

**paul chan** curriculum vitae

e: paulchacan@gmail.com

t: 602.349.8180

## work experience

*shop monitor*, school of arch. fabrication shop 2011 - 2012  
helping students work with machines in shop and mainting various machines

*student graphic designer*, school of architecture publications dept. 2012 - pres.  
coordination of the peck prize ehibition  
assoc. student graphic designer for material manifestations  
lead student editor of the all-student work book

*intern*, francis bitonti studios 2013  
provided expertise in the design of textile projects

## education

*rensselaer polytechnic institute*, b.arch. expected grad., spring 2015  
curr. gpa: 3.59

## awards and achievements

1st year faculty award certificate, spring 2011  
2nd year faculty award certificate, spring 2012  
founders award of excellence, fall 2012 (top 1% of school)  
rensselaer leadership award (scholarship)  
dean's list, fall 2010 - fall 2012 (5 out of 5 semesters)  
socio-design foundation vignette competition, spring 2012

## publications

spring 2012, building futures: re-envisioning the hyde at rensselaer  
spring 2012, <http://www.sociodesignfoundation.com/2012-vignette-competition-winn/>  
spring 2013, all-student work book, upcoming  
spring 2013, suckerpunchdaily, <http://www.suckerpunchdaily.com/2013/03/28/affective-machines/>

## knowldege and skills

modeling autocad, rhino 4.0/5.0, maya, 3dsmax, sketchup, revit  
rendering vray (for rhino and sketchup), mental ray (for maya)  
graphic design adobe creative suite: photoshop, illustrator, indesign, premeire, dreamweaver  
fabrication 3-axis milling, 3d-printing, cnc laser, wood-working tools  
programming html/css (website design), python, processing, javascript (for adobe creative suite)  
rhinoscript and grasshopper (for rhino), java

## professional references

*francis bitonti*, founder of francis bitonti studios, adjunct professor at rensselaer polytechnic institute  
francis@francisbitonti.com / 631.338.2578

*evan douglis*, founder of evan douglis studio llc, dean at rensselaer polytechnic institute  
edouglis@gmail.com / 917.568.6337

*casey rehm*, adjunct professor at rensselaer polytechnic institute  
mistum@rpi.edu / 518.331.9419

*andrew saunders*, assist. professor at rensselaer polytechnic institute  
saunda2@rpi.edu / 518.763.4881



**paul chan** | portfolio and works

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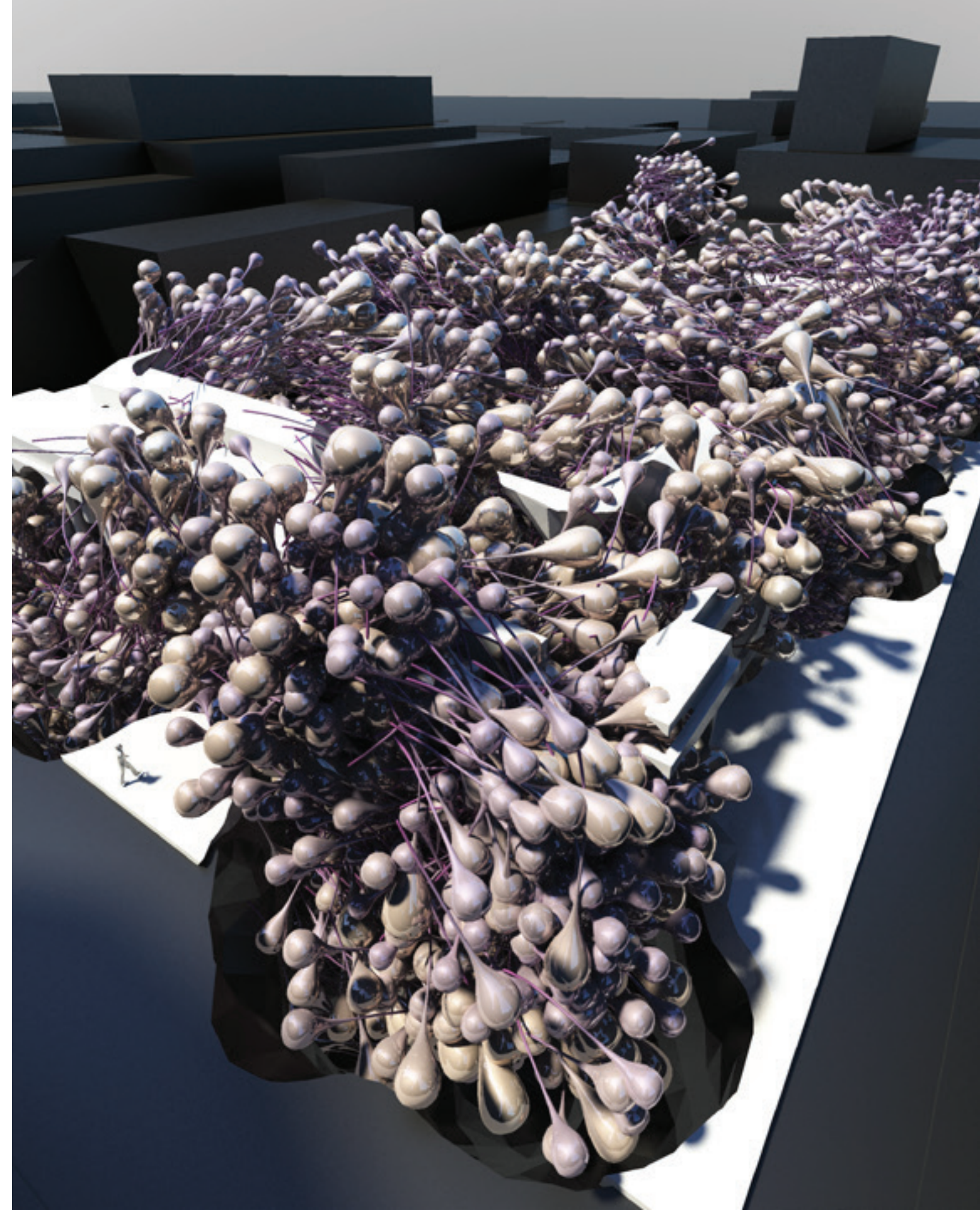
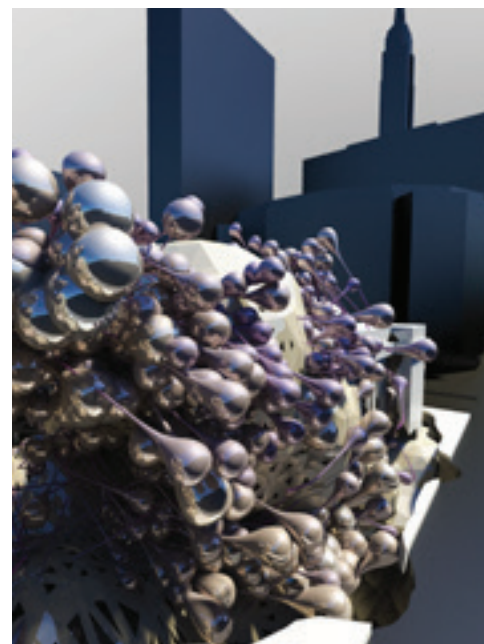
above: "mark making study 02," digital drawing, 24" x 8," spring 2013  
cover: "mark making study 01," digital drawing, 18" x 24," spring 2013

