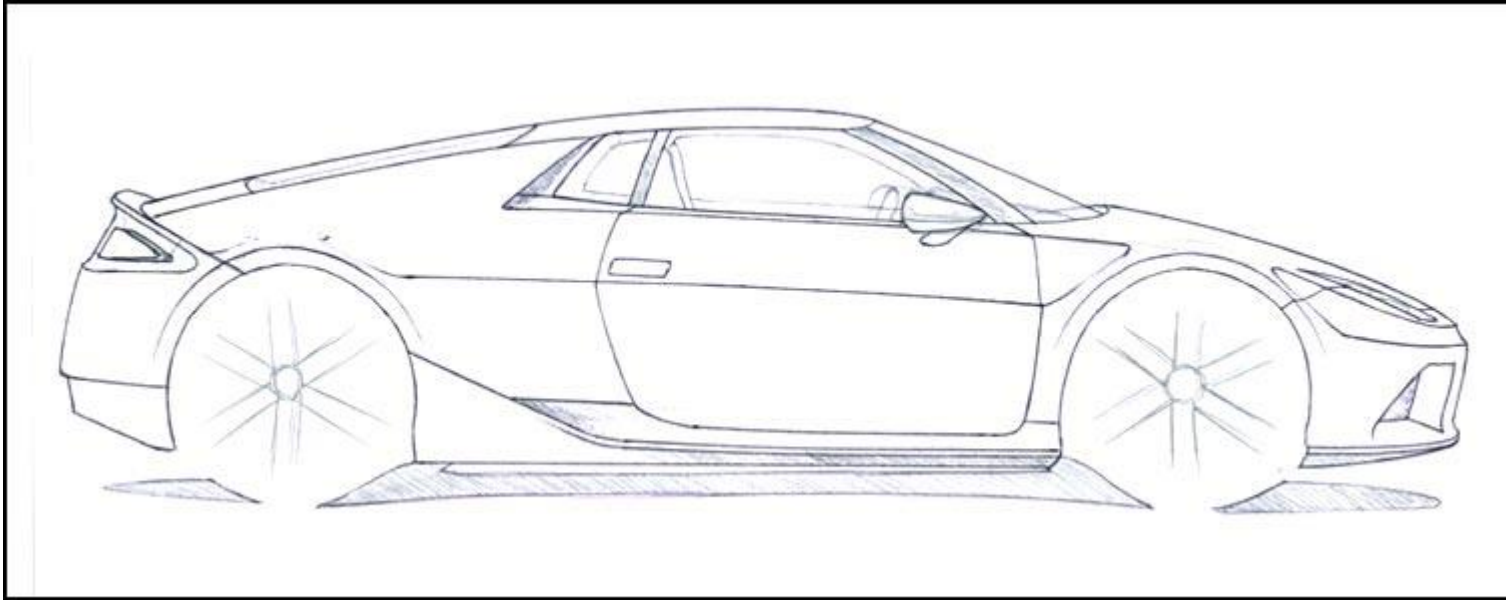


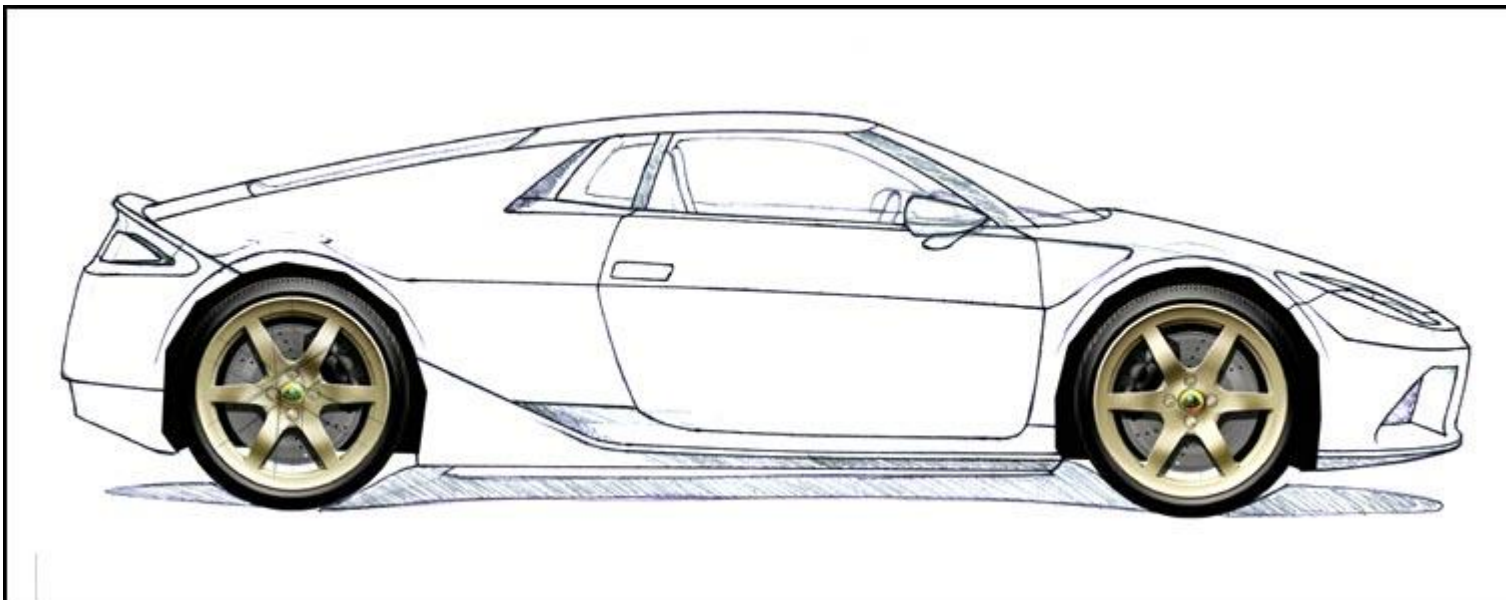
NEIL BOTTRILL

[Adobe](#) Photoshop Rendering

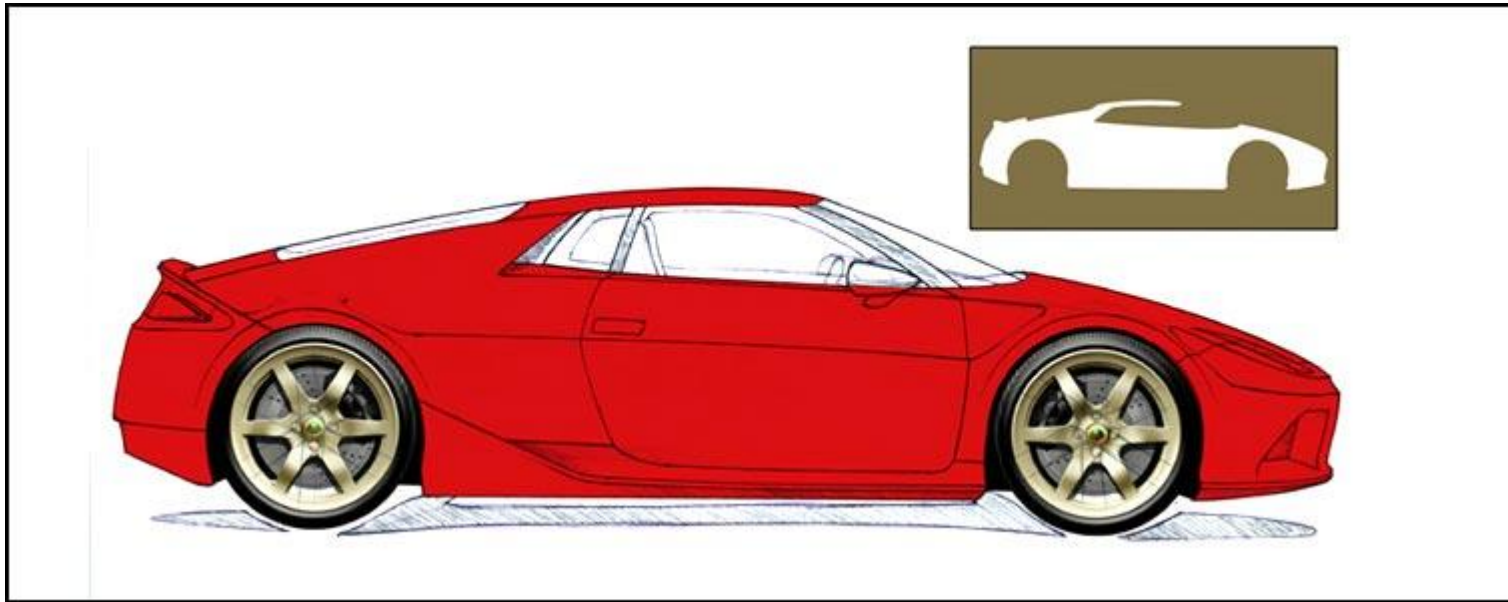
Neil Bottrill, a Coventry University graduate has put together this tutorial to show his techniques for using Photoshop in order to achieve very realistic side