

# MORPHING NORMS ::

[PARAMETRIC DESIGN] 14-25  
[SUMMERWORKSHOP 2013 CAIRO] SEPTEMBER

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organized & hosted by | **morph-d**   
studio

in partnership with | **ALTU** & **Karimsky** 



# MORPHING NORMS::

## A Parametric Design Workshop in Cairo

14-25 September 2013

### **Brief:**

**Cairo is filled with barriers controlling people movements, suppressing them as well as detaining green and public spaces to the extent that most people have been taking these spaces for granted. Public spaces have been for a while the periphery of our daily life.**

We will explore in this workshop how we can manipulate and alter people's perception and direct their attention to how these spaces are integral for city life.

This exploration will be backed up by intensive technical tutorials introducing computational design

and fabrication techniques and tools mainly Rhino, Grasshopper, Geco and Ecotect.

**“This is not going to be the typical technical workshop”**

Not only will this be the typical technical workshop, but rather you will also have the chance to be guided step by step on how these tools are used through out different design stages in a real world scenario.

**Design prototypes will be produced through 3D printing,**

**the main workshop output will be a fabricated one to one functional scale model for one of the designs using our new in-house CNC machine.**

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### Aims and Methods:



The Workshop will be oriented towards developing a specific type of knowledge which is deeply embedded in the realm of computational design. The aims to introduce and explore performance driven design methods - mechanics, physics and technical issues will offer a large experimentation ground in the search for equilibrium, in constant balance between aesthetics and technology.

We are witnessing a shift in the architectural practice which is transforming into a mass-collaborative mechanism. This mechanism in term is based on experimentation. Students and young architects will have the opportunity to take part in the ever

expanding international community and learn to enjoy both the process of generative design and that of architectural experimentation, because it is as close as one can get to playing within the architectural field. Architecture and design live and evolve exponentially through experimentation.

**“We are  
witnessing  
a shift in the  
architectural  
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### **Aims and Methods:**

During the workshop students will be introduced to several software such as Rhinoceros and Grasshopper, as a major design tool, Ecotect and Geco as environmental analysis tools enabling students to gain access to information with massive data flow management such as e.g. solar radiation, wind analysis structural optimization algorithms and its implementation in the design process.

Participants will deal with issues regarding innovative fabrication processes, which will help in transforming the designed items into a functional ones. Digital tools and experiments as well as physical mock ups will be part of the design routine. Participants will be introduced to sustainable building design software, analytical simulations and structural optimization techniques.



**“Students will be introduced to Rhinoceros, Grasshopper, Ecotect and Geco”**

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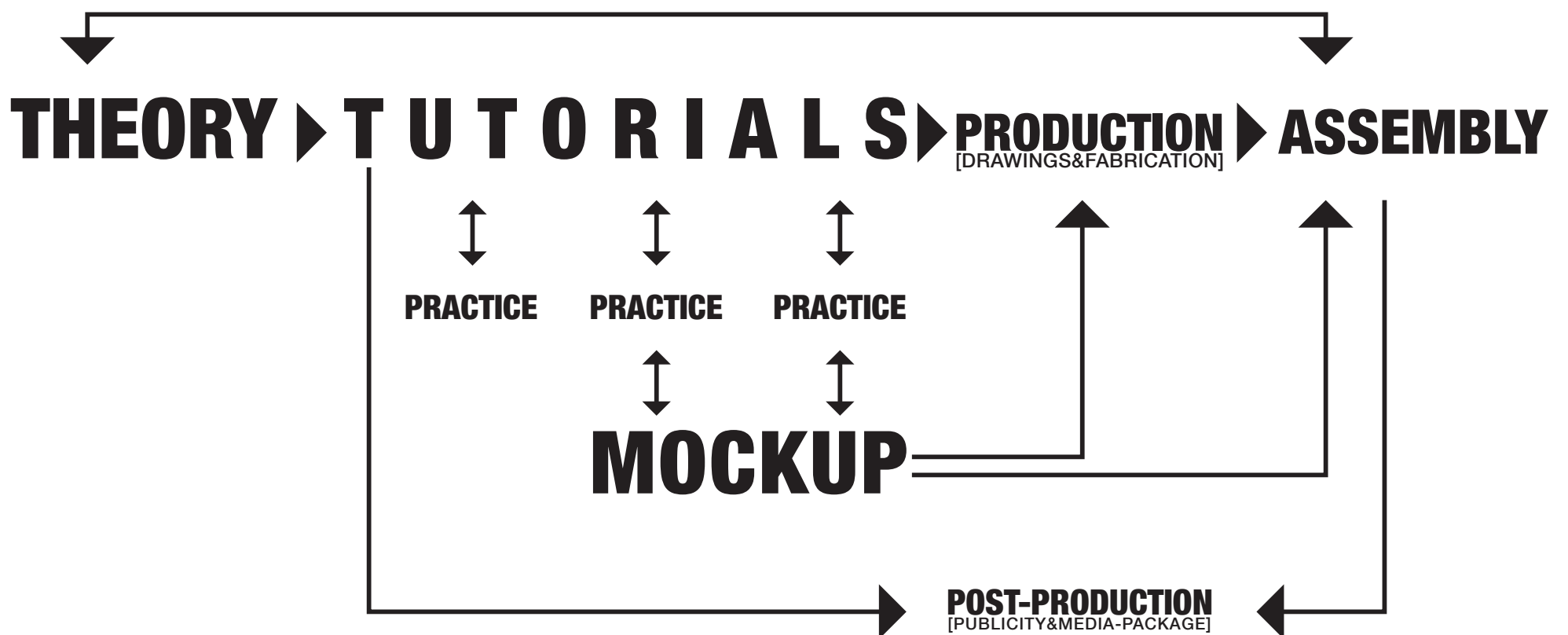
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### Aims and Methods:

