

Addendum 9

Designing with True Type Fonts

by Linda Matteotti





# About the author, Linda Matteotti



Linda Matteotti has been teaching quilting since she opened her needlework shop in 1977.

She has continued to teach both quilting and computer software classes at the community college level for the past 20 years.

Her love of quilting and all things computer related have come together in this age of technology to make her a unique quilter and instructor.

Linda works with the Handi Quilter Company as an educator, which has expanded her quilting and teaching to include longarm instructions in basics, free motion quilting, specialty quilting and computerized quilting and digitizing. As an award winning quilter, she continues to hold onto the traditional skills and art of hand quilting. She also teaches Electric Quilt software.

As a certified teacher of Art and Stitch she is able to help students discover a whole new world of "digital quilting."

For class information, visit Linda's website: http://www.lindamatteotti.com/

Introduction

Lettering, through the ages, has been an important design element. When I discovered the Art & Stitch feature which allows users to turn a TrueType font into a stitchable design, a whole world of possibilities opened. There are thousands of creative font faces available to us for endless design possibilities. I hope you enjoy the process as much as I do.

Imagine a child's delight at seeing a quilt with their name spelled out as the quilting design. Or a bride and groom whose names are quilted creatively on a wedding quilt.

Each and every personal computer will have a different set of font faces loaded. Your computer's available font styles will differ greatly from mine. Often, when a software package is installed on a computer, it not only installs the application (program), but a set of TrueType fonts as well. A good example of this is one of the many Hallmark card programs. When that software is installed on a computer, you also acquire several TrueType fonts with a great deal of character. These work out beautifully to be used along with Art & Stitch.

When browsing for fonts, look for bold, thick fonts, preferably with open bowls.





## Sources and Examples of Free TrueType Fonts

http://www.1001freefonts.com/ and http://www.fonts101.com

For personal use you can download dozens of free fonts. Many websites also have "packages" of 1000's of fonts for a small fee that are okay for commercial use.



Baby Kruffy is one of my personal favorites. This font has so much character and is very forgiving. You will find the entire Baby Kruffy alphabet digitized for you in the Library, under Quilt Alphabets and Text.

This name "Josephina" was made using the Baby Kruffy font and will stitch continuously.





LOOTEPRILL?

Polo Brush is a font with most "open bowls" and therefore easy to use.

The Alba Matter font has nice "open" bowls too. See sample on next page.

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Sample made with Alba Matter, slightly overlapped > Transform Artwork > Unite

## What to do with the "bowl" in a font design

The bowl is the separate opening in letters such as A B and D. When you use any font just as it comes in its original form, you will have a jump to complete the bowl of the letter. This may be just fine. You can trim the jump stitch later, or do free motion stitching over the jump.

Often it is easier to use the original font as a guide and trace a new one. If you choose to do it that way, lock the original letters by clicking the lock symbol in Sequence View (see Part 1 - page 18).

#### Exercise: Let's start with something simple

- 1. In a new Art & Stitch screen, click on the Import TTF Artwork button, the very last tool in the Artwork Drawing Tools.
  - 2. Type your initials in uppercase letters.
  - 3. Click the Select button.
  - 4. From the Font list choose Arial Black (we want a nice thick, bold font), Regular, and type 150 in the size box. (See note)

Import TTF Artwork   Text:   LM    Font:   Arial   Select   OK	Font   Fort: Fort style:   Avid Back Bold   O Avid Back Bold   O Avid Back Bold   O Avid Back Bold   O Avid Back Bold   D Avid Dack
NOTE: A bit about font size. When you click on the Import TTF Artwork button you will be faced with some choices. One of the choices you will have is the size of the artwork that you import. We all know that it's much easier to work large, and then reduce the size later, than it is to work small. Your maximum choice of size in the Font window looks like it is 72. But you are not limited to that choice. If you select the size number (see illustration) and type the number 150 (for example) you will have artwork more than 4 inches in height.	

## Sources and Examples of Free TrueType Fonts - cont'd

- 5. Click on Artwork in the Properties panel and remove the check mark from Fill. Click on Apply.
- 6. Now you have an outline of the font style you chose.
- 7. At this point you can assign a running stitch then watch the Sew Simulator to see how this will stitch out. You will have a jump between letters, which can be trimmed later. You will also have a stitch line to the bowl if you have used a letter with a closed bowl (such as the letters B or O).
- 8. In order to change this stitch line into a jump, you will need to select the letter, right click and choose Break Apart. Now the inside of the bowl is a separate element. When stitches are applied, you will have a jump thread between elements that can be trimmed later.
- 9. We'll explore some creative ways to deal with letters with bowls and create an interesting design at the same time.
- 10. Click OK.



