

Editorial

Vito Cardone

Last year, just a few days before Christmas, Rony Abovitz's startup *Magic Leap* finally presented something concrete in regards to the mysterious, so-called 'mixed reality,' said to surpass both virtual reality and augmented reality. The company has been working on the project since 2011, in Florida, in great secrecy and with huge capital-risk financing by some of the major companies in the digital world, among others (more than two billion dollars have been raised to date). Basically, this revelation raised only a corner of the veil which, up to then, had hidden the invention, of which only a few bits of advance information, well-crafted to arouse curiosity and interest, had previously been disclosed. The headset was tested in advance by *Rolling Stone* magazine and additional images were made available on YouTube, where they had been cleverly doled out for some time. In fact, it is appropriate to say, the product still remains mysterious.

The company maintains that it should forego computers, PCs, tablets, smartphones and similar devices, only using a headset, resembling goggles and worn like a pair of glasses, capable of making virtual images appear in the real world with the projection of a digital light field towards the eyes of the observer. It has been confirmed that the product should be available within 2018, but the precise release date and price are still unknown.

Interest is enormous because, if it keeps its promises, the invention should be truly revolutionary and open a new era in computerized representation, going beyond the current frontiers of visual representation. The fact is that, after the revolution generated by the introduction of infographics, profound innovation in the field of visual representation has been marking the pace for almost a quarter of a century: an enormous length of time, con-

sidering the accelerated pace that now characterizes technological progress. This period of stasis, however, has been beneficial, because it has allowed users—including academics and technicians—to not pursue incessant and portentous transformations, to acquire the incredible innovations introduced, to metabolize them, and then to use them with competence and profound mastery. It has also contextualized the new procedures, placing them in the role and dimension that they actually possess, depriving many of the aura of the scientific aura that at the beginning some attributed even to their simple use, without any critical contribution that would lead to their improvement, without any contribution to their implementation and to the full development of their enormous potential.

In fact, for years, in Italy and abroad, in the field of graphical representation they have been utilized, above all, for the rapidity of operations; the automatic registration of variants, wherever they are made, in the entire electronic model; the potentiality of virtual or material modeling, based on data collected with laser equipment or the result of a design concept pursued, even directly, with dedicated software. The suggestions related to the possibilities of application in fields not previously cultivated by experts in the sector has allowed us, in any case, to go beyond the representation of architecture, of civil engineering works and of the territory, to deal with, for example, statuary, musealization, the processing of images for communication and educational purposes, just to mention some of the themes in which we have been more involved. This has also entailed the advantage of favoring relations with other scientific-disciplinary areas, even the humanities, and therefore multidisciplinary work, even in very heterogeneous groups. The basic scientific contents, those that should characterize the specificity of the area, have not seen any further enrichment or evolution, after a certain progress following the infographics breakthrough. To use the words of the theme of the UID Convention held in Naples, Italy, to which this issue of the journal is dedicated, after the shifting of the frontiers related to infographics, the territories of graphic representation have expanded; new fields have been cultivated, which have produced unprecedented and important fruits and are still very promising. Productivity, however, has been progressively decreasing; the ferment that at the beginning characterized the entire scientific community is ending and we are starting to see that *routine* work, devoid of any really innovative ideas, is becoming more and more widespread. All this emerged with great evidence from the

papers received for the Naples Conference, whose theme was *Territories and Frontiers of Representation*. A current theme which, while unequivocally disciplinary-specific, became harbinger of a broad reflection on the question of images in architecture, art, science, technology and society in general. The territories of representation are in fact numerous—including those of science, technology, art in its innumerable manifestations, but also those of pedagogy, education, teaching and learning—and extremely vast, if not actually unlimited. Architectural and environmental representation occupies only a few chapters of the more general question of visual representation, which interests humanity and includes the representation of bodies, of space (not only architectural or urban), of the earth and its characteristics, manifestations and phenomena (geology, flora, fauna, anthropization), of ideas, of imagination: in a word, of the universe in which they are born and develop.

In many cases, these territories are intersecting, overlapping and intertwined, in a way that is not easily understood. They are boundless, because representation has no frontiers or, which is actually the same thing, if boundaries are set up, they can only be temporary and provisional, fragile and yielding, penetrable and dynamic, continuously movable. Often there are new spaces beyond them to be cultivated, new territories to be rendered fertile and in which to test one's identity, with the risk—or luck, if we place ourselves in broad temporal projections—to see it transformed. However, surpassing boundaries is the only way to continue a productive and meaningful journey, avoiding the risk of remaining in a static situation, a stasis, which soon turns to decay.

This applies to all fields of knowledge and art. Not by chance, *Beyond Borders* was the title of the 2017 Turin International Book Fair, whose official poster showed the image of a book straddling a border wall. And the next annual UID conference (Milan 2018), focused on representation of the material and the immaterial, should also reach well beyond borders.

In reality, this year the theme of the Conference should simply have been *Frontiers of Representation*, but due to the negative meaning that, in the pernicious drift that the so-called 'civil society' has taken in regards to human values, many attribute to this first term, some of us proposed to adopt the word 'Territories' as well. Thus a very ample theme was outlined, which has fully responded to the need, manifested forcefully in recent years, to give all colleagues from our field the opportunity of submitting a contribution.