Following the research of previous years we advocate ideas of “Learning by Doing”, “Design by research” and “Show me your Screen” concepts. Developing and discussing ideas, splitting tasks such as creating virtual and physical models and diagrams helps identify problems in a much younger state. Learning from one another

is crucial and is what should come along with any education in any field. We encourage participants to join the worldwide community of specialists and researchers in the field of computational design and architecture and contribute with their ideas to the contemporary design agenda.





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### Tutors:



#### **Olga Kovrikova,**

MArch DIA

Recently finished her Thesis as part of the duneLab team (StudioX, Prof. Christos Passas). Continuous research on computational design methods and digital fabrication methods. She was tutoring for various international computational design workshops in Moscow, Minsk and Qingdao. Currently researching on self-organization of complex systems in architecture.



#### **Karim Soliman,**

MArch DIA

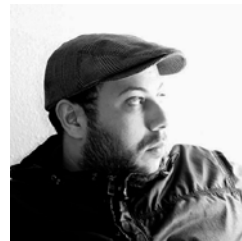
After finishing his thesis From Data to Design United nations Headquarters (StudioX, Prof. Christos Passas), He has joined Rainer Schmidt landscape architects, Berlin, Germany`. In parallel he joined DIA as tutor in StudioX. He is currently Teaching assistant in studio Interactive DIA working with prof. Neil Leach, the studio Agenda is to design installations that have the capabilities to interact with people in different levels.



#### **Alexandr Kalachev,**

MArch DIA

Finished his thesis WaterAgeCity (StudioX, Prof. Christos Passas), joined DIA as a TA for StudioX, Scripting teacher, CAD logic teacher and lecturer. As confounder of AL\_TU he's been involved in numerous computational design workshops in Bucharest, Kiev, Moscow, Minsk, Dessau, Berlin and Qingdao. Currently focused on developing new computational design tools as well as contemporary fabrication methods.



#### **Islam Ibrahim,**

MArch DIA

Having graduated from Arab Academy 2008, he pursued Masters in Architecture at the DIA Germany 2011. His Master thesis was oriented towards digital design and fabrication using parametric design software, winning the Oxman prize for the Best thesis project. He took on working at the Arab academy as an assistant lecturer teaching graphic design, digital design and fabrication for students and professionals.



#### **Sherif Tarabishy,**

B.Sc. AAST

Graduated from Arab Academy in 2011, works there as well as the American University in Cairo as a TA. His main interest is in new computational design and fabrication techniques and how they can impact and alter decision making in design process. Conducted numerous computational workshops in colleges as well as large architectural firms in Cairo.

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### **Target Participants:**

Who should attend?

The workshop is intended for undergraduate or master students, graduates, PhD candidates and young professionals in the fields of Architecture, Interior design, Product Design and Industrial Design.

### **Prerequisites:**

**- The course will be conducted completely in English.**

- Basic knowledge of any three-dimensional modeling software is a must (Sketchup, Autocad, 3ds Max, Maya or Rhino).

