

A cross-stitch pattern

(de)construction

Taco Hoekwater

September 23, 2021

Since people always ask ...

here is the state of the train room:



Instead ...

I have been busy with this:



But once the ladies were finished and up on the wall ...

it was time for a new project:



MOËT & CHANDON

CHAMPAGNE
WHITE STAR



MOËT & CHANDON

DRY
IMPERIAL

I bought the pattern for that on Etsy instead of converting a bitmap myself because I was planning on taking the lazy approach ...

which (of course) did not work out!

The pattern is a PDF file you are meant to print out, but there are multiple small problems with it:

- The printed crosses are really small
- It uses Helvetica for the symbols
- And those symbols are centred in the square

Together, this means that the printed version is hardly usable because it is so error-prone.

(I'll show you)

So, I wanted to fix those problems. There are two steps:

1. Deconstruct the PDF to get the actual pattern data.
2. Construct a new PDF using `CONTEXT`.

First step: extracting the actual data from the PDF.

- I already had a script that extracts text and placement info from PDFs
- From that output, I construct a TXT file that is basically a bitmap

(I'll show you)

Second step: creating a new PDF

- I wrote a LMTX module to do the typesetting
- It also converts the legend, of course
- And it has an option to mark progress

(I'll show you)

All in all, I gave myself about a week of work while trying to save 15 minutes ...

but I had a lot of fun!