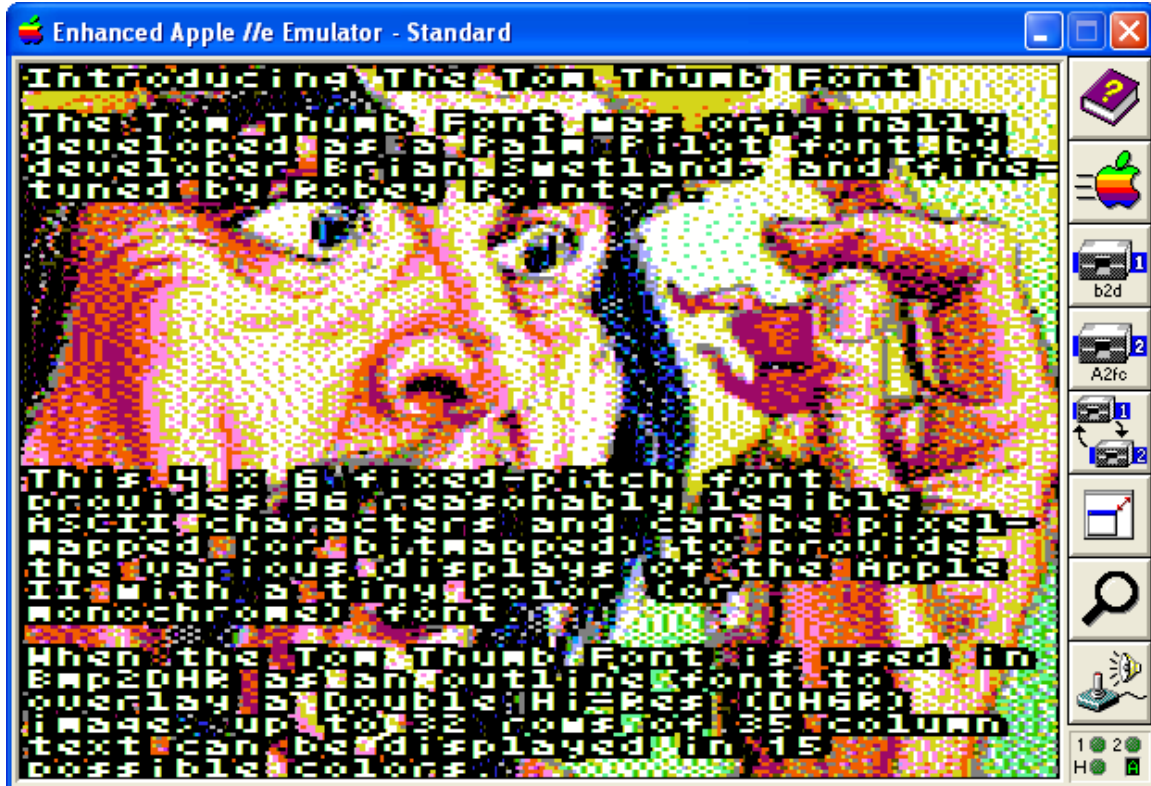


Captioning with the Tom Thumb Font in Bmp2DHR



With a limited resolution of 140 x 192, the DHGR display does not provide much room for lettering; it can be a display of few words if a large font is used. But DHGR's vocabulary can be expanded a great deal by using a smaller font. In my Apple II Super Hi-Res pixel graphics demo in cc65 I introduced the Tom Thumb Font.

Bmp2DHR provides the same Tom Thumb Font as a built-in DHGR font for over-captioning a BMP file during conversion to a DHGR file.

Just as overlaying a dithered and rendered file with discrete pixel to pixel text from a separate image is the best way to present clear and readable titling on the Apple II DHGR display's coarse resolution of 140 x 192, overlaying a dithered and rendered file with the Tom Thumb font is the most economical way to present relatively clear and readable captioning!

