

## THE DETAILED DESIGN. ROLE, OBJECTIVES, POTENTIALITY

The economic crisis and new needs of the society require an adequate analysis of the political planning stages and technical/economic planning of the built environment transformation processes.

The disciplinary debate promoted, in anticipatory terms as early as the '70s, by several scholars in the area of Architectural Technology has supported a very close bond of interdependence between "technological culture of the design", "design governance" and "quality of the built" by consistently placing these issues within the building process in order to identify tools and methods of implementation to manage the complexity of the construction process of the architecture.

The design has a central role, at various scales, activating a dialogue between its setting, technical choices and expressive purposes, it has to guarantee the implementation of both the inputs of the first phases of the construction process (political planning and technical/economic planning), and of the subsequent phases (realization/exercise/divestiture).

In fact, to protect the architectural and executive quality, the close correlation between the ideational and the realization phase in the design process must be affirmed: concentrating the attention of the design mainly on the creative moment, may lead to neglecting the executive parameters that more than others affect the procedures, the construction techniques and the quality of the works.

This centrality of the design has recently been reiterated in the Contracts Code which identifies precisely in the detailed design (Progetto Esecutivo) an element guaranteeing the correct execution of public works. Today the need to guarantee low-cost architectural quality on the one hand, and the relative quickness of incorporating the constructive innovations of the so-called 4.0 industry on the other, reactivate the role of the architect and his creative capacity in the technological control of realizations.

In this logic, the detailed design represents the most accurate definition level regarding the characteristic of the work to be realized that the design process is called to achieve.

Through the detailed design, it is a matter of satisfying the customers and future users of the building asset, taking into account the different social demands that exist today, confirming the relationship with the new paradigms dictated by the passage of the building sector towards industry 4.0, strengthening environmental protection and, constantly, guaranteeing the necessary morphological quality of the work.

Starting from these premises, call 18 intends to focus on the open debate developed inside the Technological area, in relation to other scientific and cultural fields, collecting research and design experimentation contributions, as well as essays and critical reflections. Useful contributions for defining the scenario within which the detailed design is placed today.

The main thematic areas are:

### 1. Detailed design and correct use of resources / environmental sustainability

Increased temperature, land consumption, hydrogeological instability, air and water pollution, and ecological crimes. These issues make us wonder about the regulations effectiveness and adequacy that rule environmental certification (LCA, ecolabels, EPD) and their utility and reliability in demonstrating the real respect of the Minimum Environmental Criteria imposed by the law. Moreover, the necessary forecast control of the operating phase, poses the problem of the reliable simulation of the future behavior of the designed construction configurations.

### 2. Detailed design and interpretation of the new social demand / sustainability

Population aging, crisis of welfare, reception of migrants, housing valued as "service" and not as "good". The involvement of clients and the participation of users must overcome the current limits of the "débat public", and access to open source type formulas to respect the rights of users subsequently called to express themselves through ex-post evaluations of the interventions (POE).

### 3. Detailed design and new opportunities offered by industry 4.0 / economic sustainability

Industrializing the building sector means removing it from craftsmanship (even if it is evolved) and networking among the actors (companies, universities, public / private research centers, institutions) and production factors (business culture, investments, skills). In respect of the programmers inputs, the detailed design, through methods, tools and skills, must guarantee adequate attention to process and product innovations: from the use of off-site components, to safety on construction sites, to new modes of operation through Facility Management.

### 4. Detailed design and protection of the creative and creative values of architecture

Methods, tools and skills that, together with the technical and procedural contents of the detailed design, guarantee conformity, protection and logic to the conceptual passage and scale between the architectural and design realm: a crucial step for the "survival" of the architectural idea and its translation into qualitative, performance, and figurative terms that must incorporate the necessary contents of environmental and economic sustainability, constructability and management quality of the building product.



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## PUBLICATION DATE TECHNE | 18 OCTOBER, 30th 2019

Authors are invited to send an abstract of **4000 characters** (spaces included) in Italian (or English, in case of foreign author). The abstract is intended to report the main contents planned to be proposed in the article. The abstract has to be written in a clear and concise manner, showing an effective correspondence to the topic of the call. **Each author can submit only one abstract.** Abstracts have to follow the following structure:

- object of the proposal and aim of the article;
- approach and/or methodology.

Authors are invited to specify if their contribution is targeting the “research and experimentation” or “essays and viewpoints” section. Each author can submit only one abstract.

In particular, the “**research and experimentation**” paper has to outline:

- results: analytical aspects, proposals, debates;
- originality: by explaining what is new and for whom;
- limits of the research and significative results;
- cultural implications (practical or socio-economic) when present;
- reference to research/researches, relevance of the topic, subjects involved, fundings.