- Workshop participants are required to bring their own laptops with the following software installed:

- Microsoft Windows

- Rhino 5.0 the latest version, which could be downloaded as a free trial-version from here :

<http://www.rhino3d.com/download/rhino/5.0/evaluationtimed>

- Grasshopper 0.9.0056, this is the latest version of grasshopper which will only work with Rhino 5.0 SR3 or above. You can download it from here:

<http://download.rhino3d.com/Grasshopper/1.0/wip/download/>

If you already have an earlier version of GH and you want to upgrade please read this thread first for steps: <http://www.grasshopper3d.com/forum/topics/grasshopper-0-9-0051-available-for-download>

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14-25 September 2013

### **Schedule:**

**From 14 to 25 September 2013**

#### **Daily timetable:**

**- Morning session 9 am to 1 am**

(including a coffee break)

**- Lunch Break**

**- Afternoon session 3 pm to 7pm**

(including a coffee break)

#### **14.9 - DAY\_01**

Introduction to Rhino, Project based tutorials and practical exercises.

Design Research [creating first concepts].

#### **15.9 - DAY\_02**

Introduction to Grasshopper, Project based tutorials and practical exercises.

Introduction to digital fabrication techniques.

Design research [creating first concepts].

#### **16.9 - DAY\_03**

Introduction to Grasshopper,

Project based tutorials and practical exercises.

Design research [development].

#### **17.9 - DAY\_04**

Introduction to Grasshopper Plugins, Project based tutorials and practical exercises.

Design research [development].

#### **18.9 - DAY\_05**

Introduction to Ecotect and Geco, Project based tutorials and practical exercises.

Design research [development].

#### **19.9 - DAY\_06**

Intermediate presentation.

Design development, producing scale models.

#### **22/23/24.9 - DAY\_06\_07\_08**

Project development, building study models, 3D printing, CNC fabrication and assembly.

#### **25.9 - DAY\_09**

Final presentation to guest critiques and public review.

### **Location:**

**morph-d studio:**

**90 street, 5th Settlement, New Cairo. Behind Meeting Point Mall.**

\*\*Detailed directions will be given to participants.

