

Manipulating Text

Selecting text



Using any tool but the Text tool, double-clicking allows you to select objects at different levels (a grouped word, a letter, faces, etc.). Each double-click goes one level farther down. At the lowest level, double-clicking pops you back up to the top level. At any level, a single click selects only other objects at that level: if you've selected a letter, single clicks will only select other letters, not the whole word. Click in an empty space to deselect everything. When you click again on text, you'll be at the highest level again.

In general, for extruded objects in Typestry there are three levels, or groupings, from which you can select. (Rubber Sheets have two, and Tubes have only one.) From highest level to lowest these are:

- The whole text object. When nothing is selected, clicking on a text object selects that object.
- One letter of the object (sides and faces together). When an object is selected, double-clicking on a letter selects just that letter.

- The faces of a letter (no sides). When a letter is selected, double-clicking on that letter selects just the letter's faces.

For more information on grouping and levels, see the chapter on *Group Therapy*.

Selecting hard-to-get text

You can select text in the project window that's obscured by other text, or otherwise hard to select:

1. If the Score window isn't showing, select Show Score from the Windows menu.
2. Find the object in the Score window on the left side and select it.
3. Hold down the Control key as you manipulate the object in the project window.

The Tools

Use the tools to manipulate text. Tools that have a dot in the lower right have pull-down menus with



variants of that tool. Click and hold to display the menu.

The Text tool



Use the Text tool (F2) to bring up the Details dialog, which allows you to type in your text or shapes, and set its attributes. (See the chapter on *Getting Text In* for more on this.)

The Illustrator Import tool



Use the Illustrator Import tool (F3) to bring up the Details dialog, which allows you to select an Adobe Illustrator file for import, and set its attributes. (See the chapter on *Getting Text In* for more on this.)

The Move tool



Use the Move tool (F9) to move text around in the project window. You may see its perspective change as you move it.

Note: Holding the Shift key down while starting to move an object constrains its motion to the horizontal or vertical.

The Rotate tool



Use the Rotate tool (F10) to rotate text. This tool rotates the object as if it were enclosed in a sphere (the way a trackball works): side-to-side mouse motion spins the object around its vertical axis, forward-back motion spins it around the horizontal axis, etc.. If you'd like to use a rotation tool that constrains the rotation to one axis at a time, click and hold on the tool and a pull-down menu will appear. You can pick the appropriate tool from there.



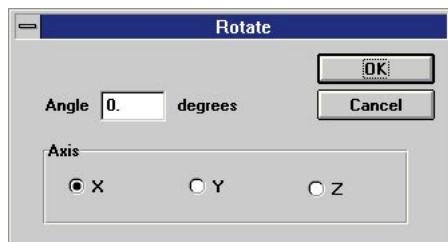
Note: If you get the text in a weird orientation that you can't seem to get out of, use Reset Orientation from the Edit menu. This will get the selection straightened out and face-on.

Using the unconstrained rotation tool (and not the others in the pull-aside menu):

- Move the mouse to the right for east-to-west rotation (the right side of the text moves toward the back).
- Move the mouse away from you for south-to-north rotation (the top of the text tips backwards).
- Holding down the Shift key *after* you've started to rotate text temporarily stops the rotation, allowing you to reposition the cursor. Let go of the Shift

key to resume rotation.

With the Rotate tool selected, clicking on the text with the right mouse button brings up this dialog:



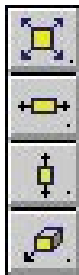
With this you can rotate a specified amount (from -360° to 360°) around any of the selection's three axes. The arrows in the dialog box show the direction of positive rotation.

The Scale tool



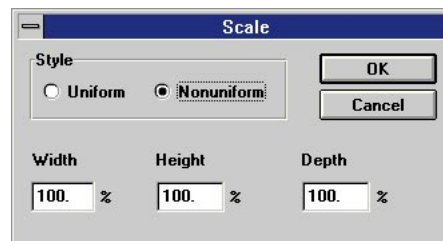
Use the Scale tool (F11) to resize text along one or more of its axes. This tool affects the text's width, height, and depth together. Use the pull-down menu to get a tool that allows you to constrain the scale along one axis.

