Education, Design and Practice – Understanding skills in a Complex World

• Paper / Proposal Title:

“I’ve Not Done All I Can Do With a Carrot: Or, What Happens When It’s Time to Take Down the Building?” Rethinking the recipe of construction by looking at waste in architecture and the development of materials without degradation

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• Abstract (300 words):

Over the past two decades, changes in building policies have led to the recovery and re-use of construction waste to make new, recycled building materials. Rugs can be re-made as rugs; aluminum can be turned back into something aluminum. We often get recycled materials of different characters that have been collected, recovered and then put into a matrix such as a resin or a cementitious binder. But, these complex materials are not easily re-used after their lifecycle except in a diminished way.

As architects, we can become more accountable by pushing our thoughts about construction and the environment one step further. Ideally, we would locate, document and collect waste to develop compound materials that can be re-formed, re-used or re-invented without degradation. Just a few years ago, plastic was not 100% recoverable. Now, a milk jug can become another milk jug.

What if the materials we use to build were created from the waste products of another industry? Can we convert trash into a compressed building mesh? How would this change trash as a commodity? What if the material we built with could be disassembled or degenerated and re-formed into another material of the same quality, enabled by the 3D printer’s understanding of the material density, specific to the site
and the material requirements? What if scrap was actually the central material of consideration?

What are the rules so we can make the module of construction easily re-useable? If we are designing for disassembly and re-use, how would that change how we design? The lifecycle of construction materials—not just their first use—does matter. It’s time to re-define how we move forward as architects and material custodians.

• Author(s) Biography (200 words each):

Victoria Rospond, Lea Cloud and Jon Dreyfous are the principals of CDR Studio Architects, a full-service, award-winning architectural firm based in New York City. Our work features public, institutional, educational, commercial and residential projects, as well as furniture design and urban planning. Our ability to work at multiple scales with creative energy is evidenced by the broad scope of our projects. We believe in well-designed architecture that engages the public, enriching our culture while giving integrity and dignity to the built environment.

In 2014, CDR Studio’s winning submission for the City of Dreams Pavilion design competition—created to inspire collaboration within New York’s artistic and architectural design communities—was displayed on Governors Island through the summer and early fall. Composed of 30,000 previously used plastic cups that we diverted from New York City’s garbage stream, the Governor’s Cup Pavilion hard far-reaching effects on how we look at material selection from beginning to end. Our experience with this project is an underlying theme of a forthcoming book expected in 2019.