Ten SketchUp Traps and Their Workarounds

IN THIS CHAPTER

- **Knowing why faces, colors, and edges aren't behaving right**
- **Coping with a slow or crashing SketchUp**
- **Viewing your model the way you want**
- **Persuading components to budge**
- **Recovering from Eraser disasters**

The bad news is that every new SketchUp user encounters certain problems, usually in the first couple hours using the software. You can call these problems growing pains. The good news is that, because these problems are common, we can write a chapter that anticipates a lot of the bad stuff you'll go through. This chapter offers tips that help you make sense of what's going on so you can get on with your life as quickly as possible.

SketchUp Won't Create a Face Where You Want It To

You've dutifully traced all around where you want SketchUp to create a face, but nothing's happening. Try checking whether your edges aren't all on the same plane.

REMEMBER Ninety percent of the time, when SketchUp doesn't create a face where you think it should, an edge isn't on the plane you think it's on. To check whether your edges are coplanar, draw an edge that cuts diagonally across the area where you want a face to appear. If a face appears now, your edges aren't all on the same plane. To fix the problem, you have to figure out which edge is the culprit, and the Color By Axis option may help you see this information at-a-glance. Here's how Color By Axis works:

1. **In the Styles panel, change your edge color from All Same to By Axis.**

   See Chapter 10 for details. SketchUp draws the edges in your model the color of the axis to which they're parallel; edges parallel to the red axis are red, and so on.

2. **Look carefully at the edges that you wanted to define your desired face.**

   Are all the edges the color they're supposed to be? If they're not all supposed to be parallel to the drawing axes, this technique doesn't do much good. But if they are, and one (or more) of them is black (instead of red or green or blue), that edge (or edges) is your problem child. Fix it and switch back to All Same when you're done.

If the plane isn't the problem with your edges, then check whether one edge is part of a separate group or component. To check whether you have a component problem, try hiding groups or components and checking the edges to make sure that they're all in the group or component you think they're in. See Chapter 5 for details.

Your Faces Are Two Different Colors

REMEMBER In SketchUp, faces have two sides: a front and a back. By default, these two sides are different colors.

When you do certain things like use Push/Pull or Follow Me on a face, sometimes the faces on the resulting geometry are “inside out.” For some people, the issue is just bothersome. If you want to 3D-print your model, the issue needs to be fixed so that your model will print correctly.

To fix this issue, context-click the faces you want to flip and choose Reverse Faces from the context menu. If you have lots of faces to flip, you can select them all and then choose Reverse Faces to flip them all at once.

In 3D printing, this process is called checking your model's normals. See Chapter 9 for details about preparing a model for 3D printing.

Edges on a Face Won't Sink In

This tends to happen when you're trying to draw a rectangle (or another geometric figure) on a face with one of SketchUp's shape-drawing tools. Ordinarily, the Rectangle tool creates a new face on top of any face you use it on; after that, you can use Push/Pull to create a hole, if you want.

When the edges you just drew don't seem to cut through the face you drew them on, try these approaches:

- **Retrace one of the edges.** Sometimes that works — you'd be surprised how often.
- **Select Hidden Geometry from the View menu.** You're checking to make sure that the face you just drew isn't crossing any hidden or smoothed edges; if it is, the face you thought was flat may not be.
- **Make sure that the face you drew on isn't part of a group or component.** If it is, undo a few steps and then redraw your shape while you edit the group or component.

SketchUp Crashed, and You Lost Your Model

Unfortunately, SketchUp crashes happen sometimes.

The good news is that SketchUp automatically saves a copy of your file every five minutes. The file that SketchUp autosaves is actually a *separate* file, `AutoSave_`*`your filename`*`.skp`. If your file ever gets corrupted in a crash, an intact file is ready for you.

The problem is that most people don't even know that the autosaved file is there. Where do you find it?

- **If you've ever saved your file,** it's in the same folder as the original.
- **If you never saved your file,** it's in your Documents folder — unless you're on a Mac, in which case it's here:

```
User folder/Library/Application Support/SketchUp 201X/SketchUp/Autosave
```

- Simple, right? Not so fast. On a Mac, you may need to change your Library folder from hidden to visible. In the Finder app, hold down the Option key while you choose Go ⇒ Library. If you don't hold down the Option key, Library may not appear on the menu.

When you close your model, SketchUp typically assumes nothing untoward has happened and cleans up after itself by deleting the autosaved file.

To minimize the amount of work you lose when software (or hardware) goes south, always do two things:

- **Save often — compulsively, even.**
- **Use the Save a Copy As command on the File menu.**

When you're working on a big project, the following steps can help ensure you don't lose any work:

1. **Save the original version of your file as** *`yourfilename`*`_Master.skp`.

   That's the file you'll always be working on.

2. **Create a folder that lives in the same place as your Master file; call the folder something like** *Your file's name* Archive**.**

3. **Every half-hour or so, choose File ⇒ Save a Copy As and save a numbered version of**

your file to the Archive folder.

When Aidan is building a big model, he often has 40 or 50 saved versions of it in his Archive folder, dating back to when he first started working on it.