- Rightward mouse motion enlarges text, leftward shrinks it.



Holding down the Shift key while dragging constrains the resize to horizontal or vertical, depending on which direction you first move the mouse.

Clicking on the text with the second mouse button brings up this dialog:



With this you can resize a selection in two ways:

- Uniform, which resizes an object as a whole.
- Nonuniform, which resizes width, height, and depth differently).

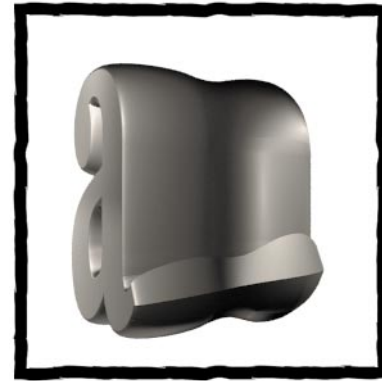
To use this, just select Uniform or Nonuniform, and enter a percentage by which to resize the selection.

Holding down the Control and Shift keys while dragging forces one dimension to grow while the other one shrinks by the same amount ("volume-preserving" resize). This is useful in creating an object that looks "squashed and stretched," as a rubber ball does when it hits the floor.



Note: Changing some text's thickness will change the shape of a rounded bevel: thickening will tend to smooth it out, thinning will exaggerate it (see the images in section Getting Text In). You can restore an object's size to the size it was when you first created it using Reset Scale under the Edit menu.

Here are some examples of non-proportional scale:



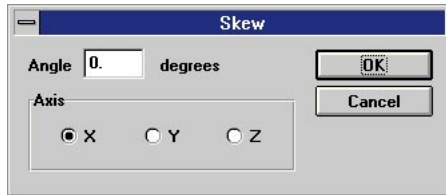
The Skew tool



Use the Skew tools (F12) to give text a slant along one of its axes. The pull-down menu provides tools to skew along individual axes.

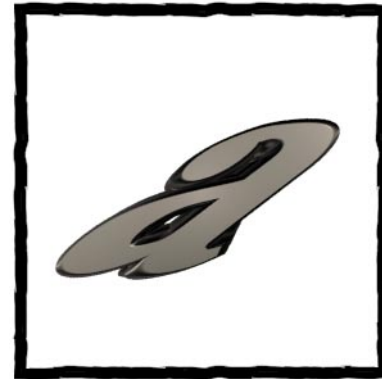
Clicking on an object with the second mouse button brings up this dialog:





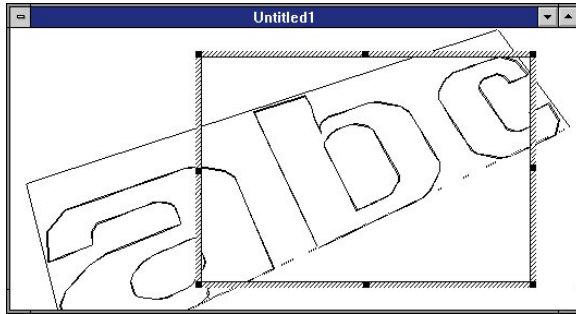
With this, you can skew a selection along any of its axes by any amount. To use this, just select an axis, and enter an angle by which to skew the selection.

The images at right show the Skew tool being applied.



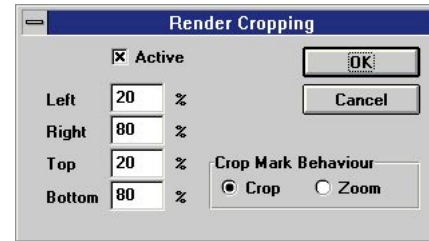
Use the Crop tool to restrict the area to be rendered: you don't always have to render the contents of the whole window. You can “crop out” areas you don't need to see by using this tool; just the contents of the crop window will be rendered. In the illustration on the next page, you only see the area within the crop box when you render.





