



Time Travellers Club

November-17

Dear Club Member,

Today if we want multiple copies of a document we think nothing of it, thanks to the magic of a photocopier. However it's not that long ago that making multiple copies of an existing document was hard work, and often required re-drawing the document completely from scratch.

My parents were both teachers in the 1980's and have fond memories of using the banda copier machine. These used alcohol to transfer dye on to copies of a carefully drawn out original... apparently the fumes in the staff room used to be particularly memorable.

Schools weren't the only setting where making multiple copies of a document was useful, and in the late 1800's and early 1900's architects would create a blue print, so the builders, and clients all had exactly the same version of the plan for a building. There are a number of ways of making a blue print, but there's one version you can still do at home today.

The original blue print was developed in 1842, by the English astronomer Sir John Herschel. It uses a variation on the artists pigment, Prussian Blue, but handled in a very particular manner. You need to combine ammonium ferric citrate with potassium ferricyanide, but you only get the blue colour if the ammonium ferric citrate is exposed to light on a piece of paper. So if you shine a light on the paper, but leave certain parts covered over, when the paper is plunged in to the potassium solution only the parts that were exposed to light turn blue. This is known as a cyanotype, and you can buy kits today to let you try the exact same process out for yourself.

The application for architecture came next, if the original drawing is done on transparent tracing paper, with a dark line, and you create a cyanotype where the dark lines of the original drawing are now white on your copy, with a dark blue background. This means that everyone working on a building can have exactly the same plan, and you can store the plans for future use, in case you need to know exactly where that water pipe runs...

Blueprints are no longer used in architecture, but the term has remained fixed in our language, as a description for a plan. This rather beautiful technique is now more confined to more artistic needs, and of course, your fibre for this month.

Happy Spinning,

Katie