

ACADIA 1999: The last Conference of this Century

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The idea of this conference arose from various discussions between us in various different places. We decided to put a proposal together for both positions – Technical Chairs and Site Organizers. This was unprecedented and we were anxious. We really wanted to run this conference and run it in Salt Lake City.

Our theme “Media and Design Process” was a timely topic and both of us were working on and around it. We thought it was interesting and challenging to define the terms and to establish the relationships between architecture, representation and media. In fact, all throughout the history of architecture, representation, media and design have been recognized to have a close relationship. Interpretations as to what exactly this relationship is or mean have been subject to debate, disagreement and change along the ages. Whereas much has been said about the dialectics between representation and design, little has been elaborated on the relationship between media and design. Perhaps, it is not until now, surrounded by all kinds of media at the turn of the millennium, as Johnson argues¹, that we have enough context to be able to see and address the relationship between media and human activities with some degree of perspective.

Media as a word has been defined in many different ways. Its most popular definition in today’s culture refers to the mass carrier of communications: radio, television, newspapers, and magazines. Some see media as new audiovisual aids; some as information technology. A general definition that has gained popularity recently is “*a tool*.” When we consider the literal meaning of the word itself, we see that media is the plural form of the word medium, a term broadly understood as being “the middle.” According to the American Heritage Dictionary, medium implies being in the middle or between two extremes or two points. Likewise, the Oxford Dictionary’s definition of media is “an intermediate agency, mean, instrumental channel.”² This understanding is the foundation for defining medium as a tool between the user and the information to be created, received, stored, manipulated, or disseminated. A tool is the middle between the user and the task being addressed.

And yet, media is more than just a “tool”. As articulated by McCullough (McCullough 1996) media is *also* “*an environment*” wherein our minds and bodies fully engage the issues of architecture. As such “cognitive and action” a space it embraces both maker and made in an artificial “place” within which interactions between them occur. Media thus transcends its ‘tool’ nature to become an all encompassing field for enhancing human activities. The concept and impacts of media as environment are best realized in electronically mediated collaborations and in partially or fully immersive virtual reality situations.

In architecture, media can be defined as a tool/environment for selecting, gathering, organizing, storing, conveying and engaging knowledge in representational forms. Media enable ideas to be externalized and evaluated and hence become a highly influential factor in the design process. Thus, from a theoretical viewpoint, media can be regarded as an important and influential factor in architectural design. In other words, the cognitive/affective/motor processes associated with design and the media technologies we utilize appear to be linked.

The reality of the relationship between media and architectural design can be seen when the interaction between cognitive processes and characteristics of the environment is considered (Salomon, Perkins et al.

¹ Johnson says: “The explosion of media types in the twentieth century makes it possible for the first time to grasp the relationship of form to content, medium to message, engineering to artistry.” (Johnson 1997)

² Furthermore Bacon referred to “the medium of words.” Oxford dictionary, definition#5.

1991; Kozma 1993; Salomon 1993). Given this, it is appropriate to assert that the nature and power of the available media facilitates what is conceived and accomplished. Conversely, limitations in design decision making may result from the limitations of the media employed. In this respect, media can be thought of as cognitive prostheses or extensions inasmuch as they serve to aid designers in their own constructive thinking, allowing them to transcend their cognitive limitations and engage in architectural operations they would not have been capable of otherwise (Pea 1985). This primary impact of media in design may be particularly relevant during the beginning stages in the gestation of new ideas and progressively diminishes as the design process advances.

Even though this argument is widely accepted today, it does not necessarily imply that we know all the essential links between media and architectural design. Perhaps, this is partly due to the lack of enough research, and partly due to difficulties formulating the essential questions. In the past few years, there has been a steady growth in the number of studies addressing the impact of digital media on architectural design. For example, recent investigations on the use of multiple iterations between digital and analog media have begun to shed some light on this issue. Design studies in structures and environmental controls in relation to media have started to make valuable contributions. Ongoing research on the impacts of networked electronic environments in collaborative design are also helping us to grasp the impact of media in architectural activities. Still, much remains to be done.