To get rid of the crop window, just toggle the Crop tool button off by clicking on it. When you toggle it on again, the crop window will be as it was when you left it last.

With this tool selected, clicking in the crop window with the second mouse button brings up the Render Cropping dialog:



Here you can do three things:

- Make the crop window active or inactive.
- Determine numerically what area the window covers. Use percentages to specify where the edges of the window are. For example, values of 50, 100, 50, 100 specify an area that covers the bottom right quarter of the project window.
- Determine how the crop window should work.

The crop window works in two ways:

Crop. This is the normal mode, where the partial image is rendered at the size of the crop window as you see it on your screen.

Zoom. The partial image is rendered “zoomed up:” the crop window is expanded proportionally so one of its dimensions matches the project window's. This is especially handy when you want to create an animation that has an object disappear from view. You

can have the object in your project window, and control the animation normally, but when it's outside the crop window it won't appear in the rendered frames with this option turned on.

- Click and drag the handles (in the upper left and lower right corners) to adjust the crop window.
- Click and drag anywhere inside the crop window to move it.

Only what's in the crop window will be rendered.

- To force the crop window to take the shape of the project window, hold the Shift key down while resizing the crop window. This is useful when used in conjunction with the Zoom setting: it allows you to create animations where objects enter the frame from one side.

Viewing the text

You can use different camera views to get a different view of the scene. These are the bottom four choices in the Views menu. View to Fit moves the current “camera” (From Front, From Left, or From Top) in such a way as to fit everything in the scene. So if you find you've moved some text off-screen, or made it too large to see the whole thing, just use View to Fit to see everything. If you've used View to

Fit and need to get the original view back, select Reset View under the Edit menu.

The views are also useful when you want to move text in front of or behind other text. Using the From Top or From Side view lets you see exactly where things are.

Grouping

The *Group Therapy* chapter goes into some depth explaining grouping concepts. This section deals with the practical issues: how to group, what it's good for, etc.

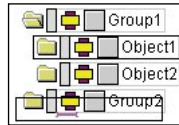
Extruded text objects have a default grouping when you create them. Whatever characters you type in are automatically grouped into one object. Within this group, each letter is itself a group consisting of two elements: 1) the front and back faces (which are a single object), and 2) the sides (also one object). Type in another text string and you have a new group. However, you can rearrange and regroup things quite simply.

If the Score window isn't already showing, select Show Score from the Windows menu. The left side of this window displays the groups' elements as if they were files and directories in the File Manager. All “directories” are groups. And you can move



things around and restructure the hierarchy just as you do in the File Manager, by clicking and dragging. Use the grey bar at the left end of the “directory” as a handle for dragging. Drag an item into a different “directory” and the item and anything in it automatically becomes a member of that group. Additionally, you can change the order of things by dragging the elements or groups up or down. You’ll see why this is useful in a moment.

When you click and drag an element (slowly) you’ll see a purple cursor appear at the drag bar. This tells you where the element would end up if you were to release the mouse button. If you don’t see the cursor, the element won’t change places.



Why would you want to group things? Well, for four reasons.

- You can apply Looks to many objects at once.
- You can manipulate the position, orientation, scale, and skew of many things at once.
- You can perforate objects.
- You can gain incredible control over animations.

You can read about this in the *Animation* chapter.

Groups and Looks

You can organize words and letters around Looks, if this serves your purpose. Applying a Look to a group makes it unnecessary to apply the Look to each of the group’s elements. Additionally, once you have things positioned the way you want them you can regroup things into Look-based groups, putting pairs of letters together, for example, to apply Looks in groups of two.

