

DataCAD Boston Users Group

120 Trenton St., Melrose, MA 02176-3714 (781)662-0020 Tel. & Fax eshu@world.std.com

<http://world.std.com/~eshu/dbug.htm>

A Committee of the Boston Society of Architects

DBUG Meeting Notes
October 24, 2006
Host: Eric Gjerde, AIA
MZO Architects, Stoneham, MA

Figure 1: SketchUp Basic Rendering is imported into Piranesi (upper), then using various tools is transformed into a more artistic rendition (below). Illus. by Eric Gjerde.

About 15 DBUGers were welcomed to this first meeting hosted by MZO Architects in Stoneham, Mass. by Eric Gjerde, who recently returned to this firm after a stint with Harrison Mulhern Architects to get commercial architecture experience. MZO Architects concentrates primarily on residential architects. The group enjoyed the lasagna and, especially, the “Norwegian” waffles especially made by Eric and his wife for the meeting.

In announcements, Mike Smith invited all to return to his detail exchange site at <www.AECCADExchange.net> now (DOT-NET instead of previously DOT-COM) due to some domain “squatting” issues. He said that the change in web developers has been made a world of difference in that they are much more responsive to his required changes. The whole site interface has been revamped and is fully functional. Evan Shu hoped all were registered to *Build Boston* and planning on attending DBUG’s 19th Anniversary meeting on Wednesday, Nov. 15th. Neil Blanchard said that DataCAD 12 Beta would probably be out soon.

Introduction to Piranesi. Eric then dived into his first presentation on the 3D painting program Piranesi. It is like PhotoShop for 3D pictures in that it has the intelligence to know what are 3D planes and what the shape of the 3D space is, even though it is working with a 2D picture plane. The program is developed in the UK and a full program demo download can be made from <www.informatix.co.uk/piranesi>. There is a 30 day restriction on the demo copy and you cannot save any files.

Eric said the best way to learn the program quickly is to go through the Quick Start Tutorials which may seem very basic at first but a lot of information is conveyed and he felt at its end, he was able to do quite a bit with the program.

While the interface can seem quite complex, the tutorial utilizes a lot of pen styles that you can click on to immediately set all your settings (like *Identify-Set All* in DataCAD). With a certain pen style, you can “lock” on to a 3D plane or whole object (like a cube or even a group of like objects) and paint that object realistically. If you use ink



(rather than paint), it will preserve your basic shadows through the painting process.

One nice technique Eric showed that produces a nice soft rendering style is like an edge rendering. Imagine taking your stark, standard rendered model (e.g. from SketchUp) and putting a layer of white paint over it that finds all the major edges. Now using your cursor like an eraser, you can rub away various levels of white paint away to expose more detail and more color of the base rendering underneath the white covering (*see Figure 1 above*).

Another excellent use for Piranesi is to add in entourage that is scalable within the picture and within the framework of the implied perspective. Piranesi comes with a library of landscape, people, and cars that can be dropped into your picture (even moving partially behind planes within the picture), sized properly and can even cast their own shadows, which you can align with the existing shadow direction in the picture.

Other rendering techniques can be found by simply following the existing tutorials, so Eric definitely recommends them as the place to start in learning Piranesi.



Figure 2a: Plan from DataCAD is imported into SketchUp (left), then traced to create SketchUp planes (below). Illus. by Eric Gjerde.

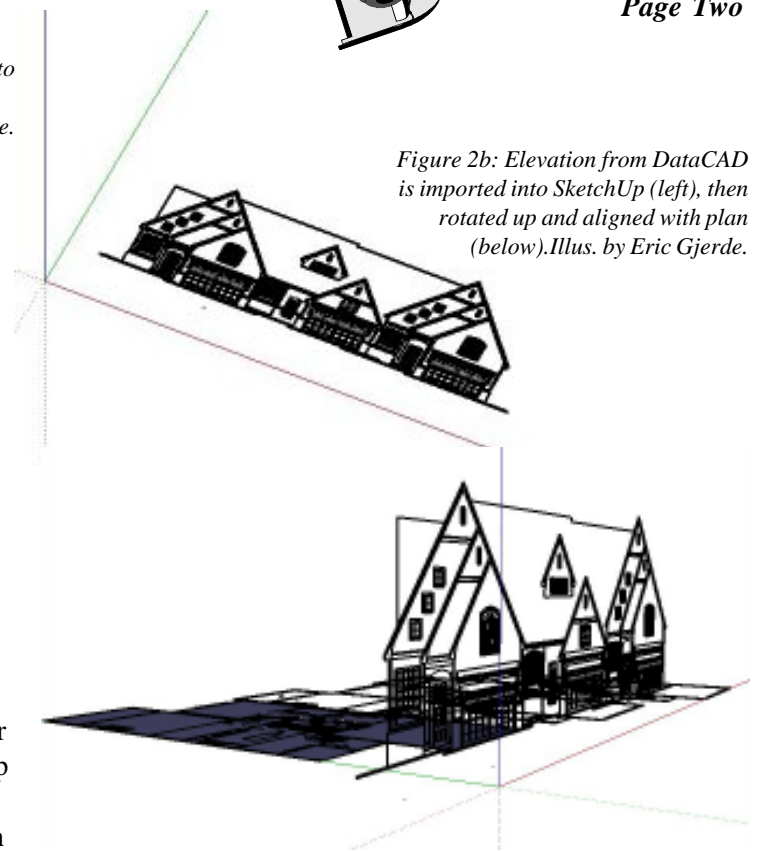


Figure 2b: Elevation from DataCAD is imported into SketchUp (left), then rotated up and aligned with plan (below). Illus. by Eric Gjerde.

SketchUp, DataCAD and Piranesi

Eric then showed what a nice combination DataCAD, SketchUp and Piranesi can be together. If you take plans or elevations in DataCAD, you can import them into SketchUp as a template to build up 3D models using SketchUp's easier 3D tools to push and pull planes into slabs, and punch voids. He showed how you use the protractor tool to easily rotate the flat elevations up into place. (Figure 2b.)

Using SketchUp, it is easy to build up your model and do some initial rendering, shading, shadows, and material assignments. (You can also use SketchUp model to export elevations and sections back into DataCAD for construction documents.) Once you have a basic rendered model, you pick a view of it that you would like to turn into a more finished rendering. Then use *Save As* to save your view in EPIX (Extended Pixel Interface Exchange) format, which is Piranesi's native file format.

Now your basic model view can be opened into Piranesi and the artistic side of you can go to it using the various techniques you learned from doing the tutorials. Also, you can easily add entourage and populate your rendering using Piranesi's object libraries. The cost of the program is about \$750, which may seem expensive at first but may not the next time you need to produce a high quality rendered view for your client.

Photomontage Techniques Postponed. Discretion being the better part of good DBUG hosting, Eric realized that he had programmed too much into his agenda, so he deferred the planned photomontage presentation to a later date due to the lateness of the hour. DBUGers left around 9:15 p.m. well-fed in both body and mind.

-- Meeting Notes by Evan H. Shu, FAIA



Figure 2c: Elevation is traced to create SketchUp planes, then push/pulled to create 3D massing forms behind elevation. Illus. by Eric Gjerde.

