

Chapter 29

CONVERTING ORDINARY LINES TO A MULTI-COLUMN TABLE

The charts for the purl diamond project in part one had been created on ordinary lines like this one, though of course the font was the knitting font.

When I duplicated the motif rows to make the motif taller, the seed stitch left and right borders were then wrong, as they did not maintain their checkerboard of knits and purls. To fix the left and right borders in the corrected chart, I had to very laboriously fix each incorrect group of seed stitch one at a time, by hand. I copied a group of K–P–K–P–K and pasted it over all of the incorrect P–K–P–K–P groups. Then I copied a P–K–P–K–P and pasted it over all the incorrect K–P–K–P–K groups. But selecting each incorrect group individually to paste a correct group over it was very slow and caused some wrist strain from all the clicking and dragging.

If the whole chart had been in a table **with the left and right borders in their own columns**, it would have been very easy—and much faster—to fix the seed stitch.

So if we've made a chart on ordinary lines and now realize we ought to have put it in a table, we don't need to start from scratch.

Making the Switch

There are just a handful of easy steps to change a chart on regular lines to one that's in a multi-column, multi-row table.

Step 1: Put Tabs Between Each Section's Symbols

While it's true that we could just select the whole chart and have the word processor Convert Text to Table to put each line in its own one-column table row, that quick step will force us to do **a lot** of work by hand. We will have to add columns for the private-side row numbers, the left border, one for each of the various patterns we might be combining, the right border, and the public-side row numbers. Adding columns is very easy to do with a couple of mouse clicks. But then we come to hard part.

We will have select each row number and drag it to its own table cell, **we** will have to select each group of border symbols to drag it to its own cell, and **we** have to select each group of symbols of each stitch pattern and drag it to its own cell.

All that selecting and dragging will be slooooooow, and the bigger the chart is, the more we will strain our wrists, perhaps to the point of carpal tunnel syndrome, possibly accompanied by saying bad words in our heads, or even out loud.

The Better Way

Before we convert the ordinary text lines to a table, we will first put **tabs** in several places on each line, using the tabs to separate the various parts of each chart row into their own groups.

For the purl diamond project variation with the doubled-up motif rows, we will separate each row's symbols into five distinct groups with four strategically located tab characters:

- 🌀 to the left of stitch Y, to isolate the private-side row numbers
- 🌀 between stitches U and T, to isolate the left border
- 🌀 between stitches F and E, to isolate the stitch pattern's symbols¹
- 🌀 to the right of stitch A, to isolate the public-side row numbers

Yes, this involves a certain amount of clicking with the mouse, but it's much less effort than would be necessary if we let the word processor throw each complete line into a table with only one column, so that we have to move by hand groups of symbols to the other columns on each row.

Why tabs? Because when we select all the chart lines and have the word processor Convert Text to Table, we can tell the word processor to **start a new table column at each tab character**.

Existing Tab Stops Are Fine

As we add tabs, the part of the line to the right of each newly added tab character may or may not move. How much that part of the line moves (or even if it doesn't move at all) is completely immaterial. It absolutely **does not matter**. Whether the ordinary chart lines have our word processor's default tab settings—or any other tab settings—makes absolutely no difference. The only thing that matters is the **presence** of a single tab character between each group on each chart line.

So if a particular added tab doesn't seem to move the symbols to the right, we do **not** add a second tab at that spot. Again, the horizontal shift that may or may not occur during this step is **irrelevant**.

We merely need exactly one tab character at the exact same places in every ordinary line.

The Modified Chart

So in the next chart, made with ordinary lines and showing the duplicated motif rows, I have added tabs in all four places on each row, exactly as described above.

¹ If we had multiple stitch patterns, like we had in the Aran sampler, we would put a tab between each pattern's group of symbols as well, to isolate each pattern from the ones on either side of it.

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The next version of the chart has the hidden characters “showing,” as if we clicked on the pilcrow symbol ¶ in a toolbar or chose a menu item like View | Hidden Symbols. The centered dots represent spaces, and the arrows represent the tab characters.²

² The symbols don't align here in the book like they do in a word processor because of the screwy things I have to do to show them explicitly.

Step 2: Convert the Ordinary Text Lines to a Table

We may have to select a menu item like Table | Convert Text to Table, or we may be able to simply click on a Table button in a toolbar. We may also have to specify that all our carefully placed tab characters are where each table column should begin, though that option may be the default setting in our word processor.

