Panels and Composite Images

Steve Wells

Images don't come in isolation. Historically paintings have often been made to be hung as a group. They were so common that terminology developed to describe them:

- Diptych two panels
- Tryptych three panels
- Quadriptych four panels
- Pentaptych five panels

For more names, see the Wikipedia entry for "Polyptych".

In the renaissance groups of paintings were used as altarpieces.

"The Seven Sorrows of Mary"
(The Ashwellthorpe Triptych) Master of the legend of the Magdalen (c1519)

“Mick Jagger”, Michael Putland (2011)

“Ribbed Leaves”, Julie Sample (2006)

“Pentaptych of Tulip Petals”, Harold Davis (2016)

Choosing Your Images

If you have a subject already such as a holiday or a birthday party then you already have a theme If not, look at a selection of images you have already taken and look for common themes in your style. It might be the use of colour (or monochrome). It might be patterns or portraits; landscapes or still lifes.

Once you have a theme choose a selection of pictures. Choose more than you need: you will undoubtedly want to replace images in your panel as it develops.

The key for a coherent panel is consistency:

- similar Height and width: at least consider whether you really want to mix landscape and portrait next to each other in the same row;
- similar colour balance: this may mean choosing all indoor or all outdoor;
- similar colours and tones: if you must use several green images and one in blue, consider converting to monochrome to remove the differences;
- similar horizons: you don't want an image with a horizon at the bottom of the image next to a picture with the horizon close to the top;
- look for similar backgrounds as well as similar, or related, subjects;
- if you are going to have a key line round an image, do the same for every image and use the same width and colour of line for every image.

Now consider the flow around the panel. The direction of a subject's gaze can take you from one image to the next. In the wrong place it could lead the viewer's eye out of the panel to a power socket on the wall! In a single image leading lines are used to move the viewer's eye into the image. In a panel lines can lead the eye from one image to the next. Shapes can be echoed from one image to another: a vertical line in one matching a vertical line in another. Images can be linked by form stories. If the theme is an event then the event provides the story. In other cases you could invent something.

How much spacing do you want between the images? Are they to be close together or more widely spaced? Widely spaced images can lead to dead space. Once you have considered the spacing, consider the colour between the images. For projected images black is usual as the space round the images is black.

Find a table or sit on the floor and place the images next to each other and move them around. Look for pairs of images which might form the two ends of a row: like bookends. Try substituting images. If one looks weak, try another.

Eventually you will arrive at a set of prints and a layout which you can work with.

It may also be that you have decided that some (or all) of the images need to be reworked: converting colour balance, converting to monochrome or simply printing at a different size.

Initial thoughts

Now consider the format of the final presentation. Is this to be a panel of separately mounted images? Or is it to be printed or projected as a single composite image?

If it is to be a panel of separate images then think about the consistency of mounting. Using several different colours of mounting board because they happened to be lying around is going to look messy and unplanned.

So:

- choose a single make and colour of mounting board;
- print on the same make and type of paper;
- print to the same size;
- preferably use the same printer so that there is consistency in the inks.

If your choice is to create a single composite image, consider whether it is to be projected or printed.

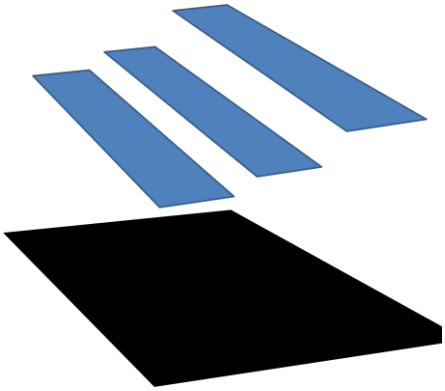
If the final result is to be projected:

- Identify the image size – probably 1600px x 1200px or 1024px x 768px. If in doubt, go larger;
- work in pixels;
- gaps between images are typically black.