### Simple shapes: examples of fills



NOTE: When using any of the above methods to embellish your letters, watch the Sew Simulator carefully. Some designs will contain more overstitching than practical. When this happens, begin experimenting with different sizes of fill, different fill patterns or changing the fill angle. In some cases, it is better to lock your design and trace a new continuous path, simplifying as you go.



# To Jump or Not to Jump

Letters can be stitched:

- 1. With a jump between each letter as in the examples on the previous page.
- 2. Without a jump, **as a continuous path**, by slightly overlapping the letters, select, right-click and choosing Transform Artwork > Unite.



3. With a stitched baseline (See Sunny example below).

#### How to tie letters together with a stitched baseline



- 1. Click the import TTF Artwork button.
  - 2. Type "Sunny".
  - 3. Click Select.
  - 4. Choose Arial Rounded, Regular, Size 150.
  - 5. Click OK.
  - 6. Click on Artwork in the Properties panel and remove the check mark from Fill. Click on Apply.

If a running stitch is applied at this point, you would not be pleased with the result. You would have a jump between each letter and a lot of trimming to do after stitching. Too many starts and stops. The goal in this exercise is to connect all the letters by placing them on a baseline. (Select all and apply a running stitch to see what happens. Click the **Back to Artwork** button to remove the stitches.)

In order to create a continuous path, it is necessary to open the bottom of each letter

- 7. In the Properties Panels go to the tab **Sequence View**.
- 8. Click the Plus sign in Sequence View to show each of the letters individually.
- 9. Click the "S" in the Sequence View panel.
- 10. Choose the **Reshape** tool or type the letter R.
- 11. It always helps to zoom in on the letter while you're working.
- 12. Right click on the midpoint at the bottom of the letter "S" (see illustration).
- 13. Choose **Split Line.** This will force the start and stop of this closed shape to be at the position where you split the line.



## How to tie letters together with a stitched baseline - cont'd

- 8. Repeat for each letter in the word. For the "u" and "n" it is only necessary to split one point.
- 9. The "y" should be split as close to the baseline as possible.



- 10. Dragging a guideline down from the ruler at the top of the design page will help with the placement of the split.
- 11. After all the letters are split, Select All and Connect Objects. The start/stop points (positions where you split the lines) of all letters will now be connected. The entire word is now one continuous path, one start, one stop.
- 12. Apply a running stitch and enjoy your continuous line lettering.

These letters were chosen for this example because they do not contain "bowls" such as you would find in the letter "a" or "b". The following exercise will help you adjust letters so that they will stitch continuously.

## Love Laugh Quilt - An exercise in font manipulation



- 1. Click the import TTF Artwork button.
- 2. Type Love Laugh Quilt.
- 3. Click Select.
  - 4. Choose Arial Rounded, Regular, enter Size 150.
  - 5. Click OK.
  - 6. Click on Artwork in the Properties panel and remove the check mark from Fill. Click on Apply.

These letters can be stitched continuously on a baseline as in the previous exercise, however before the bottoms can be split it is necessary to deal with the letters that contain a "bowl." The first letter that needs to be edited is the letter "O."

- 1. Choose the Select tool and click on the letter "O".
- 2. Click the Copy button, open a new design page by clicking on the New button (the first button in the top toolbar) and click Paste.
- 3. Choose the Reshape tool.
- 4. Click the outline of the O.
- 5. Right click on the bottom point of the O and choose Split Line.
- 6. Do the same thing with the inside bowl of the letter O. Note: this change will not be visible.
- 7. Choose the Select tool and Select All.
- 8. Right click and choose Break Apart (now the two parts of the letter "O" are independent).
- 9. Select just the inside bowl of the letter.
- 10. Move the inside down until it just rests on the outside bowl of the letter O (again, **Zoom** is a great help while moving.



Love Laugh Quilt - An exercise in font manipulation- cont'd

HINTS:

- The inside bowl of the letter can be moved in small, careful increments by using the **Ctrl** key along with the down arrow on your keyboard.
- In this case both parts of the letter can be selected, then use the Align button to Align Bottom.



- 11. Select both parts of the letter O with the select tool, right-click and choose Connect Objects.
- 12. Test by applying a running stitch and check the Sew Simulator.
- 13. Select and click on the button "Back to Artwork".
- 14. You are ready to copy and paste your revised letter "O" in the main design (delete the unedited original).

HINT: Each letter of the alphabet is going to present a new challenge. All closed letters must be opened in some way to allow for continuous stitching. The good news is that once you have redesigned a letter, you should never have to do it again. Each time you make revisions, save them to a separate design page and save it with the name of the font. Then each time you need the letters, simply open your catalog and copy and paste.