## implicated formations

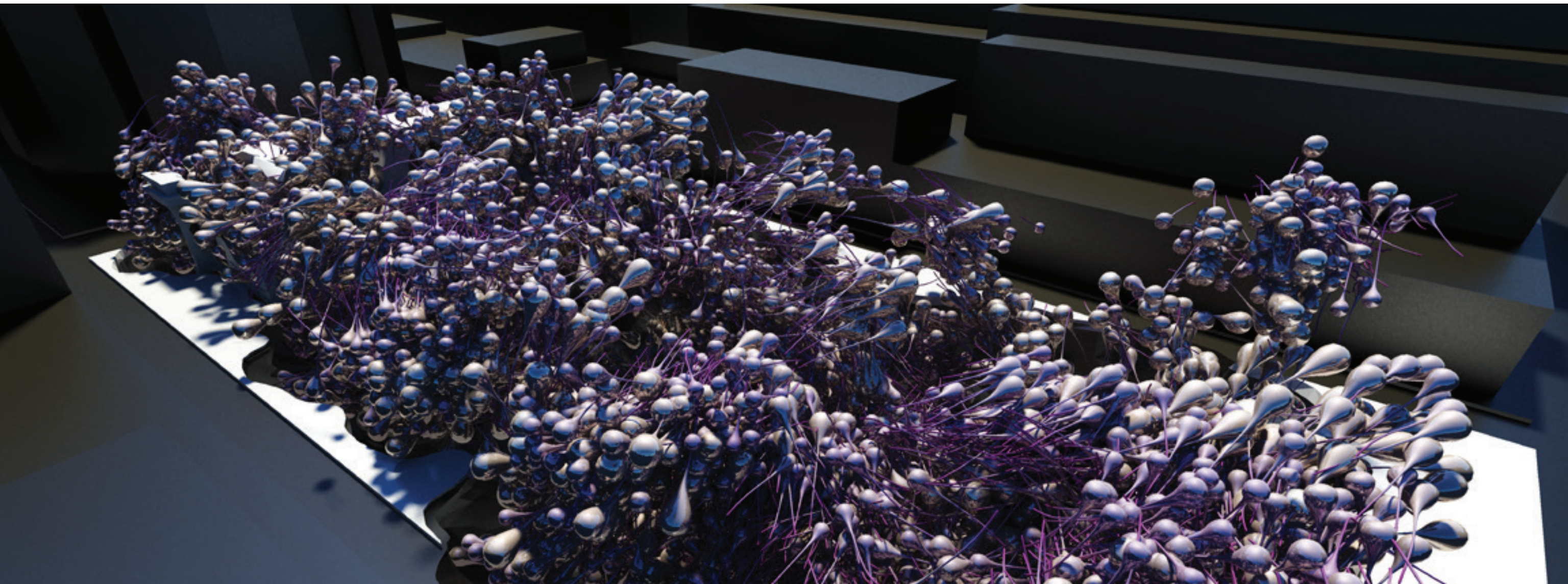
re-imagining penn station

this project moves beyond contemporary modes of parametric modeling which explicitly state transformations and movement and use an implicit means of generating form. through this, we are able to create complex forms that do not have topological constraints related to explicit polygonal or nurbs based modeling techniques. this project serves to stand as an initial exploration into what might be considered the post-parametrics age.

the formations that are generated create a sense of continuity as well as dynamism that invades penn station and erodes away the structure until it is the only part that exists. what is left is a system which creates its own field conveying an aesthetic of growth and sense of texture throughout the site.



critic: casey rehm  
spring 2013



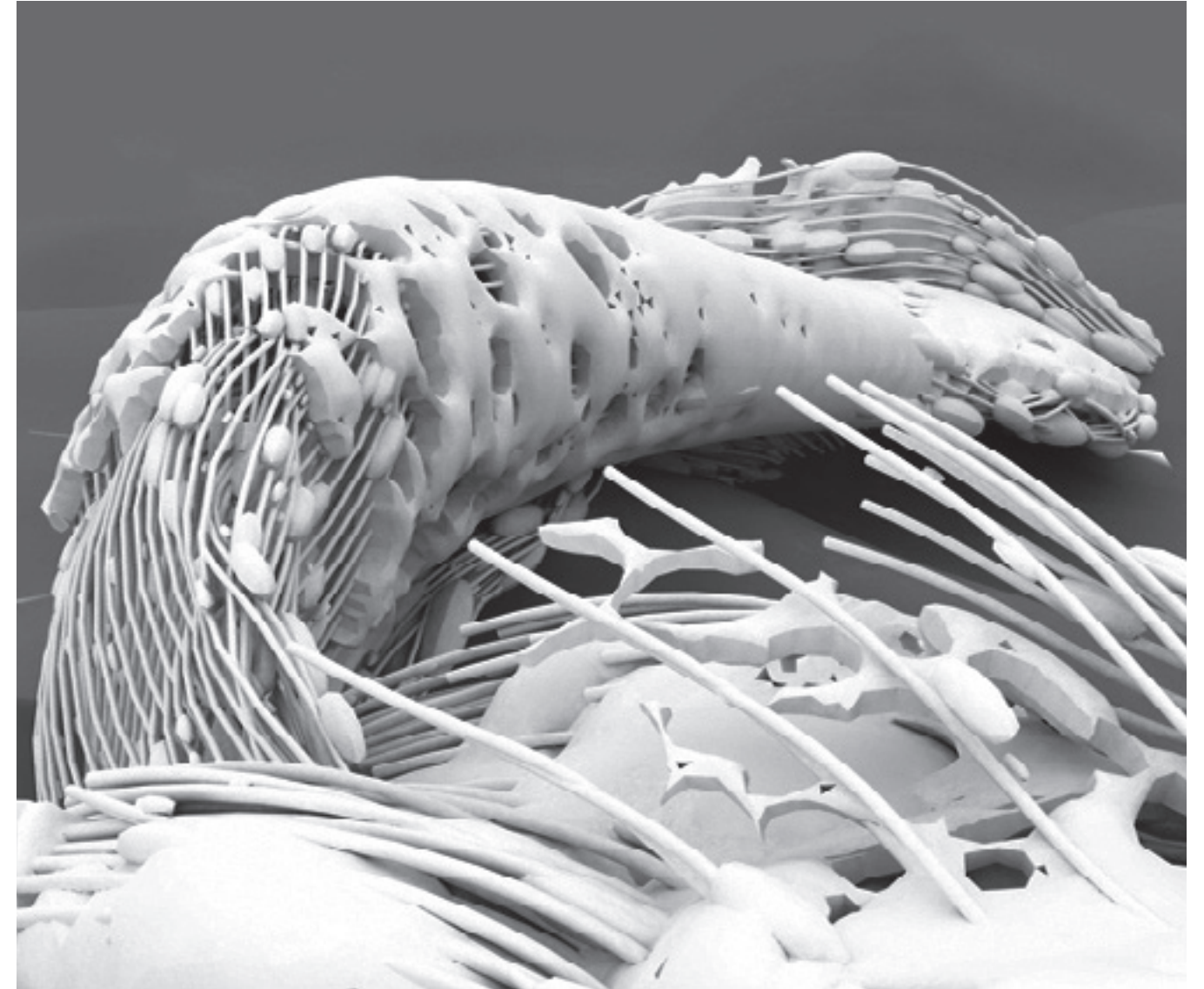
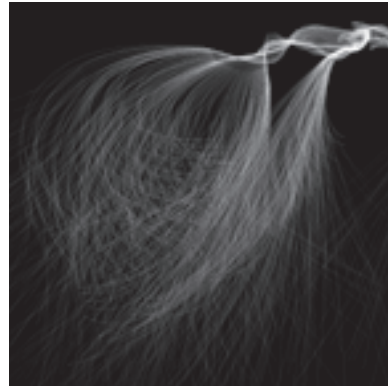
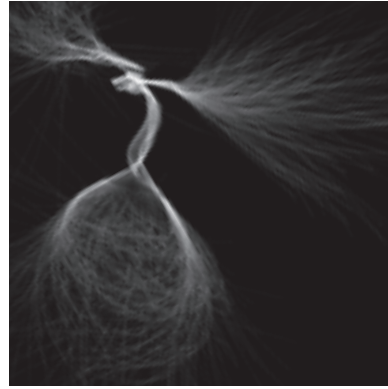
## from dust to dust