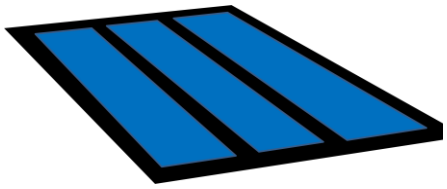
If the result is to be a print:

- decide on the paper size - A4 or A3;
- start with real dimensions in (say) mm but then convert to pixels;
- gaps between images are typically white.

In Photoshop (or your favourite editor) there will be a background layer filled with the background colour – typically white or black. There will be layers above the background: one for each image. There is an exception to this – see the “Single Masked Image” described later.



Background and three images



Three images on the Background

Planned or Freeform?

There are two ways to go about the creation of the composite image. Both are fine but have different advantages and disadvantages.

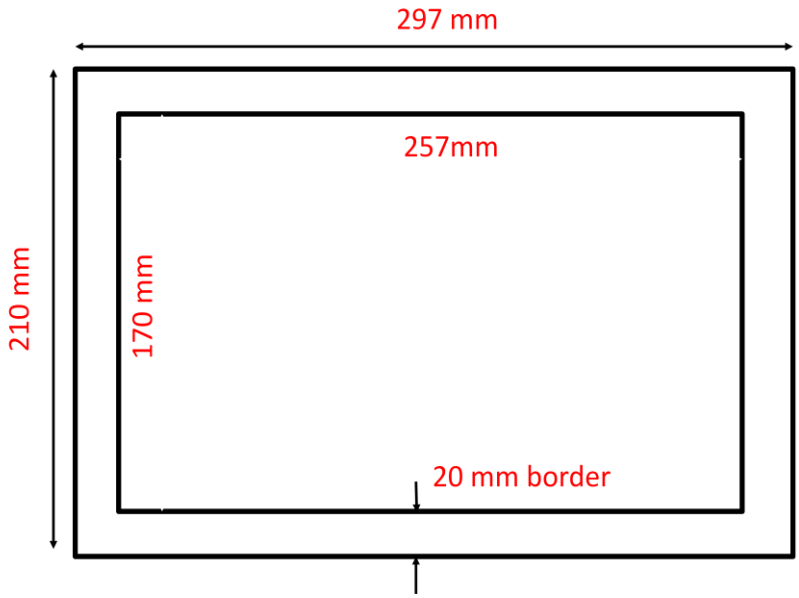
You can plan the layout down to the last pixel. This requires more work, but means that, for example, if the separations between images are supposed to be equal you can plan to make them equal.

The alternative is to move and resize the images as you feel looks right on the screen. This can lead to a less rigid result but it is difficult to align the images.

Planning a Composite Image in Advance

Here you need to start with pencil, paper and a pocket calculator. Start by drawing a rectangle representing the size of your final image. So, for a projected image it might be a rectangle 1600 x 1200. For a print it might be A4 (which is 297mm x 210mm).

For a print, draw a border to allow for edges which printer can't handle. This is not fixed, but 20mm (240px) is about right. You should then have a diagram which looks like this:



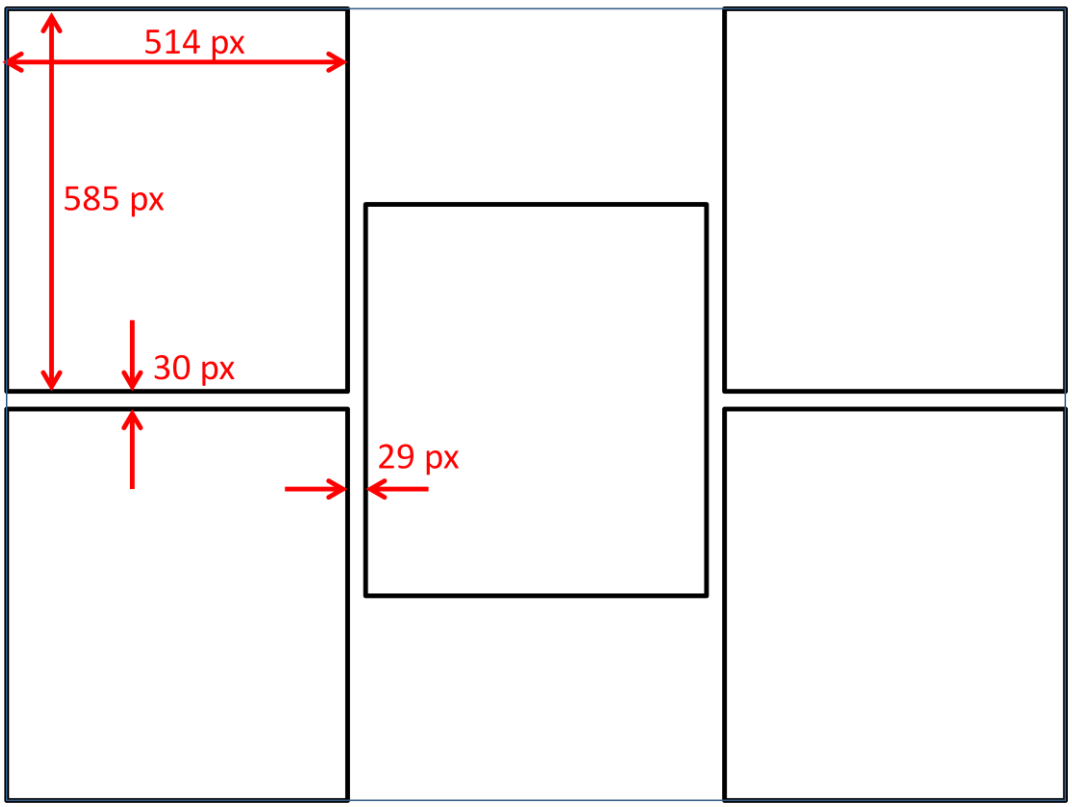
Layout of an A4 Sheet with a 20mm border

It doesn't have to be to scale: just get the numbers right.

Since Photoshop knows about pixels more than millimetres, it may be a good idea at this point to convert everything to pixels:

- 1 inch = 300px
- 1cm = 120px
- 1mm = 12 px

The idea now is to place rectangles representing images onto this frame making sure that everything adds up vertically and horizontally. For example, if you are working on a projected image 1600px x 1200px, You might end up with something like this:



A Possible layout of Pentaptych as a 1600px x 1200px projected image

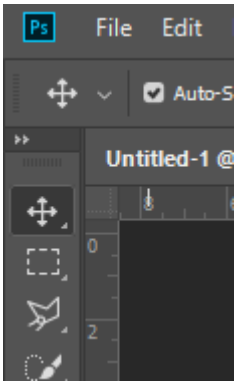
You can check hat this works by adding up the sizes vertically and horizontally. So, in this example of a projected composite image, there are two pictures vertically with a separation of 30px. Each picture is 585px high so...

$$585+585+30 = 1200$$

There are lots of options. Just play with the numbers.

Now, in Photoshop create a background of the right size. Open each image and crop it to the dimensions you want (514px x 585px in the example). Move the pictures as new layers onto the background. So, you now (in this example) have six layers: a background and five image layers.

When you set the size it simplifies things for Photoshop if you set the resolution to the same value for both the background and each of the images (say 300px per inch.)

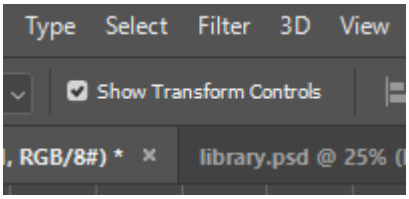


The Move Command

Now use the move tool to place the pictures where you have planned to put them. If you have created the layers correctly with images cropped to the correct size, there should be no need for resizing at this stage; just move them into place. If you need to move by small amounts; with the move tool Selected, the arrow keys will move the image by one pixel at a time.