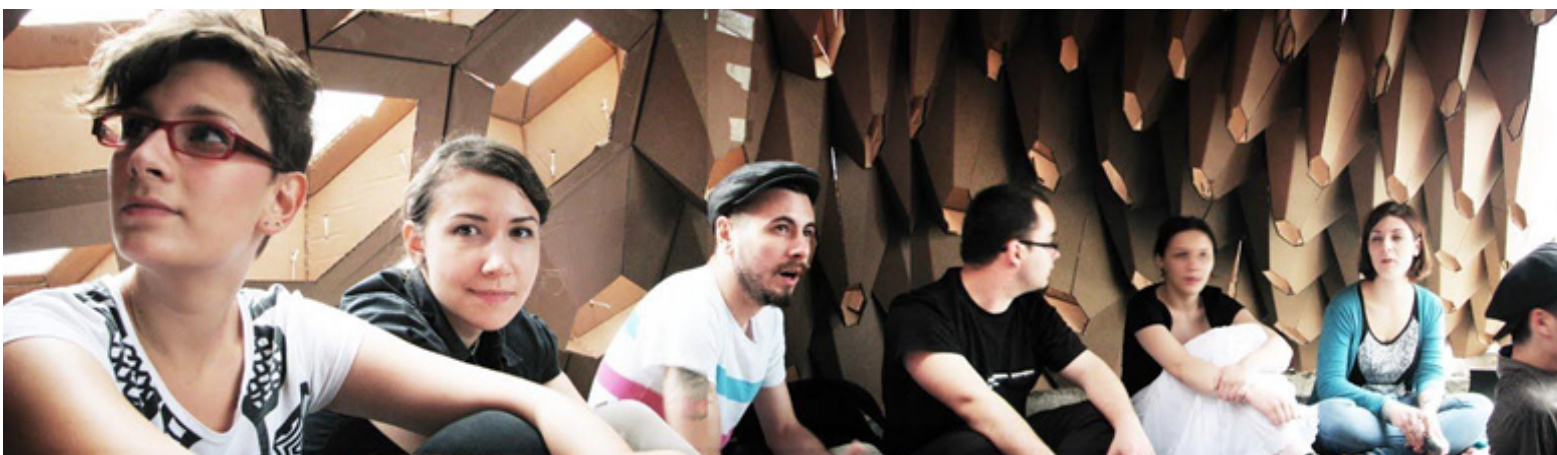
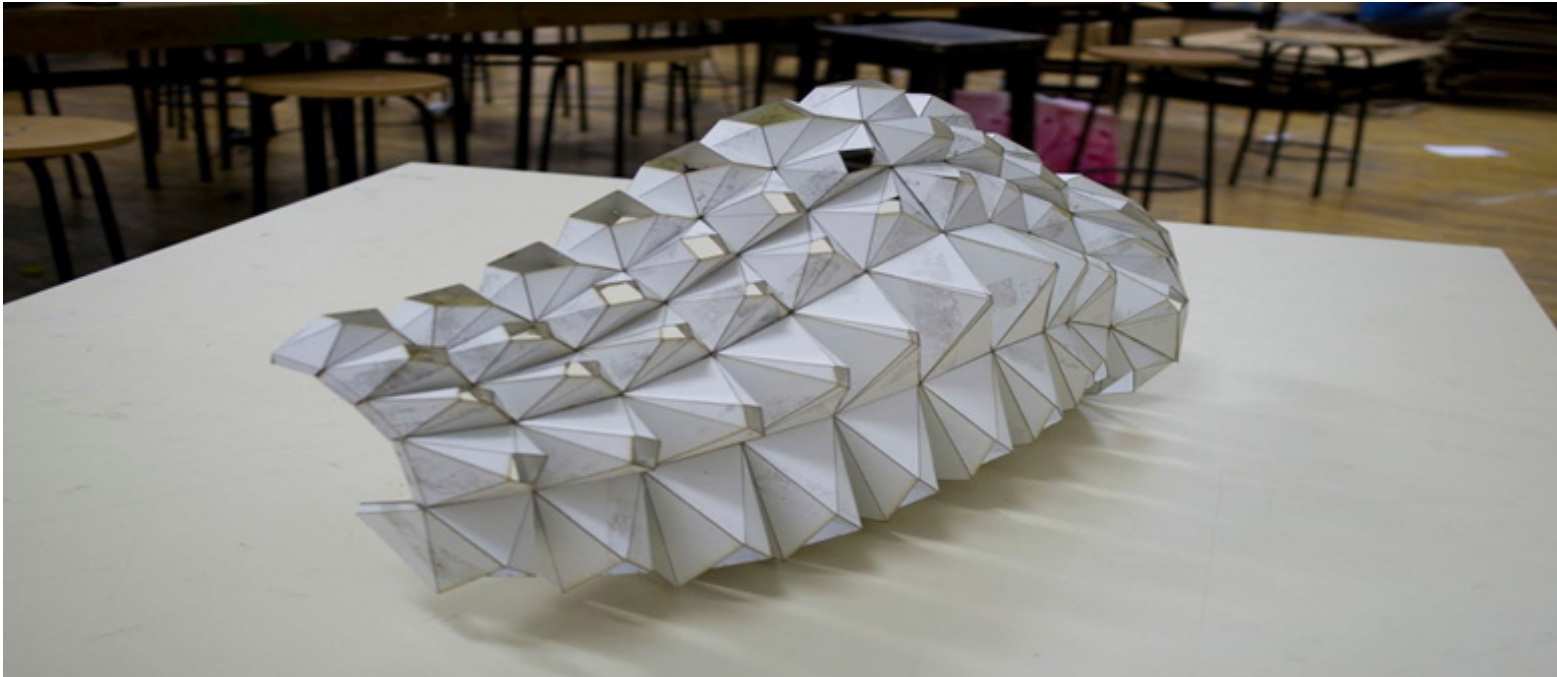


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## Previous Work Samples:





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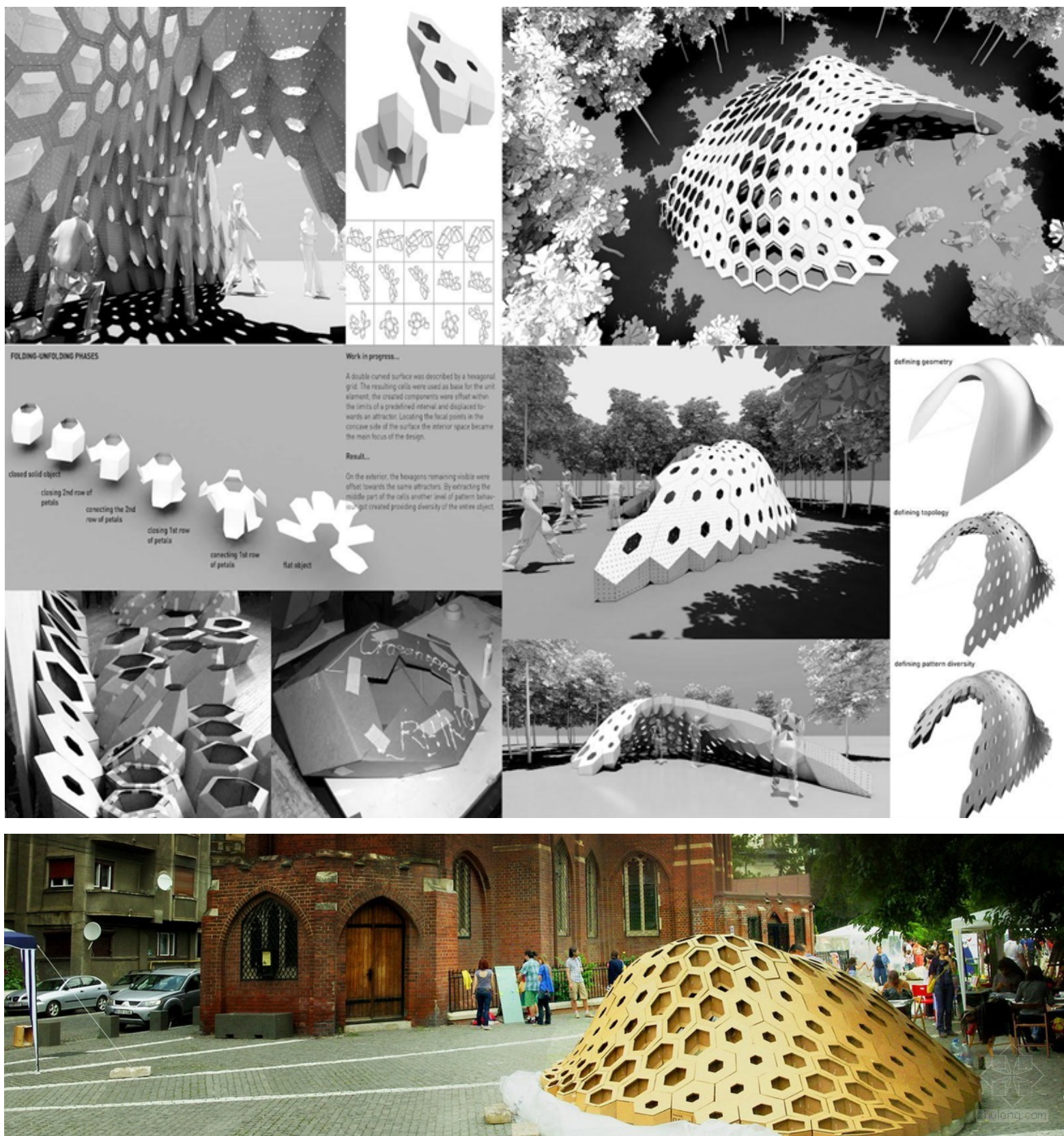