#### Getting rid of the bowl in lowercase "e"

1. Follow steps 1-3 above to move the letter to a new design page - Our goal is to create a letter that looks like the example on the right:



- 2. Select the letter and lock it to the Design Page: In Sequence View click on the lock symbol next to the artwork.
- 3. Take the Curve tool and begin at the lowest point of the letter (use a guideline to easily identify the lowest point) trace the outline of the letter, opening the bowl of the "e" as you go.
- 4. When the letter is traced, right click to finish.
- 5. DO NOT connect, remember you want the bottom open.
- 6. Click on the lock symbol in Sequence View once again and delete your original outline.
- 7. Save as Arial Rounded letter e.ans.
- 8. Select All, Copy and move it to your original design page. Delete the unedited original.

NOTE: An alternate way of "opening" the "e" is to use the Reshape tool and break the design apart with Split Line, then Connect. Retracing the letter as described above is the simpler method.



# Turning the two objects of the letter "i" into one shape

Each letter can be dealt with in the similar manner. The letter "i" is a special case since it is in two separate parts.

- 1. Copy the letter "i" to a new design page.
- 2. With the letter selected, right click and choose Break Apart.
- 3. Select the "dot" of the "i" and move it down to **slightly overlap** the body of the letter.
- 4. Select All, right click and choose Transform Artwork, Unite.
- 5. Save as Arial Rounded Letter I.ans.
- 6. Select All and copy.
- 7. Move back to your design page and paste (delete the unedited original).
- 8. The bottom of the edited letter will still need to be split.

#### Before connecting, watch the spacing between letters

What most casual lettering designers don't realize is that lettering is much more pleasing to the eye, and more readable, if the elements are placed closer together. Which looks best to you?



Always stitch a sample of your text:

On paper the closer letters already look better, and in a quilt the letters will "poof" more than the smaller negative space between the letters. But it all depends on the chosen font.

Be creative and play!

This is a simple design that can be used to quilt an allover design for a Quilts of Valor project (<u>http://qovf.org/</u>)



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## **Creating Monograms**

- 1. Create a traditional monogram by using 3 letters in the alphabet of your choice.
- 2. Move the letters together so that they are barely overlapping and apply Transform Artwork, Unite.
- 3. Select the design and right click. Choose Transform, Double Convex Bridges to shape your monogram.

This is is the outline for a scalloped placemat. You'll find the pattern in the Library under Layout Templates.

Open the Scalloped Placement template from the Library, put the monogram object (made using the description above) in the center, select all, right-click and choose "Merge". Then fill with a Motif stitch. In this example Motif 216 has been used.







## Using Jack's digitized font from the Library

Jack Stewart (see Addendum 2) has created a ready-to-use alphabet. See Library > Quilt Alphabet and Text >Jack Stewart Brush Alphabet. To use his lettering, choose the letters you need and delete the remainder. This is how I would proceed:



- 1. Open Jack's Brush alphabet from the Library, folder Quilt Alphabet and Text.
- 2. Right-click on the selection and choose "Ungroup".
- 3. Click on a letter you want to use.
- 4. Press Ctrl + D to duplicate that letter, then move it to another part of the screen.
- 5. When you've chosen all the letters you need, select and delete the original group of letters.
- 6. Press the space bar to zoom to fit the screen.
- 7. Adjust sizes and positions of each letter to your satisfaction, making sure that each letter overlaps the next slightly.
- 8. It is generally easier to stagger the lettering slightly rather than try to line it up perfectly. Remember, we're quilting, not trying to write a novel.
- 9. One you've arranged your lettering, Select All (Ctrl + A).
- 10. Right click and choose Transform Artwork>Unite.
- 11. Apply stitches and save as an .ans design. Then save again the format of your longarm system.

For a real treat, visit <u>http://groups.yahoo.com/group/artandstitch/files/PatternsJackStewart/</u> and save Full Song.ans.

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## Designing with Dingbat fonts

Refer to User Guide Chapter 3.15 for information about installing and using dingbat fonts. However, it is not necessary to actually install the font on your computer. Art and Stitch will recognize the font if you merely have the font file open when you wish to use it.

A **dingbat** is an ornament, character or spacer used in typesetting, sometimes more formally known as a "printer's ornament" or "printer's character". The term continues to be used in the computer industry to describe fonts that have symbols and shapes in the positions designated for alphabetical or numeric characters. (Wikipedia)

For this example I have downloaded a free set of dingbat fonts from <u>http://www.fontriver.com/</u> called Saru's Flower Ding. When working with these fonts it is helpful to create a dingbat "map" for yourself. When you apply a dingbat font to lettering, you will get a different character for each letter of the alphabet (a different character for upper and lower case).