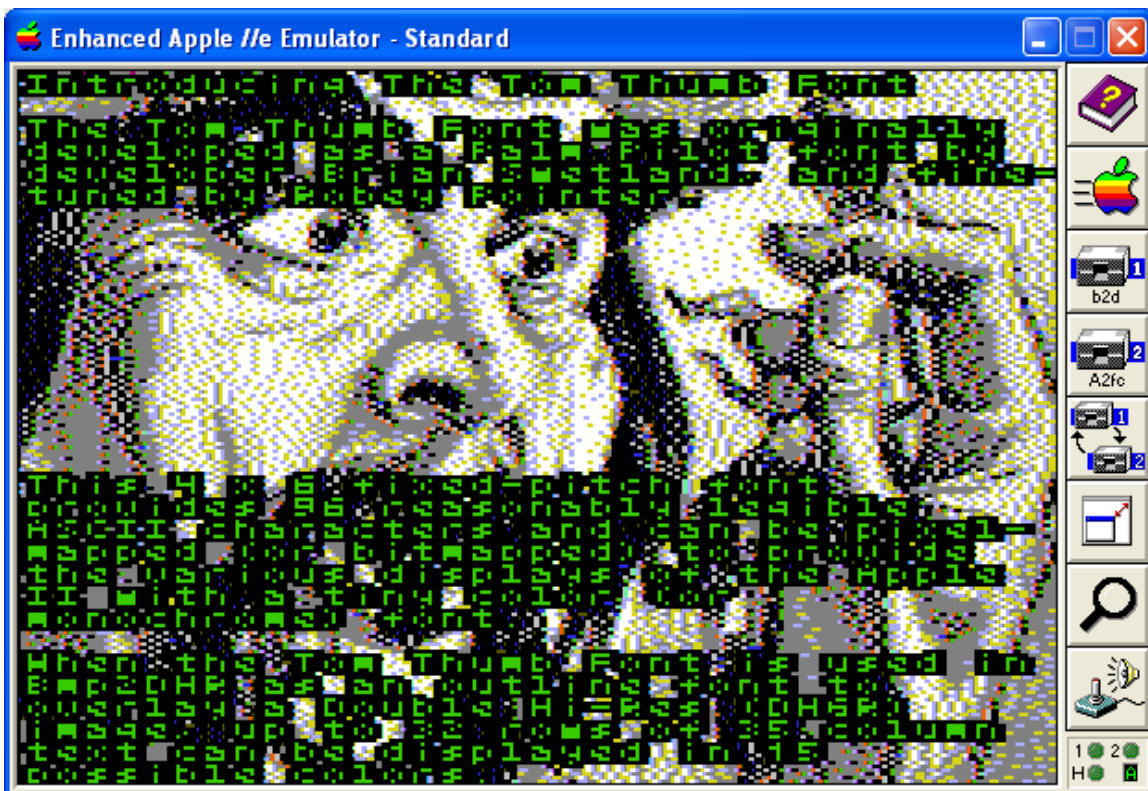
When Bmp2DHR finds a text file of the same "base name" as the BMP file it is converting it assumes that you want to overlay the finished file with Tom Thumb text. This is not optional so careful about naming text files around Bmp2DHR ☺

Like using a BMP overlay file for titling, using a text file for captioning also preserves the background image file as a clean unlettered file for mind changes.

How this works exactly is a sheer marvel of modern technology ☺ You make a text file in your programmer's editor of up to 32 rows with blank lines mixed with lines of words and sentences up to 35 characters in length. If you use Textpad (or equivalent) you can easily reformat any text at all to 35 character line lengths.