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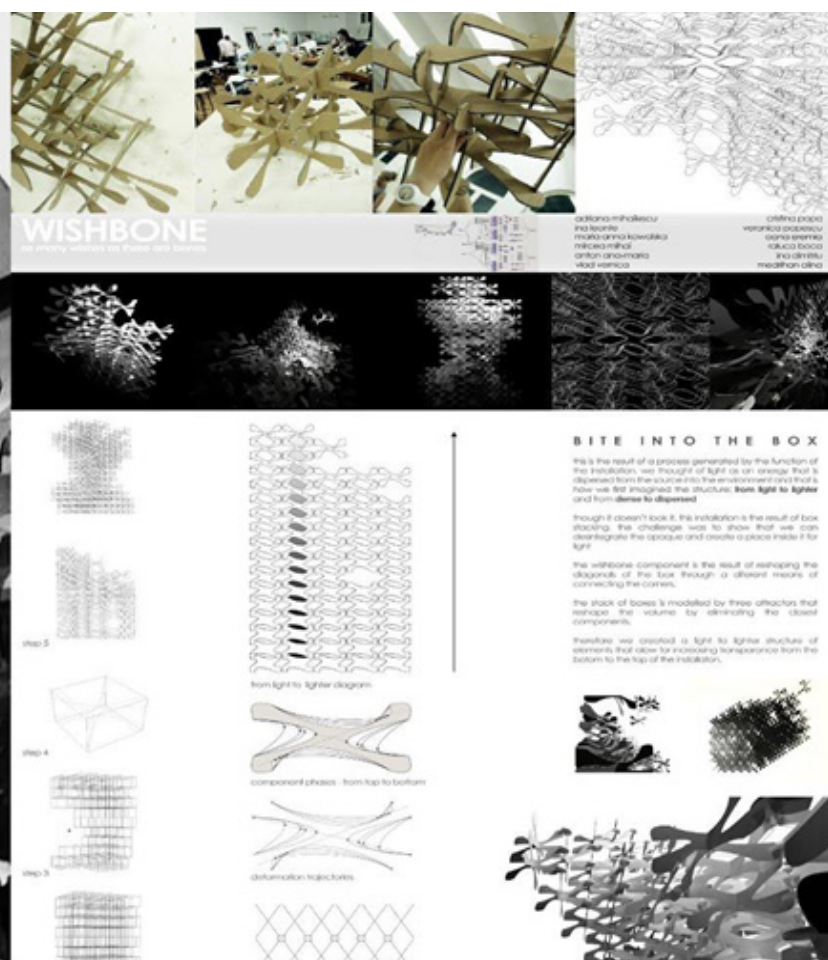
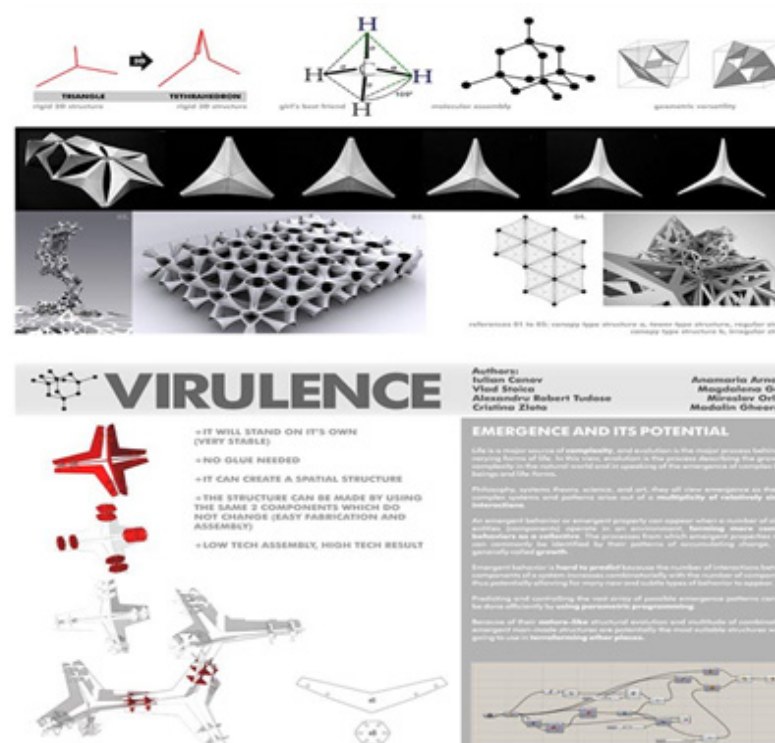


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## Previous Work Samples:





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### Previous Work Samples:



For more work samples please visit:

[diastudiox.net](http://diastudiox.net)

[all-2.blogspot.de](http://all-2.blogspot.de)

[shapingbehaviour.wordpress.com](http://shapingbehaviour.wordpress.com)

[tailab.wordpress.com](http://tailab.wordpress.com)

[facebook.com/ALTU.cdri](https://facebook.com/ALTU.cdri)

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### **Application:**

**Application deadline** 1 September 2013

\*\* For students (undergrad / Master), teachers and PhD proof of status is required (university ID with a date or a certificate of enrollment).

**Packages** (choose one of the following):

**1. Standard registration**

**Course fee is** 4250 EGP

**For Students** 3500 EGP

**2. Early bird discounted fee**

**For Professionals** 3750 EGP

**For Students** 3000 EGP

\*\* Early bird offer ends on **14 August 2013**

**3. Group registrations discounted fee** (5 or more)

**For Students** 20% off

- You will have to **fill** out an **application form** which you can find the link to on the Facebook event accessible from here: <http://goo.gl/0QxAga>

- You will need to **submit** your **CV** and **Short Portfolio** (max. 10 MB) to **info@morph-d.com**, email subject: **"Morphing Norms Application"** (we will decide if you are eligible for an early bird discount or not based on the date of your email submission)

- We will confirm receiving emails from all applicants. Successful applicants will be contacted 5 days after each deadline (early bird/final) and will have to confirm participation within 3 days, if they fail to do so, places will be given to others on the waiting list.

- A maximum of 30 applicants will be selected.



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