

# Designing Resilience

edited by

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Cover  
adaptation from:  
Piet Mondrian, *The Gray Tree*, 1911

**Book series STUDI E PROGETTI**



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## A NEW, YOUNG “INVESTIGATIVE COMMUNITY” WITHIN THE DISCIPLINE OF ARCHITECTURAL TECHNOLOGY

Laura Daglio\*

### *The goals of the initiative*

On the occasion of the MadeExpo<sup>1</sup> 2017 event SITdA, the Italian Society of Architectural Technology launches an experimental and provocative initiative, a Future Search Conference on Resilient Design<sup>2</sup>, with the aim of continuing its mission, implementing and supporting «*policies for research through the creation of a wide and inclusive network of scholars who work in the field of Architectural Technology and through the provision of scientific and cultural resources for the education and qualification of young researchers*»<sup>3</sup>.

The innovative aspect of the event relies not only in the application of an unprecedented methodology for scientific research, borrowed from the participatory design techniques, but also in the will to address and involve with a major role the younger under 40 associates (PhD candidates, PhDs, research fellows, adjunct professors, teaching assistants, etc.). They have been offered the occasion to encounter and actively discuss within a cultural, scientific as well as social meeting: also to go beyond the usual gathering models typical of conferences, which are suited for knowledge exchange but not to trigger immediate collaborations.

Only during the Osdotta Seminars<sup>4</sup> there was a similar active participation of the young researchers, albeit limited to PhD students, and an equally important opportunity for discussion, information circulation, creation and strengthening of relationships. This opportunity, which failed after the reforms that gave rise to the “large” interdisciplinary doctorates, is taken up and relaunched

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<sup>1</sup> The International trade show for architecture and the construction industry which takes place in Milan once every two years.

<sup>2</sup> The initiative took place at the Fiera Milano Rho on March 9<sup>th</sup> and 10<sup>th</sup> 2017.

<sup>3</sup> Cf. Clause 1 of the Implementing Regulations of SITdA Onlus Statute (translated by the author).

<sup>4</sup> The Osdotta Seminars, promoted as meeting events for the Research Doctorates in the field of Architectural Technology from 2005 to 2013, represented an opportunity for a broader exchange on the evolution of disciplinary and academic topics among academics and young researchers in training.

by SITdA, to be revived and reinterpreted also through new future initiatives, such as Re-Live 2019, the design workshop organised for the MadeExpo 2019 event.

Networking also means comparing different approaches, organising in a system different specialisms to implement scientific research which recently, both on the international scale and in Italy, is increasingly developed through team work and collaborative activities also due to the introduction and to the transformations triggered by the qualitative and quantitative research evaluation systems (Cerroni and Simonella, 2014).

Accordingly, the Future Search Conference initiative attempted to broaden the horizontal collaborative interrelations among young people as well as the hierarchical vertical ones that spontaneously occur in academic contexts and that also represent the educational environment in which the experience and the competences of the young researchers mature. Through the Future Search Conference SITdA - and, in particular, the Board of Directors that supported it - had in fact the aim to found a real community of researchers able to develop and get stronger even after the event, thanks to the wide availability of communication tools and collaborative work activities that contemporary computer technology makes possible (Beaver, 2001; Turbanti, 2016).

A second set of goals that guided the construction of the event was the topic of investigation: “Resilient Design” is a research area of significant relevance for Architectural Technology, a discipline based by definition «*on the evolution of settlement models, of the constructive and environmental concept, as well as of the techniques of transformation and maintenance of the built environment*»<sup>5</sup>, and which has long since extended and implemented its specific and original contribution to theoretical, experimental and applied research on sustainability, also to include the field of resilience.

Therefore, the importance of the event for the Architectural Technology research area - to be found not only in the two days of activities during the MadeExpo event, but also in the preparatory and subsequent phases of the Future Search Conference - relies in having also represented the occasion to re-think and discuss different approaches and lines of research on a national scale.

Being resilience a transversal topic within the Architectural Technology discipline, it was possible to involve and stimulate the participation of all the associates, the research areas and, above all, the Clusters, that represent the network model through which researchers belonging to the Scientific Society are organized according to competences and skills.

Through this initiative, SITdA aimed at promoting not only an update on research perspectives, but also - in line with its social mission - a stimulating opportunity to experiment methodologies and tools for the construction of a

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<sup>5</sup> See the research field (*declaratoria*) of the Academic Discipline ICAR/12 - Architectural Technology as defined in DM 30<sup>th</sup> October 2015 n. 855, Attachment B.

shared vision, with new, effective approaches in line with those adopted by the scientific community on an international level.