It was precisely with this goal of furthering our understanding of the effects of media on design that we conceived ACADIA'99. By focusing the attention of electronic media experts' in current research and reflections addressing the links between media and design, ACADIA would be advancing the existing knowledge base and methodologies addressing the integration of computers into architectural education and practice in general, and design process in particular. Thus, the ACADIA'99 Call for Participation asked for work covering different dimensions of media and the ways they related to design activities at all levels of architecture. We received 110 abstracts in response to our Call followed by 92 draft papers and 4 works in progress for review. This work came from all around the world. Of these, 24 papers (26 %) and 12 works-in-progress were selected for presentation and publications in the proceedings.

Based on the work submitted for review, we saw a great deal of interest in covering the use of the web as an environment to support design communication, collaboration, decision making, teaching, critique and presentation. As a result, two sessions of our conference were devoted to this subject. Looking at this and last year proceedings, it is clear that the 'virtual' or 'distance' or web-based collaboration is growing rapidly and arguably a major area of pedagogical and practice innovation. The many submitted works reporting on diverse approaches to assimilate computers into design studios suggest that, as published and discussed in numerous ACADIA proceedings, digital media has become a normal fact of educational life and a more reflective and explorative attitude now needs to take place. In this sense it was with good surprise that we saw a larger than expected submission of theoretical or reflective work on the impact of digital media in architecture and design, several of which have found their way into these proceedings.

Following the example of ACADIA'98, we conducted the submission, reviewing, selection, communication, editing, verification and publication process electronically. This method proved to be relatively easy to implement as well as agile, responsive and robust. Feedback from authors, reviewers, moderators and the ACADIA Steering Committee supported this claim. This method also allowed us to conduct our technical chair activities quite normally despite the fact that we physically found ourselves far away from each other at several times during the enterprise. It is clear from our and last year experiences (ACADIA'98) that technical chairs of future conferences should carry out their job electronically.

A few things were unique to this conference. First, we incorporated parallel sessions within the body of the conference to allow for a larger than usual number of presentations. The reason was simple. We believed that it was time to increase the number of voices and works presented at ACADIA annual conferences. This growth came as a direct response to the explosive growth our field has been experiencing since ACADIA's birth. We have come a long way. Unlike 19 years ago, the impacts of computers are not longer reduced to particular areas of the curriculum, production or software development. Rather information technologies have and are transforming every single facet of architectural practice, research and education. Consequently, it is now usual to see a rapidly growing number of individuals and

institutions studying, implementing and reporting on their experiences with digital media. Academic and professional organizations not traditionally interested in computing have begun including work on this area within their venues (e.g., the ACSA). This development is both a threat and an opportunity for our organization. On one hand, it threatens to displace the leading role ACADIA has been playing in this area for 19 years. On the other hand, it reaffirms ACADIA's relevance and if properly played, puts our organization at the very center of most educational, professional and research preoccupations. Furthermore, opening up ACADIA to a larger number of contributors and audience is both timely and necessary to give our organization an injection of vitality and growth that helps maintain our hard earned leadership in computing in architecture.

We think that responding to this situation means to acknowledge the large number and wide diversity of quality works being produced today. This was quite apparent to us as we had the opportunity to review every single of the 92 works submitted. It became increasingly difficult (both academically and ethically) to justify rejecting work solely on the basis of lack of scheduling time ! We chose instead to include a larger number of works and use the parallel sessions format to create the necessary space. We did this very carefully not to affect the quality nor the focus that have traditionally made ACADIA conferences memorable and strong. Hence, attendees noted that we had applied the parallel sessions model to only one of the three mornings compressing the conference. Although we think that our stated goals were achieved, it is the presenters, attendees and reflection time who will tell if this decision has been a good one.

Second, and following the spirit lay out above, we formally instituted a "Work in Progress" category. Although previous ACADIA conferences have sometimes included such category, these works were given very little time for presentation and never included as part of the proceedings. We decided to accept "Work in Progress" to recognize work that was outstanding but still needed further development. We believed that authors would benefit from public discussion and feedback while ACADIA and the public would profit from an early outlook at what lies in the horizon of CAD research. To guarantee these objectives, we allocated special presentation time for the "Work in Progress" category during the conference prime time and included their published summaries within the proceedings.