Consequently, this has led to a considerable increase in the number of papers being submitted, allowing us to continue to have (as, for the first time, in the previous Conference held in Florence, Italy) a wide and significant overview of the scientific production of the entire scientific-disciplinary sector.

Following the call, as many as 300 abstracts were received; after the double-blind peer review, to which both the abstracts and the complete versions of those received were submitted, 224 papers were accepted: as many as in Florence. One-fifth of the authors were foreigners, finally no longer just Spaniards and Argentinians, but from 12 different countries. This fact, also considering some papers written in collaboration by Italians and foreigners, allowed a broader comparison of experiences, in comparison to previous years, and can allow us to speak of a truly international Conference.

The range of topics covered was very extensive: from more traditional ones to others certainly more original, innovative or simply uncommon for our field. A fairly broad critical summary of them is found in the *Preface* to the Proceedings of the Conference. This issue of the journal offers only a glimpse of the most significant contributions. For each *Focus*, the extended version of the introductory report and two papers are being published, selected among those that achieved the highest ratings from the conference referees, and on the basis of a further referral for which a new long abstract was requested from the authors of these contributions. The opening address was instead dedicated to Anna Sgrosso, who was awarded the 2017 UID Gold Medal.

Here it is only appropriate to note that once again, the greatest number of contributions dealt with surveying, in its various and, for us, traditional forms –architectural, urban, territorial, archaeological– to which has been added, to a not inconsiderable extent, the survey of individual artifacts, whether archaeological or sculptural. This testifies that surveying continues to be the major aspect of our commitment to applied research, in some cases linked to important agreements and third parties and sometimes an occasion for the most intense interdisciplinary relationships. Conducted everywhere with the use of the most advanced methodologies and instruments, it is often carried out on artifacts which have already been surveyed several times, finding errors and limitations in the existing documentation, and helping to correct and integrate it. However, in numerous cases, these surveys

are not truly critical, performed by applying sophisticated tools and software, without questioning, as they should, the limits, the approximations of the operations and the results, from which such procedures are not immune. In other cases, on the contrary, due attention is paid to these crucial aspects –which are not only technical and operational– without, however, posing problems of critical reading and interpretation of the artifact, but dedicated only to the graphic restitution of its morphology: something more suited to topographers. Ultimately the clear impression is given that there has not yet been well defined and confirmed, in these long years of generalized adoption of the new digital surveying procedures, a sort of synthesis between the two approaches, which would perhaps be the path to pursue for our sector. More intriguing, with much broader perspectives, seems the most recent interest in the surveying of archaeological finds and sculptural elements, which was the main *focus* of various contributions. In confirmation of what was said earlier, contributions of a general theoretical nature, which the theme of the Conference should have solicited, instead decreased. The commitment to geometry, in particular, manifested itself, above all, with contributions on traditional themes, investigated with new technologies and procedures, still without any significant exploration in the territories opened by the infographic revolution.

Teaching is another topic that aroused great interest, with numerous contributions centered on the fundamental and inseparable relationship with research. Some from this field ventured near some stretches of the frontier, or rather, the old frontier: for example, in dealing with online education –a thorny issue, previously almost always avoided– and that in academic areas is distinct from architecture, design and engineering.

Sometimes, however –as in some studies on territorial and urban representation by several participants, mostly Argentinian, Brazilian and Spanish– great emphasis was placed on the frontier of representation, beyond which boundless prairies are seen, in which some of the possible and desirable paths for future developments in the scientific-disciplinary area are recognized. Someone even crossed the artificial border and courageously explored unknown territories; others gave tremulous glances, unsure of what to do; too many, instead, stayed in safe territory, sometimes in strongholds, as on the edge of the desert of the Tartars, from which they showed no intention of distancing themselves.

My hope is that the thematic issues of *diségno* can help to change this situation. In fact, the task of a journal like ours is not just to be a showcase of applied research, well packaged, conducted and presented, without significant attempts at innovation, but above all that of helping to create the conditions for everyone to arise and embark on the mysterious and obscure paths of scientific research, even avantgarde, or as an end in itself.

Some themes crossed, met with or were met by various *Focuses*, which confirms that not even topics have rigid boundaries. These include those related to virtual models, virtual reality and augmented reality, visualization and modeling: as though to testify that it is now –as in the past with computer graphics– above all a question of acquired operational tools or general languages, more than specific themes.

The impression has emerged that there are some topics (those of *Focus 4*, for example) that we are still not always able to frame appropriately: neither from the standpoint of their presentation, nor as revisions. The quality of the reviews is a serious problem, which also concerns review of the articles: in the one case, as in the other, often carried out with an approach worthier of censors, as a judgment of absolute value for assigning 'accepted' or 'rejected' rather than a moment of a complicated and complex process aimed at improving the quality of the product: that is, a laborious work of support and orientation of reviewing. For this reason, we have decided to publish the form created for the reviews of the complete articles on the website of *diségno*, hoping that this will help the authors to improve the development of their proposals, and the reviewers, the quality of their work.