view renderings. You can see more of neil's work in his CarDesignNews portfolio at, [www.carsdesignnews.com](http://www.carsdesignnews.com)



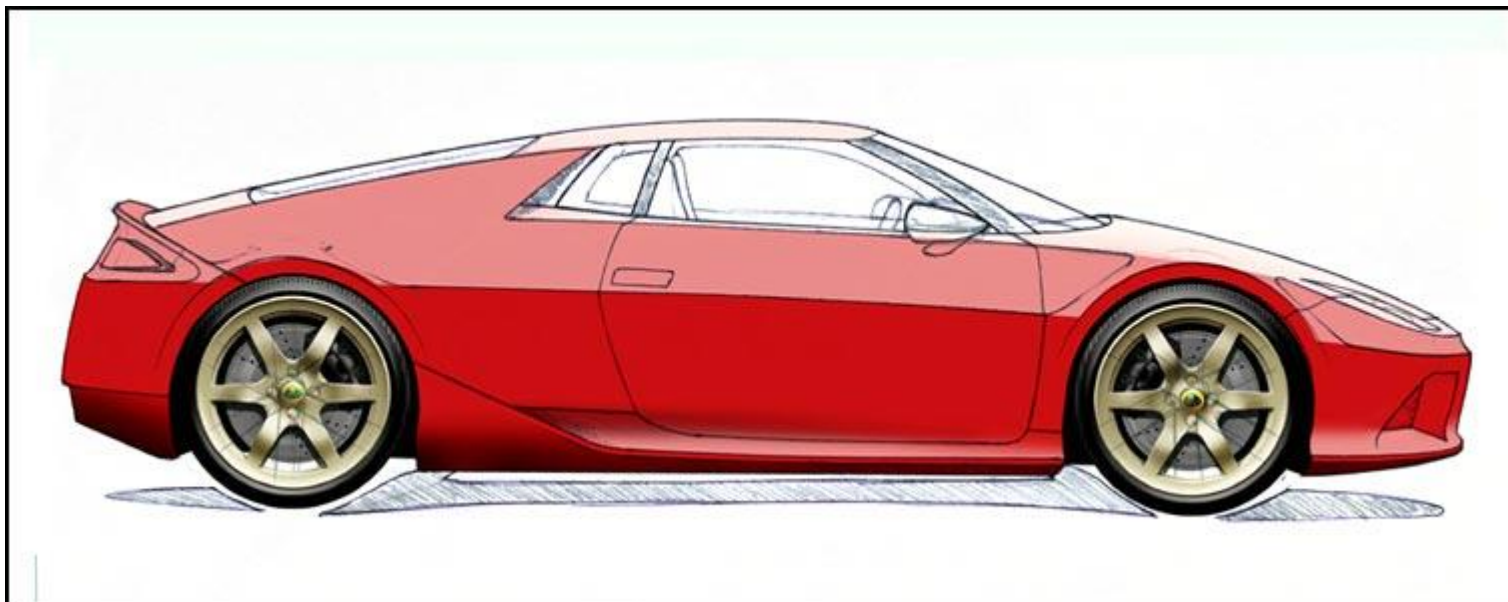
**Make** sure the selected sketch is free from major perspective issues; even in a side view there is a value of depth. Use whatever medium you feel comfortable with, I lightly sketch in pencil first, then finalise with a black biro. I find this method provides a clear, precise guide with the extra benefit of the scanner not picking up the hideous mess that is my pencil sketch. Luckily the sketch will not be visible on completion of the render. Scan the sketch at 300 dpi.