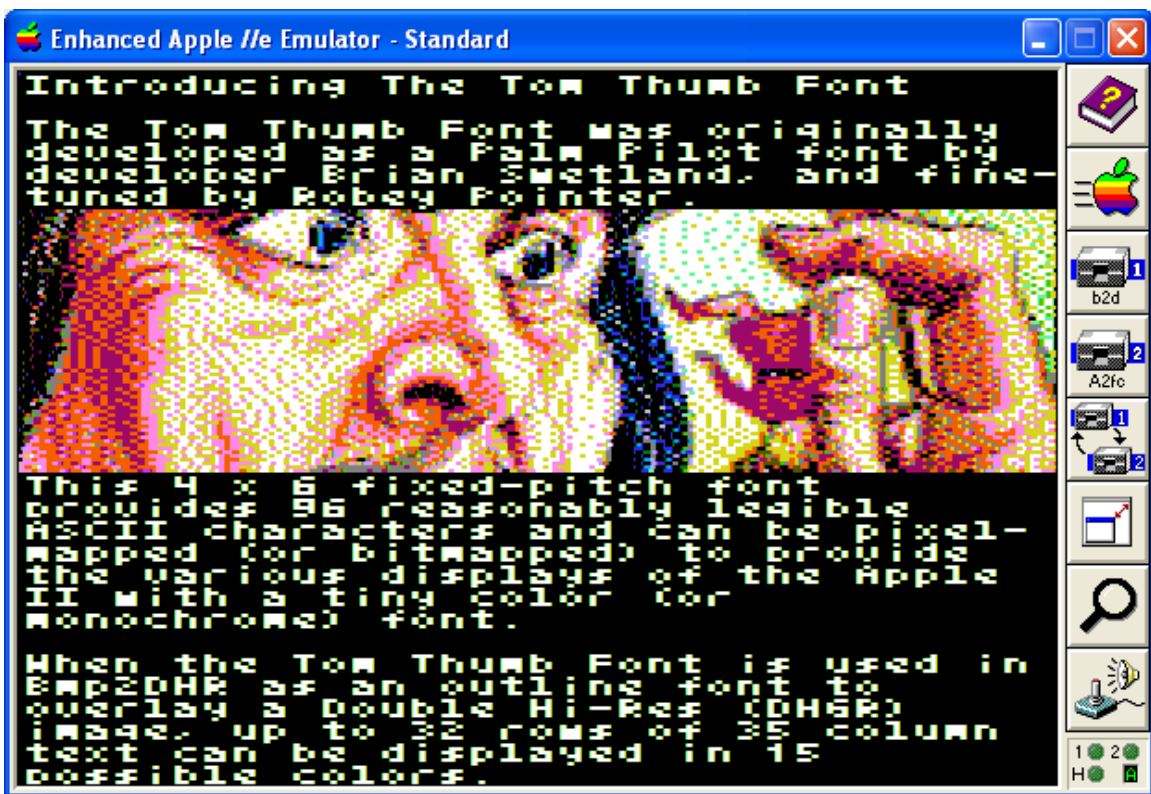
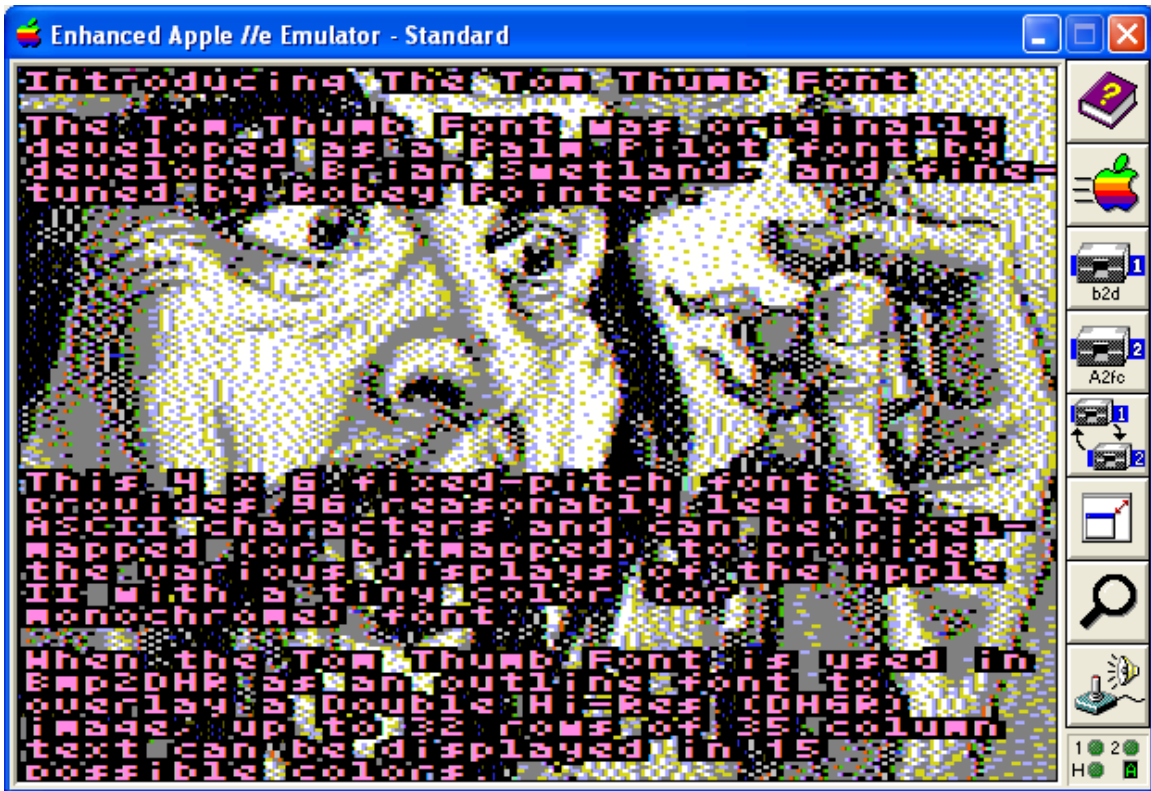
The text in this file of yours is left-justified so starts at x,y coordinate 0,0 and runs through to x,y coordinate 139,191, in 4 x 6 cells. You can easily do an entire screen caption layout by padding whitespaces to the beginning of a text file line to shift it over by 4 pixel increments, just as a blank text file line results in a 6 raster advance through the DHGR image frame buffer.