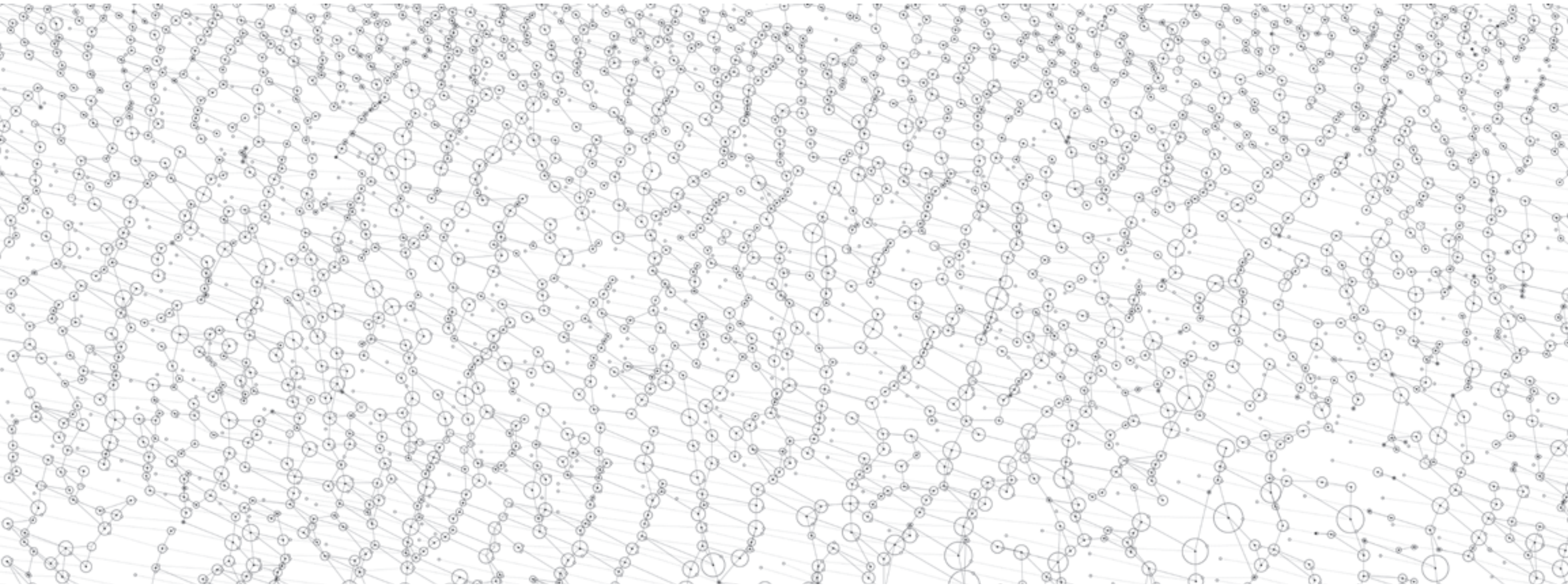
a terraformation of mars

architecture is very dependent on the context of site. in order to fully break all pre-conceived notions of site that we might have, it was decided that we would create an architectural construct on a martian site. by developing an understanding for the site based on aerial imagery, panoramic shots from martian rovers, and materials research, the development of a structure divorced from any earthen notions of site would be developed.

structure from this respect was created in the context of creating architectural form through the use of digital material. a structure was imagined that would use energized magnetic fibers to attract iron dust on the martian landscape which would harden over time. digital methods of simulating this effect through drawing and modeling techniques would be generated over the course of the semester to support this narrative argument.

procedural forms of drawing and modeling were used to create a visual argument as well as augment the narrative for a proposition of architecture on mars. by developing and using these digital techniques and tools to fashion an argument, an understanding of how contemporary methods of drawing and visualization could create an architectural narrative.