Freeform Design of a Composite Image

As before, start by creating a background of your required size and colour. Now open the images you want to include. Resize them to slightly smaller than your background and move then over your background as new layers. If you don't resize to be smaller than your background, you may lose the corners of the image and be unable click on the handles to be able to resize later!



Show Transform Controls

Now choose the move tool (as before). This time, also check the "Show Transform controls" box. This will enable handles on the corners of the image. You can grab these to resize the image.

So, select each image in turn, resize it as you wish and move to anywhere you wish.

Masking a Single Image

Sometimes you may want to create a composite image out of a single image, keeping the individual extracts from the single image in register.

In this case, don't try to cut up the image and then put them back together in register with each other. Instead, create a pattern for your layout the same size as the image. This should be white with black shapes where you want the original image to show.

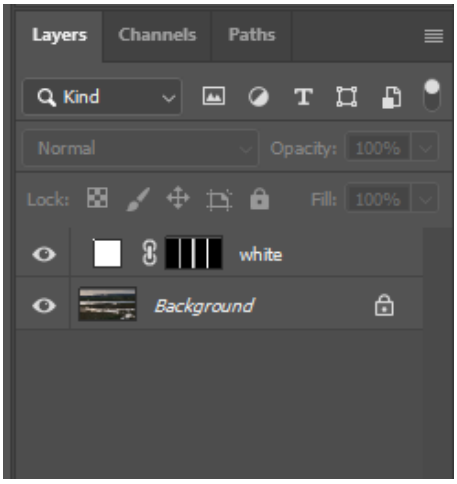
To create the pattern, use either of the planned or freeform approaches I described earlier.

A Pattern and an Image Masked with that Pattern

Now, above the original image, create a new fill layer with the same colour that you want to use between the extracted images.

Create a mask on this layer. Copy the pattern. Now click on the mask icon with the <alt> key pressed. This will allow you to edit the mask directly.

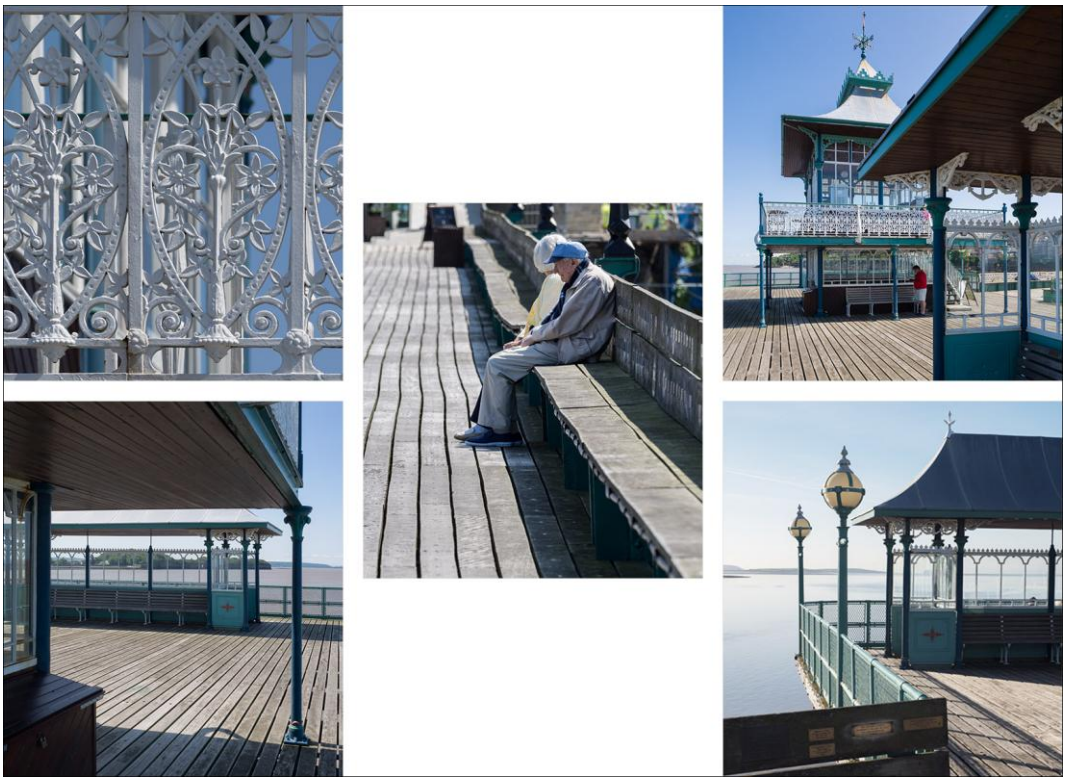
Paste the pattern onto the mask. Now click back on the image layer to see the final result.