Groups and the tools

If you’ve worked with any of the popular drawing programs, you’re no stranger to grouping things to have one operation apply to many things at once. It’s a simple idea. The Move, Rotate, Resize, and Skew tools operate on whatever’s selected. If the selection is a group that contains many objects, you can get a lot of work done at once. Use grouping to have an operation apply equally to multiple objects: when you resize a group, all its elements will have all three dimensions scaled exactly proportionally. When you rotate a group, some elements may end up *behind* others, which you can use as a tool to gain depth in a scene.

Creating a group

To create a new group:

1. Select Group from the Edit menu. This creates a new group. If an element was selected when you used the Group command, that element will be included in the new group.
2. If you wish, type in a name for the group by highlighting the name and typing in a new one.

To ungroup grouped elements:

1. Select the group you want to delete.
2. Select Ungroup from the Edit menu.

Warning: Don't use the Delete key to try to ungroup! This will delete the group and everything in it.

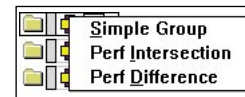
Perforating objects

You can get some quite interesting effects by combining objects in unusual ways. You can do various sorts of perforation, embossing, debossing, and overlapping. For example, the IBM logo is an easy effect to create. You're not limited to using a few shapes for these operations — you can use any object you can get into Typestry.

There are three basic steps. We'll lay them out here, and then explore them in detail in a tutorial:

1. Create one object that overlaps another. (An object can itself be a group.)
2. Group the objects.
3. Set the group's perforation (perf) mode.

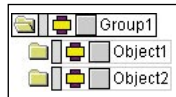
The perf modes are available in a popup menu in the Score window. To display the menu, just click and hold on a group's perf icon, just to the right of the gray drag bar:



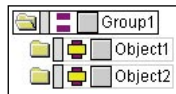
Once you've created a group in which two objects overlap, here's what you can do:




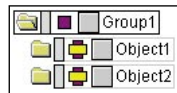
- Create a composite object from the two elements. This is the default behavior. The group's name will be preceded by the "Simple Group" icon, indicating that it's a simple group.



- Render only the overlapping areas. This is called an "intersection." For this effect, set the perf mode to Perfs Intersection. The group's name will be preceded by the Perfs Intersection icon (a small square with a purple circle inside).



- Remove any overlapping areas. This is called a “difference.” For this effect, set the perf mode to Perfs Difference. The group’s name will be preceded by the Perfs Difference icon (). In the group you create to hold the objects, the second (lower) element in the group gets subtracted from the first (higher) element.



Warning: Using perforations increases rendering time. Using multiple characters for perforations can make a dramatic difference, slowing things down and increasing memory requirements significantly.

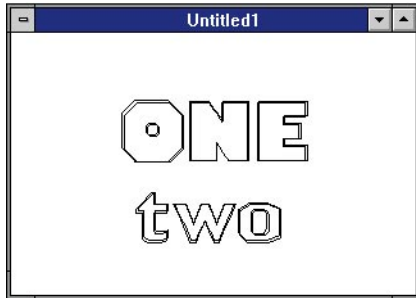
Perfs tutorial

Ok, let’s try one. Let’s make the N in the word “ONE” have the word “two” carved out of it. If your Score window isn’t showing, bring it up now by selecting Show Score from the Windows menu.

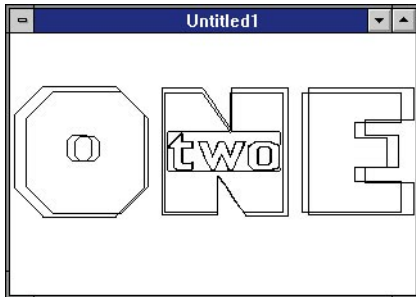
1. In Typestry, type in the word “ONE” (all caps) in some fat font, as bold as possible. Use the Bevel Build Method, and any bevel you wish.