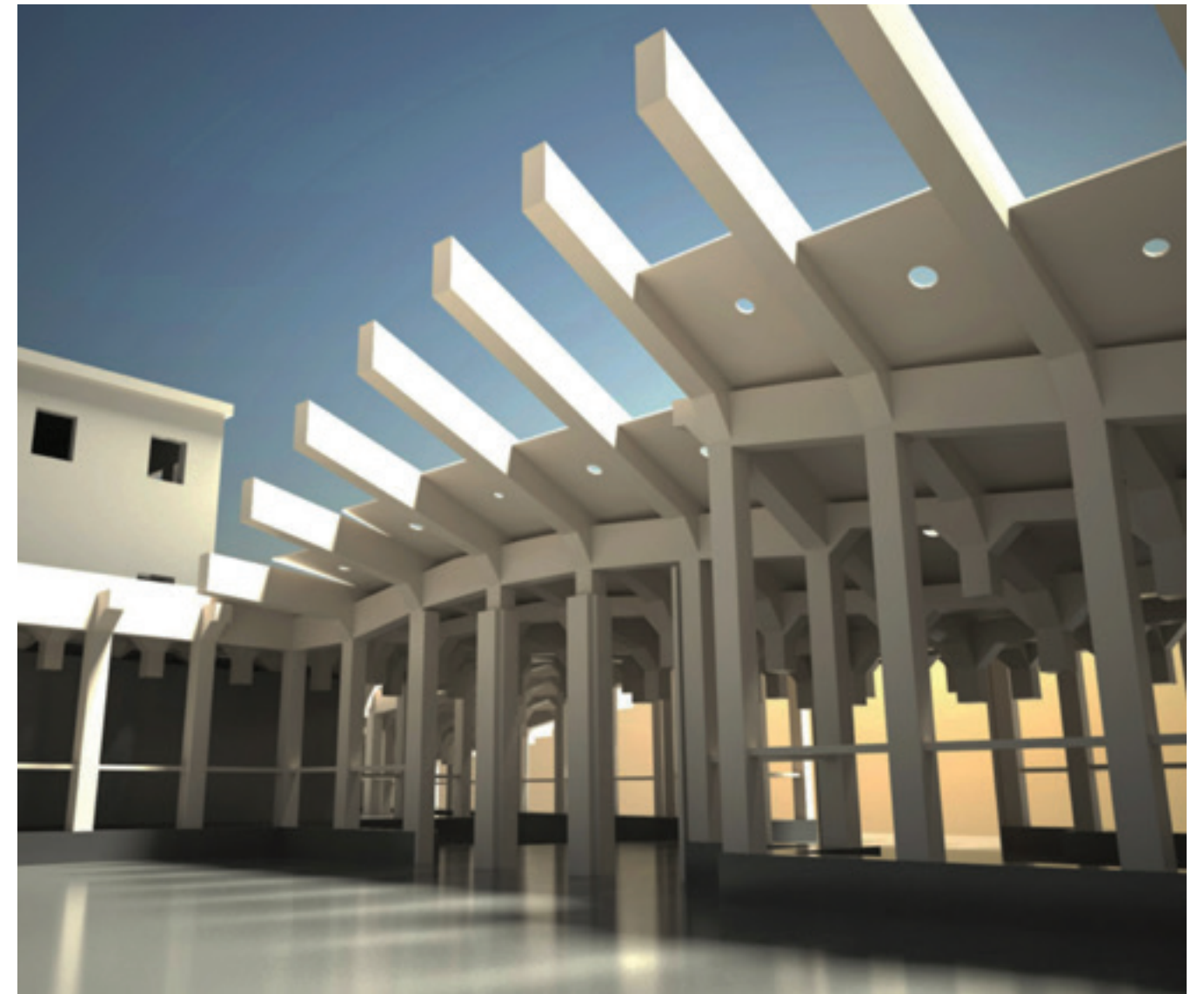
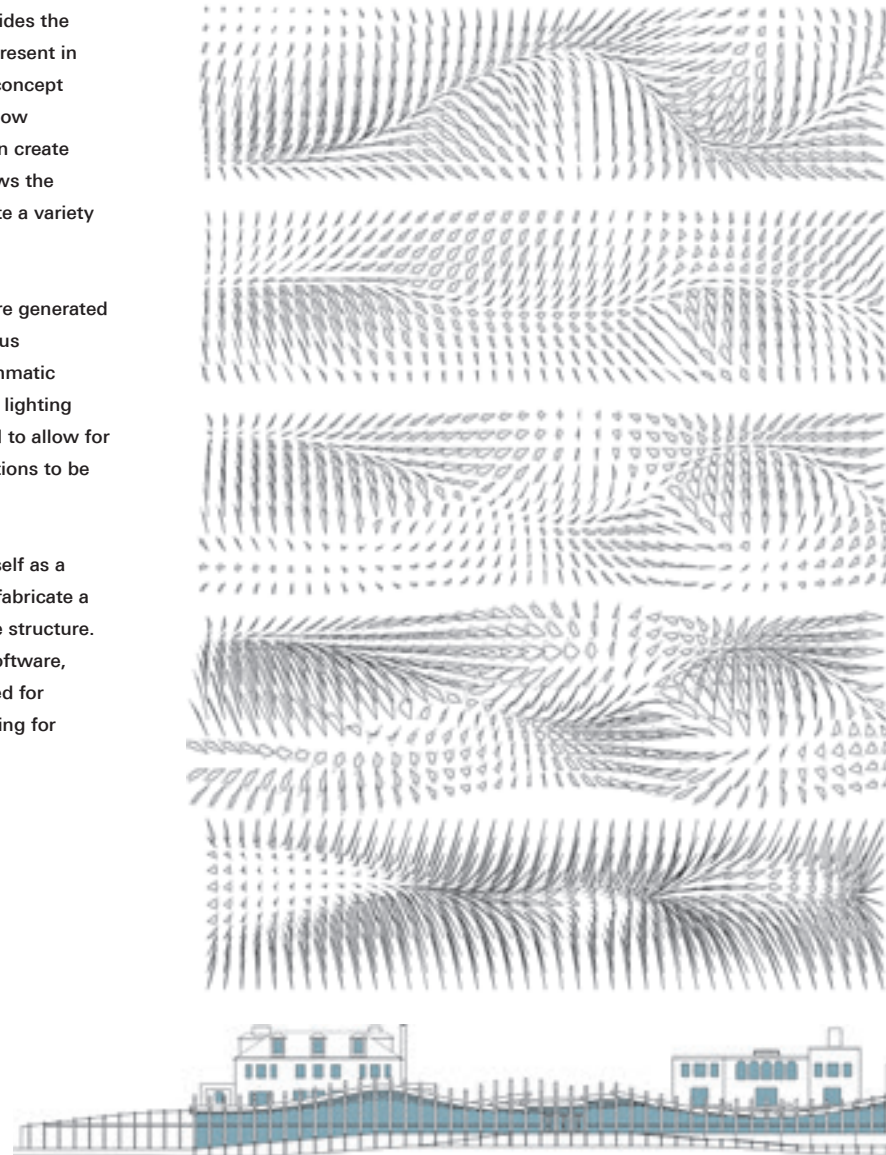
## derivative form

re-envisioning the hyde

an expansion to a structure provides the context of the trajectory of the present in order to predict the future. this concept provided the basis for realizing how modern tools and techniques can create a parametric process which allows the designer to generate and evaluate a variety of forms.