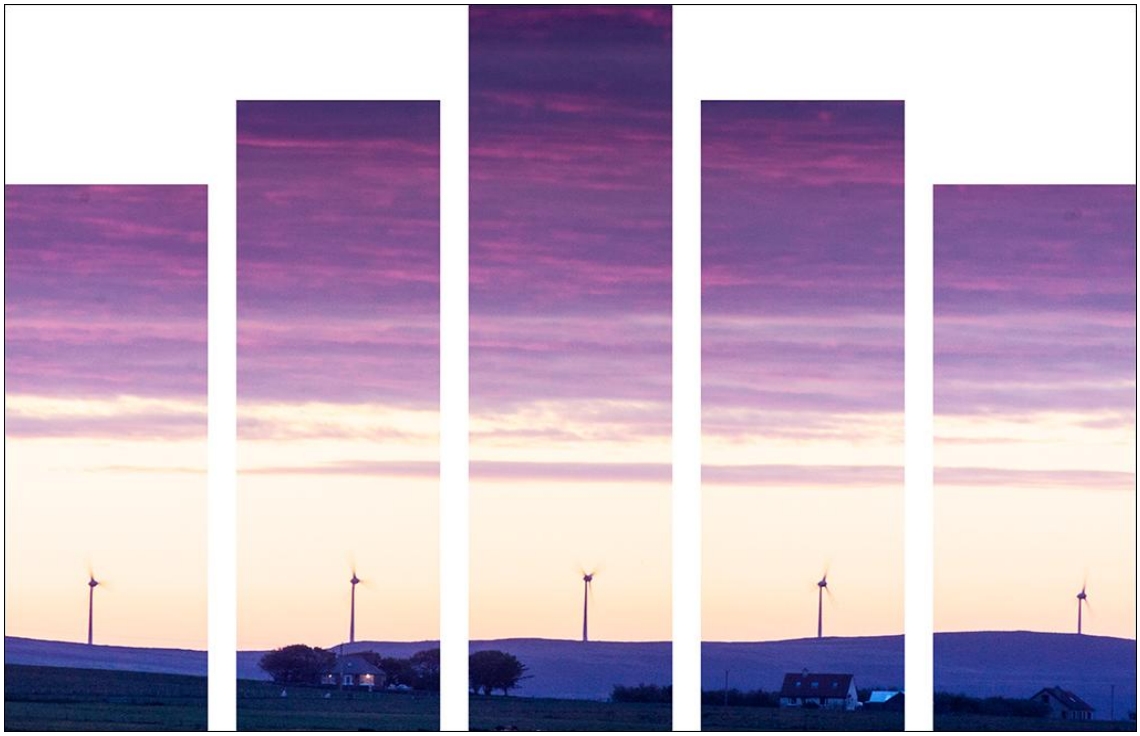
Layer Structure

A Few Examples

These examples are by Steve Wells.



Clevedon



Orkney Windmills

A single image masked

Black Country Living Museum

Trees

These three images are slices from a single original.

Nigella Triptych

Horton Court

If you are not designing a Medieval Altar Screen, There is no reason why the images should be rectangular. They could even overlap.

Morning Mist

Tintern Abbey

Frosted Leaves

Venetian Masks