**Questions Log - AAH1710 webinar “Generative Design for Healthcare Planning”**

Q: Is there commercial software available to use this design technique? The technique refers to generative design?

A: The work presented is an ongoing project. Some of the work has been released as open source. <https://github.com/subhdas/Spaceplanning_ADSK_PW>

As we further develop and validate this work further look for updates to the software.

Q: Other firms have implemented similar Computational Design Tools (NBBJ's Digital Practice and ZGF's Study Optimizing Spatial Adjacencies Using Evolutionary Parametric tools). Which studies served as precedents and how does the Space Plan Generator differ from these studies?

A: In our paper (reference below) we cite and discuss the relationships of this work to prior published and open source projects that we are aware of. The ZGF work is included in this review, we are aware of some of the work by NBBJ as well, but are unaware of any peer reviewed publications that describe this work in enough detail to allow comparison.

Das, Subhajit; Day, Colin; Hauck, John; Haymaker, John; Davis, Diana (2016). Space Plan Generator: Rapid Generation & Evaluation of Floor Plan Design Options to Inform Decision Making, 36th Annual Conference of the Association for Computer Aided Design in Architecture (ACADIA), Ann Arbor, MI.

Q: Is Form Maker a plug in for Dynamo? Or a separate tool?

A: It is a plugin for Dynamo that works in the context of the other components of SPG.

Q: Can you share the dynamo graph?

A: See above, the Dynamo graph has been shared on github.

Q: How does Perkins+Will measure the value of computational design over traditional planning?

A: There are both process and product metrics at play. Process Metrics include time for the task, but also the number of alternatives generated, the number of analyses created, and the level of confidence in the outcome by the design team. Product metric include things like visibility, waking distance, program satisfaction. We are continuously adding new metrics and analyses related to environmental, experiential, and economic performance.

Q: From the computerized/automated layouts, how long does it take these optimized layouts to be evaluated & evolve into functional & efficient layouts that meet the programming needs & physical constraints, such as columns, shafts & etc.?

Some Architects/Planners may be concerns that this automation may minimize the needs for Planners (or creativities.)

A:Each individual design is produced in seconds because of the highly efficient data structures produced. The stated purpose of the tool to date has been to as an idea generator, so we have not rigorously explored optimization or deep integration with systems. While future work will not doubt move in this direction, we see the these methods to be a smaller part of a much larger workflow in which designers are interacting and configuring a large number of components in an iterative fashion to creatively explore the design space and gradually build in more detail. We believe the methods can release the planner to be more creative by supporting the rote representation tasks and enabling more efficient iteration which design theory tells us will lead to better designs.