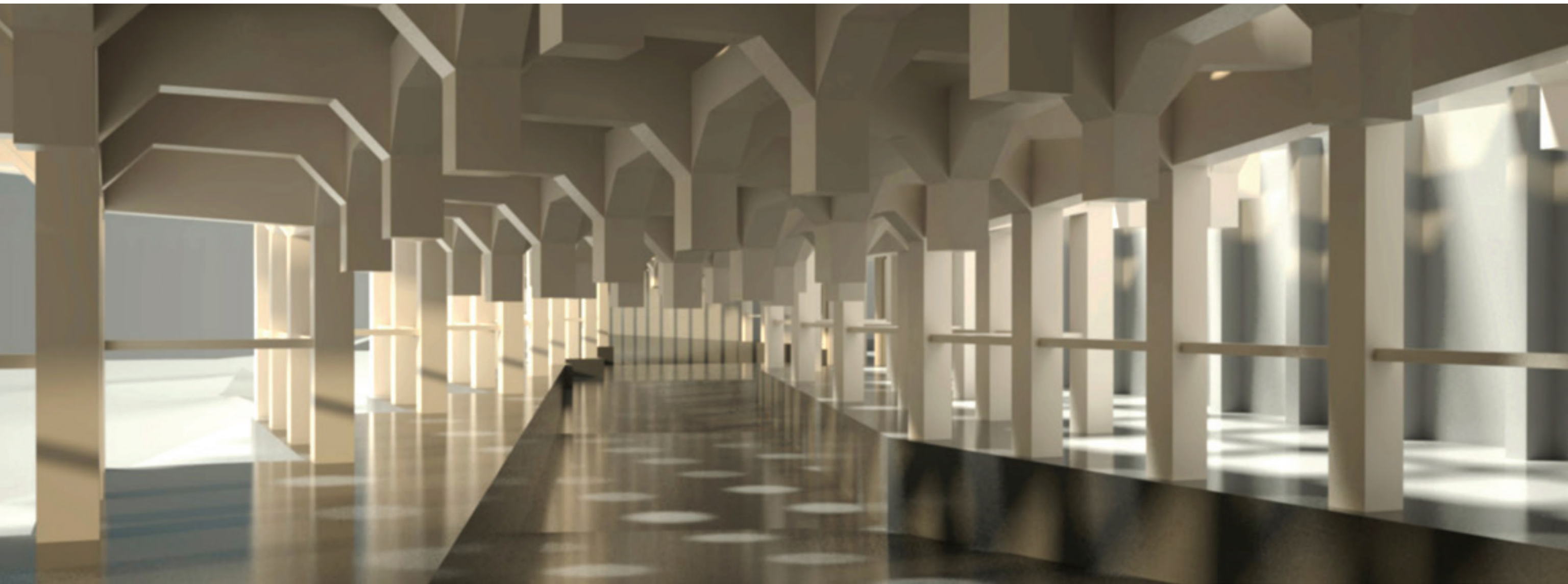
a discrete set of possibilities were generated to create a field for design. various parameters, such as the programmatic needs for circulation and natural lighting requirements, were incorporated to allow for different varieties and configurations to be generated.

this expansion also presented itself as a test as to how to construct and fabricate a form which would constitute the structure. through the use of parametric software, tool paths were quickly generated for the structure, cladding, and glazing for modeling.



