris took on this task, with a significant essay that also constituted a careful reading of this monumental publication, in which the critical edition of the drawings was edited by Riccardo Migliari, with the involvement of some of his students.

Obviously, in line with the call, the articles selected for this issue of the journal, as well as those published upon invitation, deal with the history of representation and not with the history of the UID or the Conferences of the Teachers of Representation Disciplines: we will deal with these, as mentioned earlier, in a series of initiatives being organized by a specific UID work group, coordinated by Vice President Mario Centofanti, whose first product were prepared for the Conference in Milan.

As expected, most of the papers received as a result of the call were related to Geometry, descriptive and not, and to design drawing, naturally identified as the two main and fundamental lines of the discipline. Some proposals, especially those concerning design drawing, were rejected because related to realities –architectural or urban– or to minor or otherwise less significant figures within the rich and articulated history of representation. The papers selected after the double review process conducted on the abstracts as well as on the complete articles, therefore form the two thematic sections of this issue of the journal, introduced by two articles presented on invitation.

The introduction to the section on Geometry was entrusted to Fabrizio Gay, who focused on what he calls the “historical passage from Descriptive Geometry to Computational Geometry,” which occurred in the second half of the last century, highlighting “continuity and discontinuity in the history of geometry for drawing” and mentioning the current conditions of this thematic area.

For the introduction to the section on design drawing, instead, a contribution was requested of Livio Sacchi, who dealt with the main transformations that have changed architectural drawing, which had “enjoyed extraordinary historical stability over time,” with the exception of small innovations on the instrumental level. Among the main procedures of the more general infographic algorithms that have replaced the traditional (and exclusive) graphic

algorithm of the design process, mainly parametric design, BIM, Big Data and artificial intelligence were examined: that is, the innovations that, for Sacchi, more than others “seem to summarize the changes underway.” The article concludes with several interesting considerations on the further revolution that is approaching “in regard to the authorship, both of drawings and, of course, of projects.”

Various proposals received dealt with digital drawing; but for the most part they had a descriptive approach and were rather poor in scientific content in line with our journal's approach, thus they were almost all rejected by the referees, usually during the evaluation of the abstracts. The only one selected is introduced here with an article by Alberto Sdegno, focusing mainly on the origins of the application of information technology to graphic representation: a crucial passage, not yet adequately and critically historicized by our scientific community in its full revolutionary potential. For this reason, a contribution on the same topic was also requested of Liss C. Werner, of the Technische Universität Berlin, who has been investigating the same subject for some time, on which she held an interesting *ponencia* at the recent Congreso EGA in Alicante.

Few, and almost all not up to standards, were the proposals addressing other topics, confirming the fact that these –starting with survey– are considered above all as an expression of applied research activity, in which we essentially adopt innovation from other scientific areas, rather than producing it on our own. It was impossible, in any case, not to dedicate a reflection to Survey, whose manifestations over the centuries have had a substantial effect, if not on the definition of the methods of representation, certainly on the documents realized within them and on graphic techniques.

This reflection was entrusted to Paolo Giandebiaggi who, with very linear reasoning, attempted to redeem Survey, shifting away from the idea that it is a simple technical practice. On the basis of the complexity of the present-day world, which requires a new and very articulate type of knowledge, he stresses the need for interdisciplinarity in survey, forced to “confront itself with cultures different from the traditional ones in the fields of architecture, urban planning, history and engineering.” Giandebiaggi thus outlines a new and in many ways unprecedented scientific dignity for survey, even going so far as to speak of an autonomy of survey, considering it as an autonomous discipline. That proposed by Giandebiaggi is a wide-ranging

contribution, of which we felt the need, which can help us to go beyond the practical applications that characterize much of our commitment to survey, especially after the introduction of the most sophisticated procedures and methodologies.

With this issue of *diségno*, in the section of bibliographic references entitled “the UID library” there are the reviews of books considered particularly significant. This is a firm choice of position that –in the dangerous drift currently characterizing, especially in Italy, the evaluation of scientific publications, among which reviews are not considered– emphasizes instead the importance of this publishing product which, in other contexts, even the most experienced and established professors, not just young scholars, continue to deal with. I hope that the same thing can happen for us, that is, that significant proposals will be received and that the reviews of monographs will regain their due importance.

Instead, reviews of events on topics in our area are increasing. This shows, first of all, the great fervor that for the last few years has characterized the activity of colleagues in the sector in the various Italian universities, but also the fact that the UID has become a point of reference in the international field, with requests for patronage of initiatives held abroad, promoted by other organizations. The high participation of both our members and of external scholars in these events bears witness to the achievement of an exceptional goal.

The experience of this first thematic issue suggests a consideration useful for guiding future proposals for articles for our journal. The fact is that our journal is not –as are the proceedings of the conferences– a collection of writings without a numerical limit; it cannot therefore accept each and every article that responds to the theme of the call and is considered “acceptable” according to the standards used for the papers of the conferences.

This implies that the papers that are proposed in relation to the general theme of the issue should not only be contextualized, but must have an appropriate approach, be focused on persons and topics of adequate relevance for helping delineate a truly significant scenario in relation to the general theme proposed. It also means that the articles evaluated by referees will not be evaluated simply “acceptable,” as just specified, but only those that –for originality of content, relevance, quality of the text, notes and images, correctness and relevance of bibliographic references, style and propriety of language, as indicated by the review form– can be considered at least of a “high” level, worthy of a necessarily selective scientific journal.

I hope that the proposals for the next thematic issue –Issue No. 5 of the journal, whose publication is scheduled for December 2019, dedicated to the representation of landscape, environment and territory– will take into consideration what is proposed here.