### *The design and development of the process*

Given the plurality of objectives defined and the unusual participatory methodology that characterized the event<sup>6</sup>, the organization of the Future Search Conference required a specific effort in terms of planning and construction of the process, preceding and following the two days workshop activity.

A preliminary investigation phase, in fact, was developed since November 2016, structured through a series of meetings, which involved the pro-tempore coordinators of the Clusters, and/or possible delegates and the scientific and organizational coordination of the initiative, in addition to Andrea Pillon, as expert in participatory techniques.

The initial phase was conceived with a dual purpose: first, the sharing and evaluation of the adoption of the Future Search Conference model in order to better define its application from the more common and practiced context of planning and design to the more original environment of the participated research<sup>7</sup>. Accordingly, the initial debate focused, on the one hand, on the opportunity of introducing the Future Search Conference as a method of scientific research, on the effectiveness of the confrontation/discussion between different positions and interpretative models concerning the themes proposed, also dealing with the limited duration of the workshop. On the other hand, taking into consideration the real scientific progress of the results to measure the value of the event, all the participants in the organisation phase approved the possibility of experimenting with this tool to establish shared approaches and common goals, both among young researchers and between different generations with the older associates.

Secondly, the need for a preliminary definition of the concept of resilience was identified, or rather of “Resilient Design” as formulated according to the Architectural Technology discipline. The demand for a preliminary investigation and advancement of the activities to be carried out during the Future Search Conference workshop was in fact recognised because of the short dura-

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<sup>6</sup> For a detailed description of the Future Search Conference participation methodology, see the chapter authored by Andrea Pillon, who as an expert “facilitator” coordinated the planning and development of the project.

<sup>7</sup> The concept of “participatory research” in the field of social sciences is more widespread (see Bergold, J. and Thomas, S. (2012), “Participatory Research Methods: A Methodological Approach in Motion”, in *Forum: Qualitative Social Research*, vol. 13, n. 1, art. 30) and of medical sciences (see for example Cornwall, A. and Jewkes, R. (1995), “What is participatory research?”, in *Social Science & Medicine*, vol. 41(12), pp. 1667-1676). This concept however refers to methodologies aimed at planning and developing research with people whose life experience and actions are the subject of the field of investigation.

tion of the event, including the presentation and the final debate, and the heterogeneity of the competences of the researchers involved.

The document, distributed in advance to all participants, programmatically simple and concise, was written in the following months until February 2017, through an open source iterative and participatory process involving the curators and the pro tempore coordinators of the Clusters, as referees for the stimulation and involvement of the associates belonging to the different Clusters.

Because of the diversity of the research areas and scales, the final document has the value of having once again highlighted the specificity of the approach to design and research, and the focus on the process development that links and characterizes the methodological and identity core of the Architectural Technology discipline; an important and even more significant effort as a legacy for the younger generations.

The Future Search Conference at the MadeExpo Milano took place over a two-day period, in four consecutive phases as illustrated in the contribution authored by Andrea Pillon who coordinated the workshop. The event was attended by 56 “under 40” associates, who worked together as investigating community: young researchers and experts from 12 Italian Universities, involved in parallel discussion directly led by 10 tutors and joined by more than 40 associates from 11 universities all over Italy.

The idea of appointing tutors emerged as an opportunity to support the task of the facilitator and to follow and more closely orientate the discussion of the workgroups organised within the parallel sessions. These teams, focusing on specific topics, were gathered around discussion tables during the second phase, which was in fact dedicated to the analysis of the current situation and of the on-going trends/topics that characterize the various research areas, which emerged during the first step of the workshop. A call was launched for the role of tutors and, among the applications sent to the Organizing Committee, the tutors were selected favouring a more mature profile of researcher thus able to lead the investigating community teams. The decision to assign two tutors per team was aimed at not identifying a single leading figure but at offering instead a double reference with a contribution that was not univocal but dialectical.

The associates who followed the Future Search Conference workshop participated directly in the parallel discussions, wandering around the thematic teams, listening and exchanging views with the investigating community, offering contributions to the debates and the development of the state of the art and of the future trends. The concise results of the Future Search Conference were presented during the afternoon of the second day to a larger assembly of associates and discussed with renowned guests, with a special focus on the next research trends following the evolution of the social, cultural and economic changes affecting the national and international context.