critic: florencia vetcher  
fall 2011



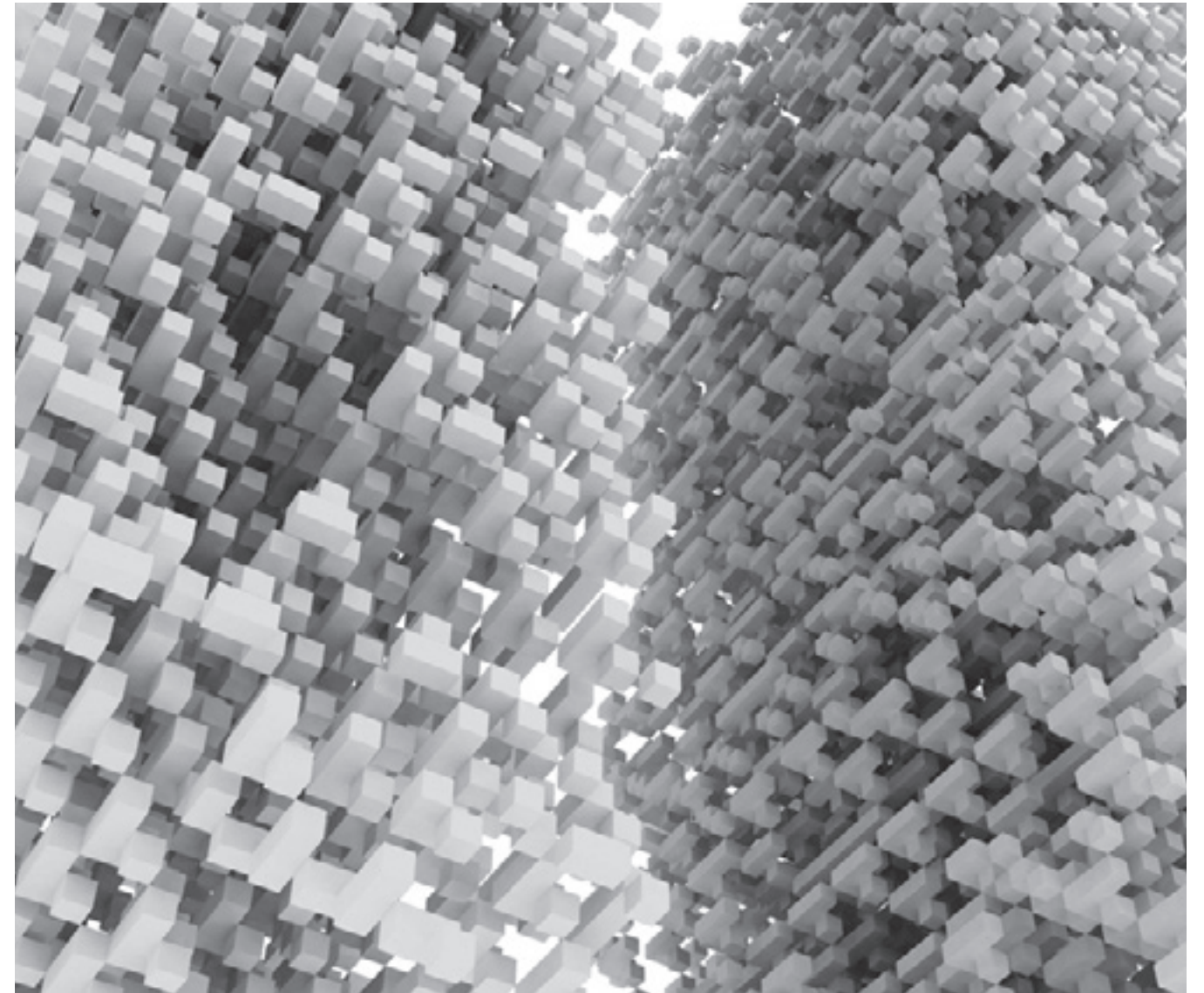


## binary space

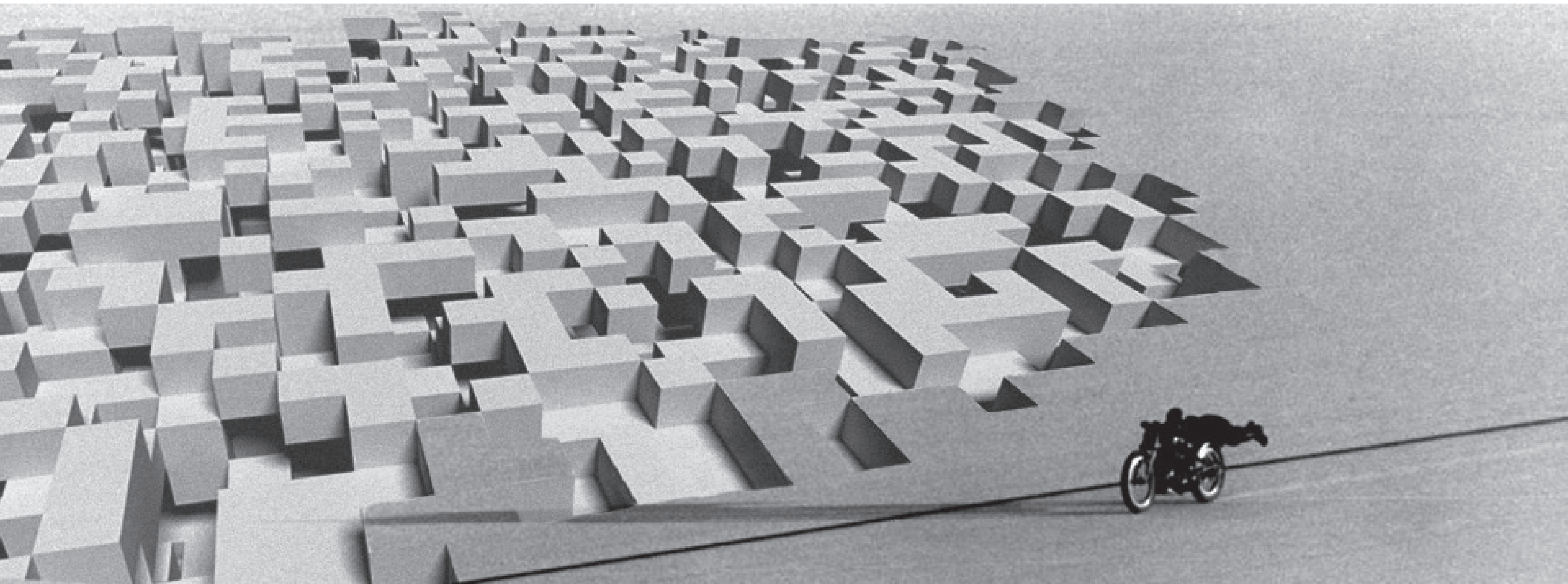
socio design foundation vignette competition

this competition entry is a study in the development of procedural forms that can be generated through strictly rule based patterns. the use of scripted form allows us to generate highly complex detail and ornament based on a simple seed and a rule. this idea is drawn from fractal patterns and other natural rule-based forms that exist in our universe.

the use of solid and void to generate porosities of space is important particularly because architecture is traditionally read in terms of poche space. binary forms particularly resonates with the digital workflow as it consists of a series of ones and zeroes. this is the same logic which forms the basis of modern computing.