Third, we made particular efforts to make this conference as international as possible. Using our own means as well as the help of leaders from ACADIA and its sister organizations (ECAADE, SIGRADI and CAADRIA) we advertised ACADIA'99 Call for Participation to a large global audience. This year highly visible and successful ACADIA International Competition may have also helped to bring further attention to our conference. In any case, the response to our Call was truly international with 35% of the submissions and 41 % of the accepted work being from outside North America. We are glad to report that this year we had presenters from Argentina, Australia, Canada, Chile, China, Germany, Japan, Italy, the Netherlands, New Zealand, Singapore, Switzerland, and the UK. Such a strong international response indicates the growing globalization of knowledge, research, and communication. It also points out the need that we become fully aware of the fact that ACADIA is closely monitored from abroad and regarded with a great deal of respect and leadership among our sister organizations and experts in the field. We are happy that our a-priori commitment to a truly international convocation has paid off and that this conference began to address the role that ACADIA may play in a global environment.

Fourth, we developed a set of measurement criteria for paper evaluations. These criteria were based on critical framework that applied to all papers. Each paper was evaluated by at least three reviewers (mostly four and five) for a fair measurement. All submitted papers received long, constructive and rich feedback and we received many thanks for this process.

Fifth, in ACADIA'99, technical and site chairs' responsibilities were given to the same individuals for the first time. Although on one hand this meant a lot more work for both of us, on the other hand it provided us with the opportunity to better coordinate and integrate the academic and logistic dimensions of the conference. For instance, the choice of the site, Snowbird, was done not only on the basis of its breathtaking beauty, outstanding services and accommodations and conference supporting facilities but also in the premise of bringing the material and mediated dimensions of contemporary culture right into focus from within the conference. As technical chairs, we couldn't think of a more fitting place to reflect on the impacts of virtuality in architecture than in the midst of nature. The joint appointment also allowed

us to incorporate the University of Utah Graduate School of Architecture 50th anniversary celebration within the body of the conference, thus enhancing both the ACADIA'99 meeting and the GSA's planned commemorative activities.

We would like to express our thanks to all those who have contributed in some way to the ACADIA '99 conference on Media and Design Process, and to the production of the present proceedings volume. First, We want to thank all the authors that responded with their work to our Call for Participation. Without their effort and trust, this conference would not have made possible. We would also like to acknowledge the technical review committee for their committed, disinterested, and hard work at evaluating the submitted work, particularly because most of them reviewed at least 5 papers and provided long and thoughtful feedbacks to the authors. We thank the session moderators for their quick and positive response to our invitation as well as their session introductory commentary for the proceedings. Recognition is also deserved by Skip Van Wik (ACADIA'98 technical chair), Anton Harfmann (ACADIA'97 Site Chair), and Brian Johnson (ACADIA'95 Site Chair) for their advise and various contributions. We also appreciate the ACADIA Steering Committee's support, encouragement, critique and advice during this past year of work. We want to thank University of Utah Graduate School of Architecture Dean William Miller for providing the school's financial, logistic and academic support to the organization of this conference. We are also in debt to the University of Utah Office of the Vice-president for Research for their grant supporting Greg Lynn (our Keynote speaker) lecture. The diligent and patient desktop publishing work for this proceedings contributed by graduate student Yue Pan needs also acknowledgement. We would like to extend our thanks to the several GSA students that helped us in diverse ways before, during and after the conference. Especially, the following students deserve a great appreciation: Jeff Byers, Tom Jakab, Richard McCann, David Pugh, Tom Richey, Travis Sheppard, Joe Smith, and Misha Waldron. Also, many thanks to the people at Snowbird for their professional and kind assistance in producing this conference. Finally, we thank ACADIA for giving us the opportunity to contribute to the advancement of computer aided activities in architecture, serve the ACADIA membership and the public, and, in the process, develop a friendship that is to last.

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