In the case of an “**essays and viewpoints**” proposal, attention has to be given to:

- cultural and scientific background with regard to the proposed topic;
- analytical aspects, the state of the art of the critical fields and debates on the topic.

For both sections, the abstract has to be introduced by specific \*keywords, reflecting the essential elements of the paper. **The noncompliance with the aforementioned indications is a reason for exclusion.**

The abstract has to be sent to [redazionetechne@sitda.net](mailto:redazionetechne@sitda.net) by **December, 16th 2018, using the sheets attached to this call.** The authors of the accepted abstract will receive information by the Editorial Team starting from **January, 18th 2019.** Once the abstract has been accepted, the authors are invited to submit the paper by **February, 28th 2019.** The paper has to respect the limit of max **20.000 characters, spaces included**, in the case of single author; **max 24.000 characters,**

**spaces included**, in the case of multiple authors. The papers will be submitted to a double blind review and the authors, whose papers have been accepted, will receive further information starting from **March, 29th 2019.** The final version of the paper, integrated with the suggestions given by the referees, will have to be submitted by **May, 10th 2019.** Texts, bibliographic references, images and notes have to follow the editorial rules for the authors, available at the following address: <http://www.fupress.net/index.php/techne/information/authors>. **The non-compliance with the editorial rules is a reason for exclusion.**

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**A section devoted to papers of advanced search, proposed by researchers under 35, is foreseen:** papers (up to 2) which receive and excellent evaluation in the abstract selection and subsequent double blind review, will be published by SITdA with no publication fee.

Section	Research and experimentation	Essays and Viewpoints	Advanced Search (Under35)
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Topic (from the call)	1.	2.	3.	4.
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Title

Keywords (5)

SITdA member	yes	no
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Abstract (max 4000 characters - including spaces) \*

References (max 5)

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Corresponding Author

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For reason of procedural speed, we ask to fill in **the personal and fiscal data of the person or the institution that will make the payment** (we recall that the payment can be made by one person or one institution). In case the contribution will not be accepted for publication, we guarantee that we will not use the data provided. Please remember that the subject reported here will be required to make the payment only after the notification of acceptance of the article for the publication and after a specific request from the publisher (Firenze University Press).

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# CALL FOR PAPERS | TECHNE | 18

## \* ABSTRACT'S SELECTION PROCEDURE

1. After the Call for Papers, authors propose an abstract of a maximum of 4000 characters -spaces included-, which are collectively selected by the Board (composed by the President, the Editor in Chief, the Editorial Board, the Assistant Editors). The abstracts are forwarded by the editorial staff, once purified by any element of possible identification.

2. On average, 25 to 30 abstracts are selected per number

3. Each author agrees not to include specific identifying elements in the text of the abstract, without making any reference to the affiliation and, in the references, with a maximum of one bibliographic contribution, where the author of the abstract appears as an author of the reference. Each author can submit only one abstract, also considering contributions with multiple authors. Submitting more than one abstract for each author is a reason for exclusion of all the abstracts presented.

4. The selection is based on the correspondence:

4.1 to the topics and sub-topics of the call. The main reference topic of the contribution must be stated by the author;

4.2 to the declarative mode, which must be typical of a scientific contribution;

4.3 to the requirements of the typology of the contribution. In the case of **Essays and Viewpoints**, the paper -not be excluded- has to highlight (also through bibliographic references):

- object of the proposal and the purpose of the contribution;
- approach and/or methodology;
- cultural and scientific background related to the subject matter;
- analytical aspects, critical framing or debate on the subject;

Each of the aspects listed above must not exceed 1000 characters, including spaces.

4.4 to the requirements of the typology of the contribution. In the case of **Research and Experimentation**, the paper -not be excluded- has to highlight (also through bibliographic references):

- results already achieved by research: analytical, propositional, and debate aspects;
- originality, which novelty is expressed and for whom;
- limitations of research and possible significant developments;

Each of the aspects listed above must not exceed 1000 characters, including spaces.

4.5 to specific additional features required in the call.

Please note that, in the case of a Research and Experimentation article, quoted researches must be formalized by administrative acts and by the presence of third parties; the subjects involved must be indicated also in the abstract (excluding the department of affiliation. You can anyhow quote the University, which does not represent an element of recognisability). The relevance of the topic has to be highlighted and eventual fundings have to be mentioned.

**Considering also the contributions by several authors, an author can appear only once in the same issue of the magazine, and cannot publish on two consecutive issues.** Board members and the Scientific Committee may publish papers over a year and a half, also considering contributions with multiple authors.



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