competition entry, honorable mention  
spring 2012



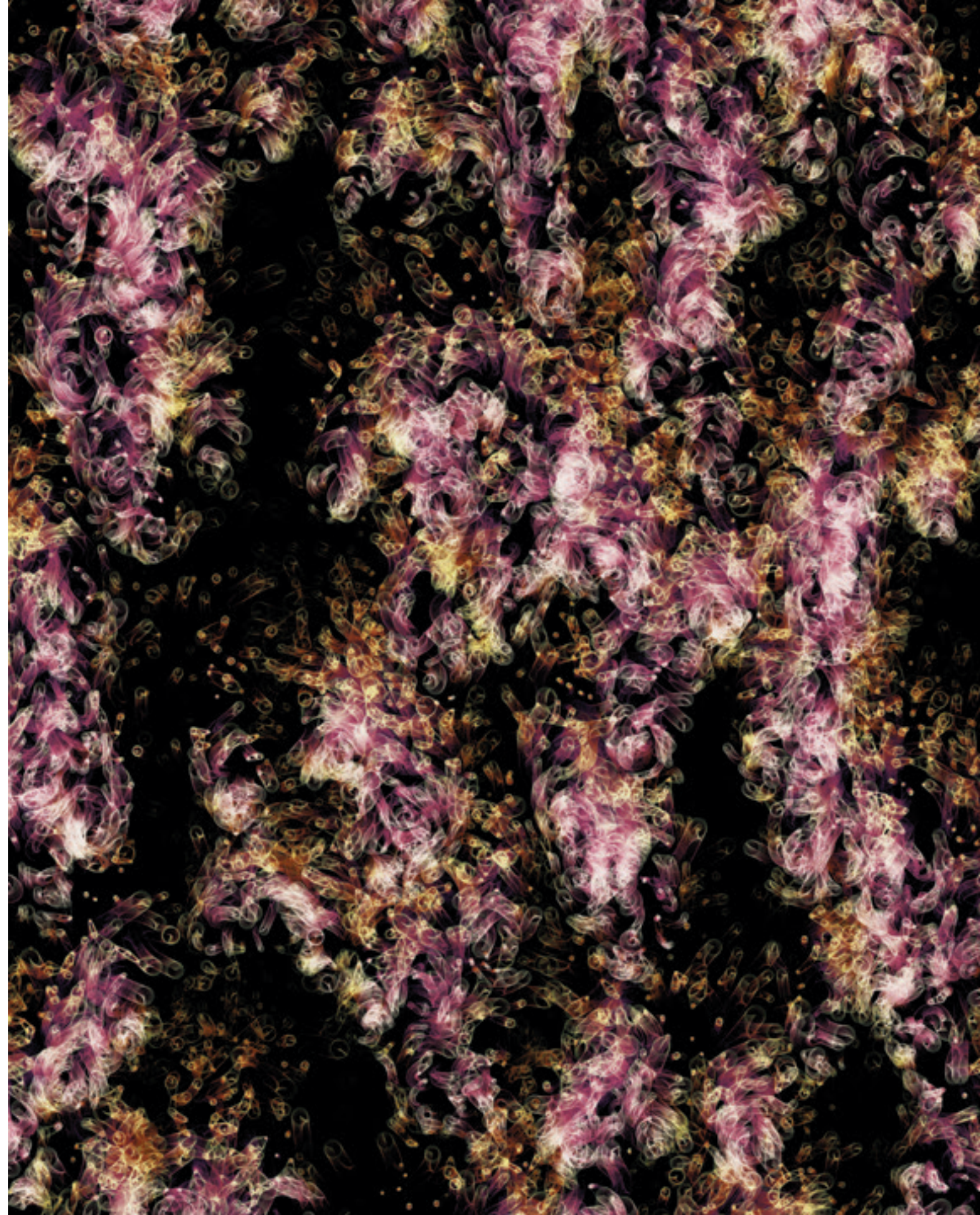
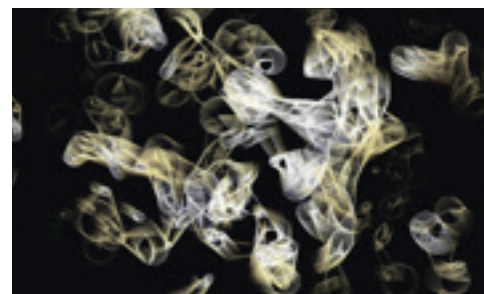
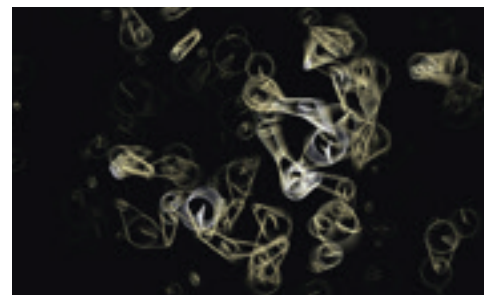
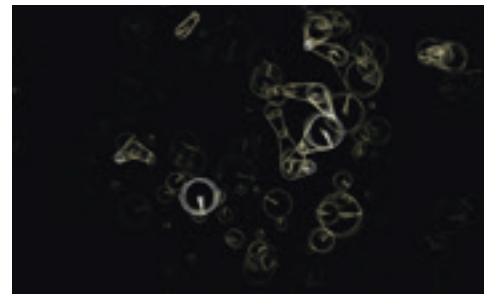
## interrupted thermodynamics

drawing automatons

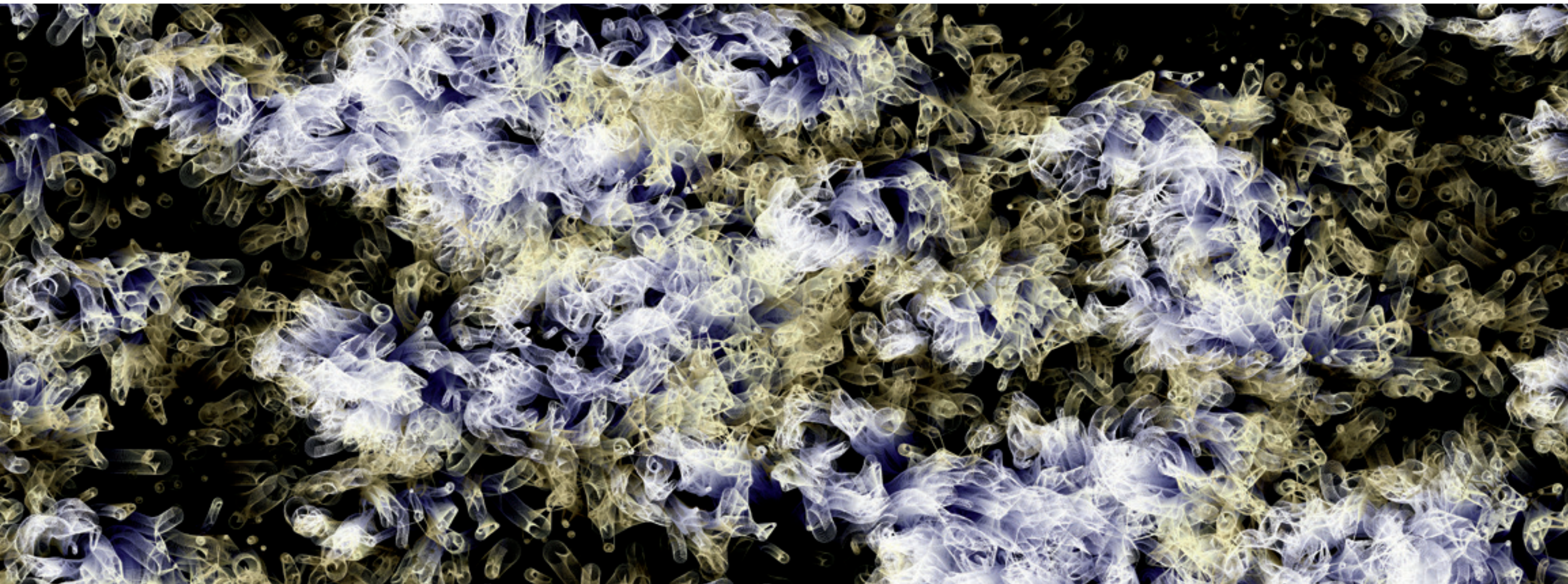
a series of drawings were generated to portray a field being disrupted by a series of events. these events are inspired by large scale disruptions, such as hurricanes, tornadoes and other weather events, which distort an otherwise seemingly stable condition. however, as we know from nature, these disruptions are actually very important for enforcing the natural equilibrium.

by emulating the various events and the kinetic and latent energies that exist within agents in the field, a drawing system could be developed. certain characteristics such as energy as well as relationships could be drawn. chiaroscuro painting, which is characterized by extreme contrasts of light and dark, served as a precedent for the color schemes in these drawings as such intensities and contrasts were best to illustrate energy within drawing.

these drawing techniques explored several different mediums including still prints as well as animations.