This feature breaks-down somewhat when colors in the background over-whelm the text, so a grey scale image can be used as a background (by using your image editor to remove saturation from your input BMP), and by trying-out different text colors and reviewing in preview mode.



Greyscale dithered images in Bmp2DHR are an interesting color combination in their own right, so after trying several colors you may not find the combination you want.

Keeping in mind you have only a handful of brighter colors to choose from, if bright colors like light green or pink don't do anything for you, you can black-out the areas of your preview image that you want to caption, and process your edited preview instead of the original, and you may end-up with something that is maybe more readable. DHGR is very coarse so you may need to be a little less creative than usual.



The Tom Thumb Font is also an interesting programmer's weapon. Let's say you expanded my cc65 DHGR routines to write an adventure game and you wanted to

combine text into some of your backgrounds, and dynamic text directly into your DHGR program as well. Using Bmp2DHR to prepare these hypothetical backgrounds of yours would give you the ability to do some pretty accurate layouts. Keep in mind as well that you can “hive-off” fragments of an edited Tom-Thumb preview image with little captions of their own and end-up with a consistent screen series throughout.

Now admittedly you can do some pretty nice monochrome true-type font work and paste into an overlay file to do almost the same thing, and Bmp2DHR is not trying to be a full-blown Paint Program (those are already available) so if you are into a “designer” font this probably isn’t for you but might suit the programmers in the crowd.

The “Tom Thumb” Font

The “Tom Thumb” Font was originally developed as a Palm Pilot font by developer Brian Swetland, and “fine-tuned” as a derivative work by Robey Pointer, robeypointer@gmail.com :



!"#\$%&'()*+,-./0123456789:;<=>?
eABCDEFGHIJKLMNOpqrSTUVWXYz[\]^_`
`abcdefghijklmnopqrstuvwxyz{|}~■

Brian Swetland’s Copyright and Conditions of Use for the original font are in the Bmp2DHR source code header file “tomthumb.h”. If you decide to use Robey’s “Tom Thumb” Font in your own programs, you must leave Brian’s Copyright and Conditions in the source code. More can be read about this font at the following link:

<http://robey.lag.net/2010/01/23/tiny-monospace-font.html>

Mentioning the use of the “Tom Thumb” Font herein is neither an endorsement, nor a promotion by either of these two individuals; merely an attribution to them.

All the best,

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