Graduate School of Architecture, Planning + Preservation
Columbia University
Spring 2011, Visual Studies

APPROACHING CONVERGENCE 2011: ADVANCING EXCHANGE IN GRASSHOPPER
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Course Website: http://www.thediscontinuum.net/ac2011

OPERATION #1B: *outSOURCED OPERATIONS (Dynamic Interoperability)*

The goal for this final assignment is to realize the full extent of the research workflow proposed in Operation #0 and refined in Operation #1A. Groups are expected to utilize interoperational methodologies discussed in class and work sessions to formalize research and generate data-driven geometry and/or systems within Grasshopper. Each team must target specific strategies for introducing external data generation (input) and/or streaming Grasshopper data/geometry across platforms for evaluation/regeneration of data (output). Groups are further encouraged to explore advanced manipulations of logics within Grasshopper as well as integration of customized VB visualization and drawing production tools (Color / Material Bakes, Make2d, Render Animation, etc.).

The ultimate objective is to develop and document an innovative approach to the realization of construct and workflow as a dynamic/unified/interoperable system. Thus, for Operation #1B students are required to produce an animation/video of dynamic processes in action (via Camtasia, CamStudio, similar screen recording software, or animated sequencing of output) and final renderings.

Operation #1B REQUIREMENTS:

Rhino/Grasshopper:
Multiple distinct + clearly-described (with Panel notes) Grasshopper operations
Integration of Visualization, Drawing Production +/or Workflow tools
Dynamic Cross-Platform Connectivity utilizing integrated, plugin, or custom toolsets

Deliverables:

DUE PRESENTED IN CLASS 03.03 and SUBMITTED ON CD/DVD
+ Process video: 1 to 2 minutes in length, 720x480 resolution, exported as .MOV
    Process videos should clearly document intent, structure, process, + outcome of the research conducted over the course of the semester; this may include, but is not limited to the following:
    ++ Screen capture / live video / animated sequencing of multiple softwares in dynamic communication
    ++ Refined Workflow Diagrams
    Animated rendered sequences
    Still renderings/drawings/imagery
    Concept materials
    ++ Indicates minimum required content

DUE POSTED TO COURSE WEBSITE NO LATER THAN 3.24
+ Refined workflow diagram (.pdf)
+ Matrix of possibilities/outcomes, rendered as vector or composite drawings from Rhino
+ One archival-quality rendered image at 2000x1500 minimum
+ Grasshopper .ghx definition + associated software files posted to course website

Projects will be graded according to quality, clarity, intricacy and depth of operations, and creativity. This is an opportunity for you to demonstrate the soundness of your systems as a contribution to the collaborative body of research from the semester.