critic: casey rehm  
spring 2013



## the winter froze you away belts // buried textiles

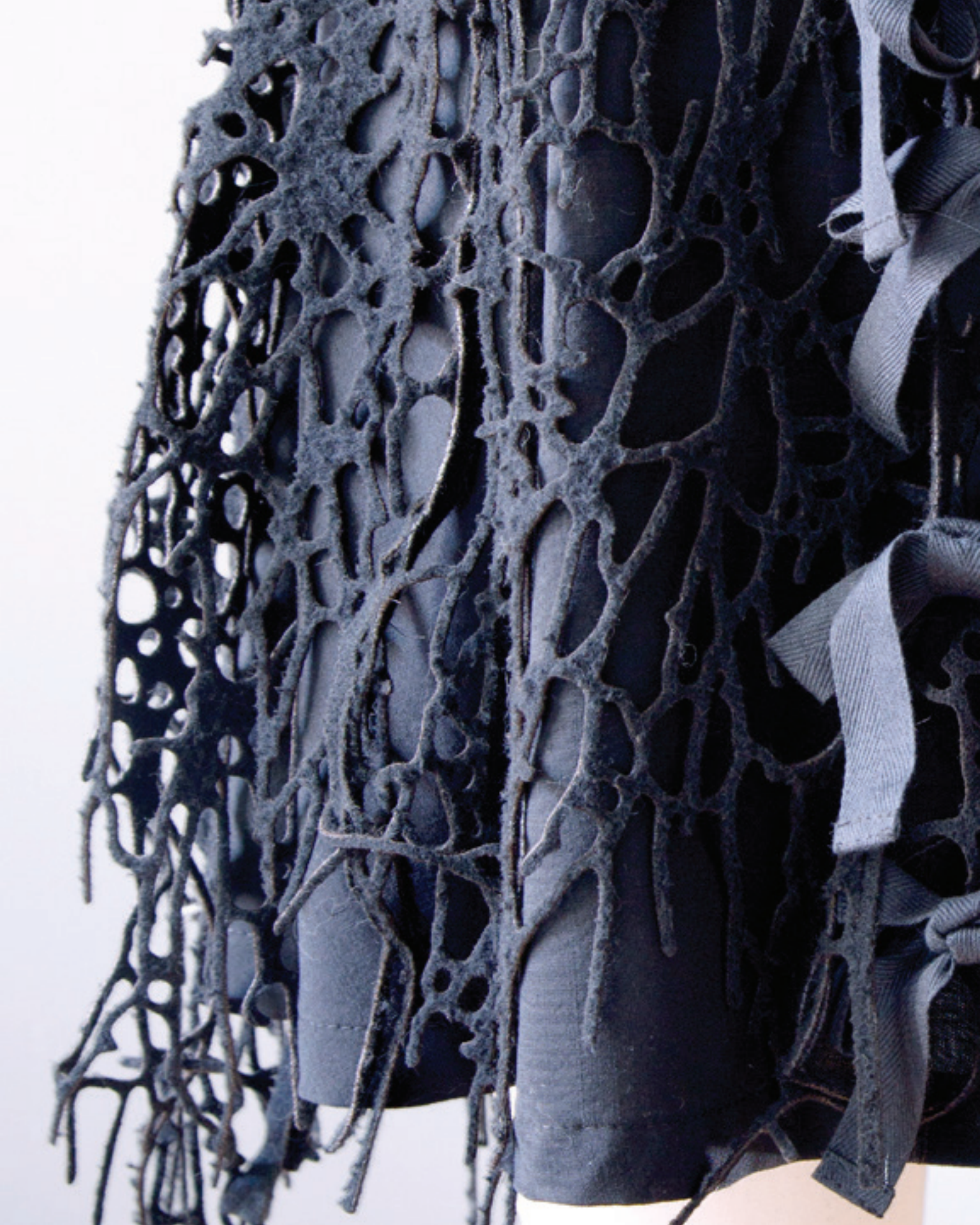
internship work with francis bitonti studios

a series of textiles and belts were designed for katie gallagher's autumn / winter 2013 collection.

expertise was given in the area of designing and developing certain details in this project. by using a hybrid technique of compositional and scripted techniques, a branching aesthetic began to develop. by developing patterns and the concept of body as the site, propagation of a branching pattern that was would be developed. curvature of the garment and of the body would result in completely unique patterns where no single part would be alike.

the belts were developed using a similar technique of using a hybrid technique of composition and scripted algorithms to produce a similar branching aesthetic.

intern work, francis bitonti studios  
spring 2013





## hyde exhibition and charette

re-envisioning the hyde

the hyde initiative comprised initially of a charette to extend the hyde museum campus then culminated to a full scale exhibition at the museum itself.

hybrid faculty and student groups and student proposals were exhibited at this show. the rendered proposal of the museum to the close left is a collaborative work including myself as well as other students led by casey rehm.

expertise for constructing the exhibition was given in the area of helping to generate tool path files for milling hdpe modules for the exhibition center piece. assistance and expertise was also given in the process of the assembly of the exhibition. assistance was given to students and faculty with the fabrication of 3d-print models and the assembly of display cases and signage.





## soa publications

graphic design work for the school of architecture

developing core skills for the presentation of material is an important asset to have as an architect. expertise was provided for the school of architecture publications department. tasks have ranged from using software to design and coordinate exhibitions, design and organize material for published material, editing video, and creating presentations for the dean's office.

expertise has been provided for publications such as the 500 page material manifestations book which catalogs second year design work over two semesters. coordination and design of the peck prize exhibition, an exhibition showcasing nominees for an outstanding thesis.

leadership coordinating the upcoming all-student work book was provided over a period of approximately six months. leadership was given serving as the point of contact to coordinate between the dean's office, faculty, the publications department, and the photo editing contractor. this 640 page book, showcasing student work from the entire school is currently set to be released in early april.



graphic designer, school of arch. publications dept.  
spring 2012 - present



## complete list of works

### education

*rensselaer polytechnic institute*, b.arch. expected grad., spring 2015  
*phillips academy andover*, high school dipl. 2010

### professional

*shop monitor*, school of arch. fabrication shop 2011 - 2012  
helping students work with machines in shop and mainting various machines  
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founders award of excellence, fall 2012 (top 1% of school)  
1st year faculty award certificate, spring 2011  
rensselaer leadership award (scholarship), spring 2010  
phillips academy arts department architecture award, spring 2010

### competitions

socio-design foundation vinette competition, spring 2012  
soa coffee cart competition, runner-up, fall 2011

### publication and exhibition

spring 2012, book, building futures: re-envisioning the hyde at rensselaer  
spring 2012, exhibition, building futures: re-envisioning the hyde at rensselaer  
spring 2012, <http://www.sociodesignfoundation.com/2012-vignette-competition-winn/>  
spring 2013, all-student work book, upcoming  
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