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If the newly converted table doesn't have the correct thing in each cell, we probably omitted a tab character or added an extra one by mistake. We undo the conversion from text to table, fix the tabs, and convert the text to a table again. It may be easier to check for missing, misplaced, and extra tabs if the hidden characters are visible.

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numbers that were needed to make the stitches be aligned properly when the chart was in ordinary lines. We'll ignore those unneeded spaces since they don't matter.³

Let's now concentrate on fixing the seed stitch left and right borders.

Step 3: Find and Select a Group of Correct Symbols

This ability to correct groups of symbols quickly is one of the main advantages of using multi-column, multi-row tables instead of ordinary lines to make charts.

First, we figure out where the symbols are correct.

For the left and right borders, the symbols are correct in rows one through six, as well as in the lowest row seven. The left and right borders are wrong starting in the second, duplicated row seven and higher.

The cells containing symbols U through Y in rows one through six are correct. We select these six cells, outlined with the thick border in the partial chart.

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³ But if we **want** to get rid of them, we open our word processor's Find and Replace tool, type a single space in the Find box, leave the Replace box empty, and click Replace All **only if** our entire file consists of the chart. If we have regular text in the file also, like the pattern name or book title that's the source of the pattern, we click Find on spaces between words in the regular text and click Replace on spaces in the chart. We could also specify in the Find box to look for spaces only in the knitting font, then we can click Replace All. See "More Charting Tips" (chapter 26) for full details on specifying the font for the Find and Replace boxes.

Make a copy of the selected table cells with a keyboard shortcut (which is probably Ctrl-c) or a menu item (like Edit | Copy).

We have two options for this step, and you can probably use Ctrl-v or Edit | Paste to do the actual pasting.

Our word processor probably won't make us select all six cells that we want to paste over, so we should be able to simply click in the correct table cell and paste. Since we are copying six vertical cells, we have to count to the sixth cell above chart row six, then click to put the cursor there before we paste.

The thick border below shows the cell I clicked in, and that cell and the five below it now have the correct arrangement of seed stitch.

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But what if we miscount and paste the selection in the wrong place?

In the chart below, I clicked in the cell in the lower row nine before I pasted the six cells. The cells that were pasted are inside the thick border.

More Tips

In reality, this way of fixing the borders works, but for this particular chart, it's more difficult than is actually necessary. In some cases, we might have to do this kind of piecemeal correction, but in others, we can save some time and effort with other techniques.

Fix the Row Numbers First

In this case, the chart rows starting with and higher than the upper row seven were misnumbered because of the way we duplicated the motif rows. Fixing the row numbers before we start trying to fix stitch symbols will make the entire process easier.

Delete the Incorrect Symbols

Because the symbols that were wrong were isolated in the left and right borders, it would have been easier to simply delete the contents of those table columns altogether and start completely fresh.

For some projects, it may be more work to delete the wrong symbols and retype the correct ones than to copy and paste in correct groups. It just depends.

Start at the Top and Work Downward

Because our word processor will always paste downward, it makes more sense to work from top to bottom. So instead of starting with the bottom few rows of the chart, we start with the top few rows. Note that the row numbers have been corrected.

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The bottom five rows of both the left and right borders of this partial chart are wrong. We can copy a group of correct cells, shown in the thick border in the next chart

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then click in the proper cell (with the thick border) and paste.

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	YXWVU	TSRQPONMLKJIHGF	EDCBA	

Note that we had to start the five-row selection with a P-K-P-K-P row because row thirty-two was K-P-K-P-K.

Fill Entire Columns by Pasting One Row Repeat

Since seed stitch is a two-row repeat, we could have put the correct two rows at the top of the column for, say, the left border, selected them, copied them, highlighted the rest of the cells in the border, and pasted to fill the entire column at once. See “More Charting Tips” (chapter 26) for full details.

Copy and Paste Corrected Columns

Once we had corrected the left border, we could simply copy the entire column and paste it at the right edge of the chart. There would be absolutely no need to correct both border columns by hand, since they were identical.

Summary

We’ve already talked about the advantages of having three columns when we chart in tables: the left column holds the private-side row numbers, the middle column holds the stitch symbols, and the right column holds the public-side row numbers. Now we see that we should chart a project’s vertical borders the same way we would chart multiple stitch patterns across its width.

Lesson Learned

Put left and right borders in their own table columns, treating them as what they are: stitch patterns in their own right.

Applying this lesson learned to the purl diamond project, we would have five table columns, as shown in the later charts in this chapter.