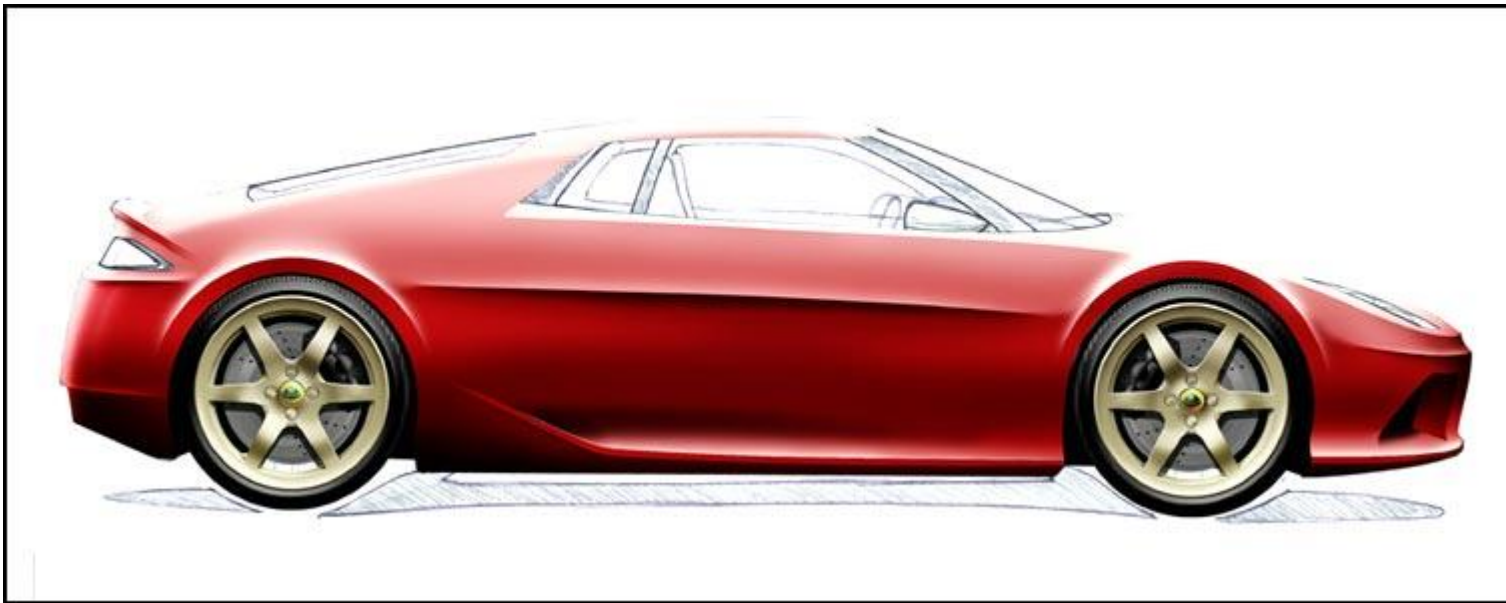
**First** duplicate the sketch by choosing 'Duplicate Layer' in the Layer menu and setting the layer style to 'Multiply'. This layer should remain above all subsequent layers. Create a new layer and fill the wheel wells with black. On another new layer, import the wheels. Either cut and paste existing wheels or use wheels that you have designed and already rendered in Photoshop. I save all wheel designs in a folder so I have a library of rims to choose from.



