CONSENT FOR PARTICIPANTS IN A RESEARCH STUDY

Georgia Institute of Technology

Title of the Study: Meta-models of Design Knowledge

Investigator: Marcelo Bernal, Ph.D. Candidate, College of Architecture, Georgia Institute of Technology
Supervised by: Professor Charles Eastman, College of Architecture, College of Architecture, Georgia Institute of Technology

Purpose:
The purpose of this study is to identify the patterns of organization that expert designers use to create coherent arrangement of physical components. The information collected will be used to test an approach to automate the production of design options based on the combination of parts and such pattern or organization as part of the Ph.D. thesis of the Investigator. Only one expert designer is required to participate.

Exclusion/Inclusion Criteria:
The participant must have at least ten years of professional experience in architectural design.

Procedures:
- Description of the design process of three case studies of custom façade system design of your authorships will be audio recorded for further transcription.
- The transcriptions will be subject of verbal analyses seeking for episodes with descriptions of the relationship between physical components of the design and the patterns of organization that the expert designers use.
- The transcriptions will be also complemented with graphic material.
- This information of parts and patterns will be used to create a model using the System Modeling Language (SysML). Form the model variations of the original designs will be explored.
- Because of the case studies correspond to internationally well-known design projects already published in several architectural magazines, the credits of the expert designer will be included in the documentation of the study as well in future publications.

Risks or Discomforts:
The expert designer will define what graphic material will share with this study, and if some sensitive information should be omitted from the transcriptions at any time.
Benefits:
You are not likely to benefit in any way from joining this study. However, this study will contribute to the development of computer-aided design methods.

Compensation to You:
There is no compensation for participation.

Confidentiality:
This study involves the use of audio-taping. Only the Investigator will have access to the material. It will be erased after all the necessary information is collected from them. In the documentation and articles derived from the study, the expert designer will be quoted by name and affiliation in recognition of the authorships of the design projects used as case studies.

Costs to You:
There are no costs to you, other than your time, for being in this study.

In Case of Injury/Harm:
Although it is unlikely, if you are injured as a result of being in this study, please contact Professor Charles Eastman, at telephone (404) 894-3477. Neither the Principal Investigator nor Georgia Institute of Technology has made provision for payment of costs associated with any injury resulting from participation in this study.

Participant Rights:
- Your participation in this study is voluntary. You do not have to participate in this study if you don't want to.
- You have the right to change your mind and leave the study at any time without giving any reason and without penalty.
- Any new information that may make you change your mind about being in this study will be given to you.
- You will be given a copy of this consent form to keep.
- You do not waive any of your legal rights by signing this consent form.
- You have the right to review and approve the content of any research article derived from this study. It will be sent to you two weeks before the submission for peer review.

Conflict of Interest:
The expert designer declares no conflict of interest.

Questions about the Study:
If you have any questions about the study, you may contact the investigator at telephone (404) 452-2905 or marcelo.bernal@gatech.edu.

Questions about Your Rights as a Research Participant:
If you have any questions about your rights as a research participant, you may contact: Ms. Melanie Clark, Georgia Institute of Technology Office of Research Integrity Assurance, at (404) 894-6942.
If you sign below, it means that you have read (or have had read to you) the information given in this consent form, and you would like to be a volunteer in this study.

**Marc Simmons**  
Professor of the Practice, School of Architecture  
Thomas W. Ventulett III Distinguished Chair of Architectural Design

Participant Name

[Signature]

March 19, 2015

**Participant Signature** Date

**Marcelo Bernal**

Signature of Person Obtaining Consent Date

[Signature]

March 19, 2015