2. Type in the word “two” (in lower case) in a thinner font, also using Bevel, with any bevel.
3. Now you should have two words on your screen, something like this:



4. In the project window, make the “ONE” big, and the “two” small: adjust the sizes of the words so the “two” is small enough to fit into the N in “ONE.”
5. Place the “two” somewhere in the N:



For the “two” to create a hole all the way through the N, it must stick out both the front and the back of the letter. If the front of the “two” is behind the front of the letter, all we’ll see is the front of the letter, and not the hole inside where the “two” is. If it sticks out the front but not the back, it’ll seem like the “two” doesn’t poke all the way through.

6. So make the “two” thicker than the N. Be sure to use the Top and Left views, available under Camera in the Effects menu, to check that the “two” sticks out in front and back of the letter. (If you want, you can also use the Telephoto lens, available under Camera in the Effects menu to get rid of the perspective distortions. But don’t forget to set this back to Normal when you’re done.)

- If you’re having trouble selecting the right object to scale, select it in the Score window, hold down the Control key, then click and drag in the project window.

Now for the subtraction.

- Remember, within a group the first element is the one subtracted from. All the other elements get subtracted from the first.

So we’re going to have to group things carefully to get the effect we want: “two” subtracted from the N. To be safe, let’s make a group that includes only the letter and the “two.” It doesn’t matter if this

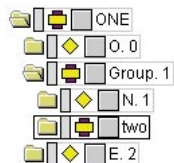
group is inside another group, or at some other level. The subtraction will apply only within the group we create. Just for practice, let's make the group at the level of the letters in "ONE."

7. We'll need to see the contents of the ONE string, so in the Score window click on the triangle to the left of the ONE string. Now you should see ONE's elements (the individual letters).

8. Select the N; then select Group from the Edit menu. Now there's a group that has just the N in it.

Now let's add the "two" to the new group:

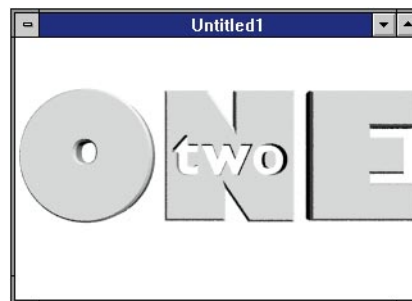
9. In the Score window select the "two" and drag it (by its gray bar) into the group. The purple cursor should be directly below the N's drag bar. Your Score should look something like this:



10. Now all you have to do is change the perf mode of the group holding the N and the "two:" click and hold on the group's perf icon, and select Perfs Difference in the popup menu.

Now you can render. Be forewarned though, perforations do increase rendering time, so just use the Reasonable rendering setting for this session, unless you can afford to use Excellent 'n' Slow.

- Don't forget, you're not restricted to using *letters* for doing perforations. You can use any character at all — characters in the PixarPerfs font (see below), characters in a dingbats font (e.g., Zapf Wingdings), characters created using Corel symbols, or shapes in imported Adobe Illustrator files. (For more on importing Illustrator files see the section on "Importing Illustrator files" in the *Getting Text In* chapter.) If one of the font creation packages are up your alley, you can make shapes in them, too.



The PixarPerfs font

We used Fontographer to build a font with special characters just for perforating objects (though you might also use some of them to add interest to your image). You really should try some of these, now that you know how to do perforations — they're much more fun than letters!

You should have installed this font in your system at the time you installed Typestry. The character set appears at the end of this manual. Alternatively, you can use the Character Map program in the Accessories group from the Program Manager. desk accessory to view all the characters. These are just a small sample of the kinds of shapes you might want to use to get away from your basic "image with letters in it."

Note: The grid divides up the window itself, not the space in the window. This means that if you resize the window, the number of grid lines doesn't change — the grid resizes along with the window.

Using the Grid

Use the grid to help you with aligning things in the project window. Select Toggle Grid from the Edit menu to turn the grid on and off. The dimensions of the grid are set in the Preferences dialog, available under the File menu. This is most profitably used in conjunction with the Telephoto setting, available in the Camera menu under Effects. This combination provides you with an orthographic (2D) view, which is ideal for aligning things.