In **Saru's Flower Ding** font if I type an "a" I will get a . If I type an "A" I will get a a font map allows you to see at a glance which symbol you will get with each keystroke.

. Creating















С







In this font there are no symbols for numbers, but that is not always true.













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I like to create my font map in Excel because I have neat little boxes to work with. However, use any familiar software.

- 1. Type the alphabet in lowercase.
- 2. Select this alphabet, copy and paste on a separate line.
- 3. Select the second line and change the font to a dingbat.





## More examples with Dingbat fonts

This sample of an overall design was created using the font style Saru's Flower Ding and the letter "a", converting the TrueType font to artwork, then using the Power Copy function to repeat the design. After power copying and pasting several sizes of the flower, rearrange them so that they are overlapping slightly at only one point. Then select, right click, Transform Artwork, Unite. There is no limit to the amount of flowers you could paste. The secret is to have each flower touch in only one place.



The dingbat samples above are quite simple, but can range to the very complex. They provide unlimited design inspiration.

For example, here is a sample of the letters "a, b, c, d" in Floralia from <u>dingbatdepot.com</u>. Wouldn't these make a beautiful block designs? This would require using the tracing method.



Using the lowercase "g" in the Damask Dings1 font face with give you this:



- 1. Click on Artwork in the Properties panel and remove the check mark from Fill. Click on Apply
- 2. You now have four separate stitchable elements
- 3. Right click and chose Break Apart (now the four parts of the design are independent)
- 4. Arrange / rotate / move so that parts are barely overlapping in only one spot.
- 5. You might have something that looks like the shape on the left.
- 6. Right click, Transform Artwork, Unite.
- 7. Now you should have a design that looks like the shape on the right:





# Designing a border and a corner with Dingbat fonts

Using the lowercase "u" in the Damask Dings1 font face with give you this:





1. Click on Artwork in the Properties panel and remove the check mark from Fill. Click on Apply.

- 2. Drag a vertical ruler to your screen.
- 3. Now rotate the design by using the Rotate button in the upper right of the selection rectangle so that the bottom section of the design touches the guideline and the upper portion doesn't quite touch.
- 4. Make a duplicate design using Ctrl D.
- 5. Flip the duplicate copy horizontally.
- 6. Align so the bottom portion of the design barely overlaps.
- 7. Select All and align the tops of the two sections.
- 8. Right click and choose Transform Artwork > Unite.
- 9. To continue making a border design, duplicate the resulting design and flip it vertically.
- 10. Repeat these steps to make the design as long as you need.

Continue uniting this design as a corner if you like. The secret is to make sure the design overlaps in only **one** place, so that you don't get any "enclosed" areas. That way the entire path is continuous.



Hawaiian.Quilt 3 - letter x



- 1. Click on Artwork in the Properties panel and remove the check mark from Fill. Click on Apply.
- 2. Rotate the design 45 degrees.
- 3. With the Reshape tool, split the corner points in each of the two legs.
- 4. In Sequence View you will see that the lower right corner portion is now a separate piece.
- 5. Delete this piece.
- 6. The remaining end points are cusps.
- 7. Select the anchor that points out of the shape and Rotate it on top of the other anchor. Now it cannot get in the way when connecting a second pattern.



Move the cusp anchor that points away from the shape to the center of the point so that it does not get in the way when connecting later.

- 8. Use the Magic Square, Connect Objects and Close the shape.
- 9. Center the result.
- 10. Use the Reshape tool to adjust the inner lines and curves until you have a pleasing result.
- 11. Repeat the steps until you have a block of 16.







# Sources of free TrueType dingbat fonts

#### http://www.fontfreak.com - Florals 2

Letters b, c, d and e give the following designs:



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http://www.fontfreak.com - Flower Ornaments

Letters b, c , d and e:



http://www.dingbatdepot.com - Floralia

Letters b, c, d, e, f, g, h, l, j, k, and l:



http://fonts101.com - Damask Dings 1

Letters b, c, d, B, C and D:



#### References:

- 1. The Non-Designer's Design Book by Robin Williams
- 2. Wikipedia



Design Ideas - cont'd



Font Hawaiian Quilt 1, letter x - Magic Square, connect



Font Hawaiian Quilt 3, letter i - twice in Magic Square, connect



# Design Ideas



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Font Saru's Flower Ding, letter W - Power Copy, Transform Artwork > Unite





# Design Ideas - cont'd