The final phase of the process was aimed at the systematization and implementation of the workshop activities in order to consolidate and disseminate the

results within this publication. Once again this phase was managed on a network basis, in collaboration with the tutors who coordinated the different topics emerged during the discussion within each of the thematic teams they directed. The development of this publication is also the result of a discussion that was intended to be as inclusive as possible, which took place during a meeting<sup>8</sup> that involved the coordinators of the Clusters, the tutors as well as the curators of the book to share the objectives and the expected results.

The contributions of the investigating community are multi-authored, in order to promote collaborations between the researchers from the many universities and geographical areas. The aim is not only to strengthen the SITdA network but also to encourage the exchange and dialogue between different approaches and models. Each chapter of the investigating community section, in the second part of the volume, collects and develops the research trends that emerged during the work of the thematic teams of the Future Search Conference through a further research and scientific investigation. The structuring of the topics within each chapter - supervised and coordinated by the curators - and the selection of the respective authors is the result of a process of continuous improvement between the tutors and the participants in the teams, originated by the initial proposals presented by the young researchers. Therefore, also taking into account the concrete effort accomplished through this process of sharing a common language and a cultural basis, the selected bibliography is at the end, common to each chapter that collect the essays of the single thematic teams.

The first part of the volume, which anticipates the contributions of the “investigative community”, collects and articulates the declinations of resilient design as interpreted by each SITdA Research Cluster and is the result of a continuous collective work of implementation and enhancement with respect to the preliminary analysis developed for the Future Search Conference.

### *A first review of the achievements*

It is possible perhaps to recognize at least three different types of results achieved by the process developed through the Future Search Conference experience.

A first outcome is related to the substantial springing up and consolidation of interrelationships within the community of young researchers of the Scientific Society, who have had the opportunity to get to know each other, assess their respective interests, meet and even clash during the debates. The event was in fact the first of a series of initiatives that SITdA is proposing aimed at promoting and enhancing the activities of the “under 40” associates, whose

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<sup>8</sup> The meeting was held in Rome on May 15<sup>th</sup> 2017.

success was also witnessed by the considerable number of subscriptions, more than 50, at the International Conference “Producing Project” organized by the Society at the Department of Architecture of the Università *Mediterranea* di Reggio Calabria on 14<sup>th</sup>-16<sup>th</sup> June 2018. If, on the one hand, the Future Search Conference has potentially paved the way for possible new research collaborations and the concrete development of a new investigating community, on the other hand, because of the methodological nature of this instrument, which required the socialization of personal experiences and the definition of common and shared goals, some general critical issues in the contemporary research environment were also highlighted.

The establishment of internal specialisms within the discipline, also prompted by the logic of productivity emerging from research evaluation systems, as well as the detachment from the real professional practice in the construction sector imposed by the latest university reform whose fruits are only beginning to be perceived, risk to undermine the holistic view characterising the approach of Architectural Technology. This originates not only from a theoretical assumption of scientific principles but also from a direct exchange with real contexts. It is important to tackle with this aspect, so that through the multiplication of opportunities for exchange and discussion some rigidities can be overcome, some general perspectives can be extended and a Socratic critical consciousness can be developed with regard to research.

A second result concerns the testing of an innovative way of practicing a collaborative and bottom-up research, despite the limited time available. This experimentation, thanks to the support of Andrea Pillon, of the tutors and of the senior participants, was found positive even during the initial construction and articulation of topics related to resilient design, highlighting synergies in the diversity of approaches, underlining gaps and themes that have been little investigated, as well as introducing new points of view with respect to already consolidated models. Accordingly, this participatory and shared dimension of research allowed to overcome the apparent difficulty related to the inevitably uneven level of scientific maturity of the young researchers. Furthermore, this methodology has substantially inverted the most typical hierarchical roles of a predominantly academic community, focusing on the activity and interests of the “under 40”, and thus also offering some suggestion to rethink the training of new researchers.

A third result is related to this publication, as the outcome of a choral and shared work which, on the one hand, for the first time attempts to reconstruct the state of the art of research in the field of Architectural Technology, focusing on the topic of resilience; on the other hand, it aims to trace some possible paths of investigation and lines of development, not so much in abstract and theoretical terms but in operational and concrete terms to positively affect the society and the environment. Hence the specification of “Designing resilient, designing resilience”, to highlight the proactive and predictive approach, the

process and systemic dimension of technological design and the wish to compete with and face the characters of a real context and its evolving aspects; to respond to and prevent critical issues according to the demand-performance approach.

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