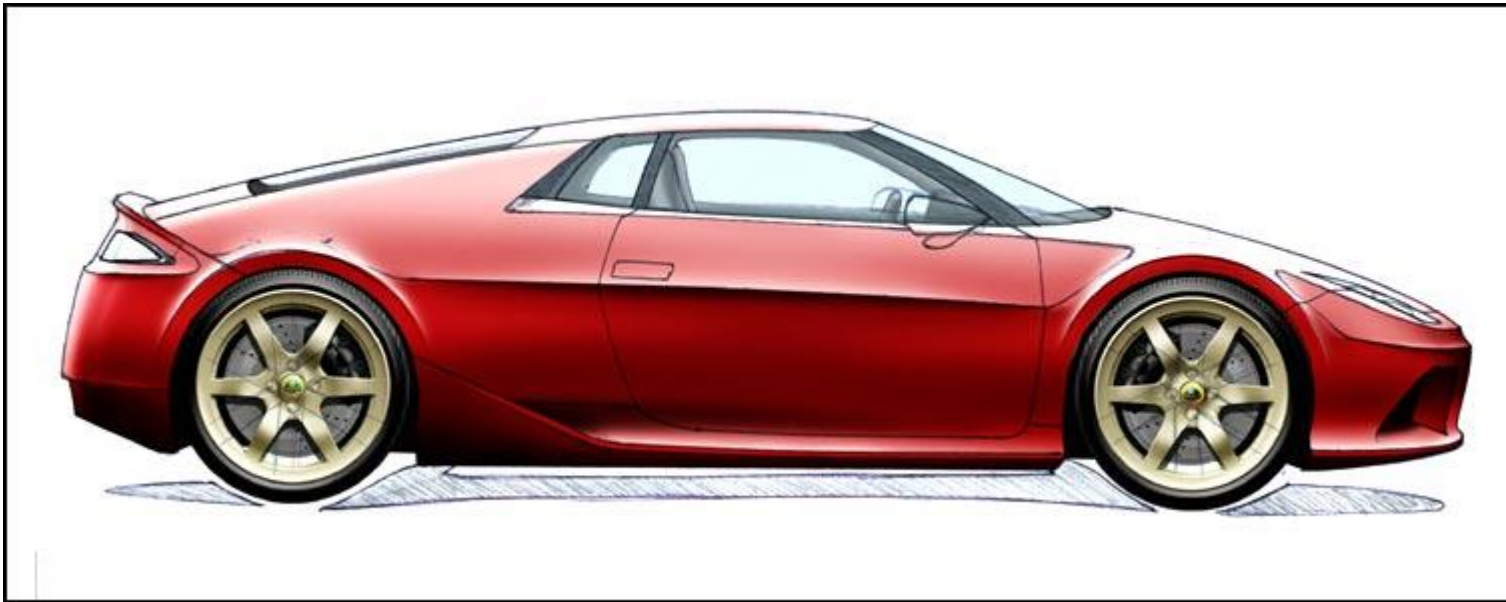
**Create** a boundary around the bodywork. Creating the boundary can be done in two ways, by using Paths or Polygonal Lasso. Zoom in and keep the lines as short as possible. Paths are tricky to use at first but they offer complete control over the tangents and radii of the curve required. In this instance a Path is better due to the large nature of the component and it will need to be saved for future use (See inset). Fill the boundary with body colour.



**Create** a boundary around the wheel arch lips, copy and paste onto a new layer. On the bodywork layer use the Dodge tool to lighten the upper facing areas of the car and the Burn tool to darken the downward facing surfaces. If your design has swage lines that separate upper and lower surfaces (like this car) create a boundary to get a crisp divide between the light and dark.

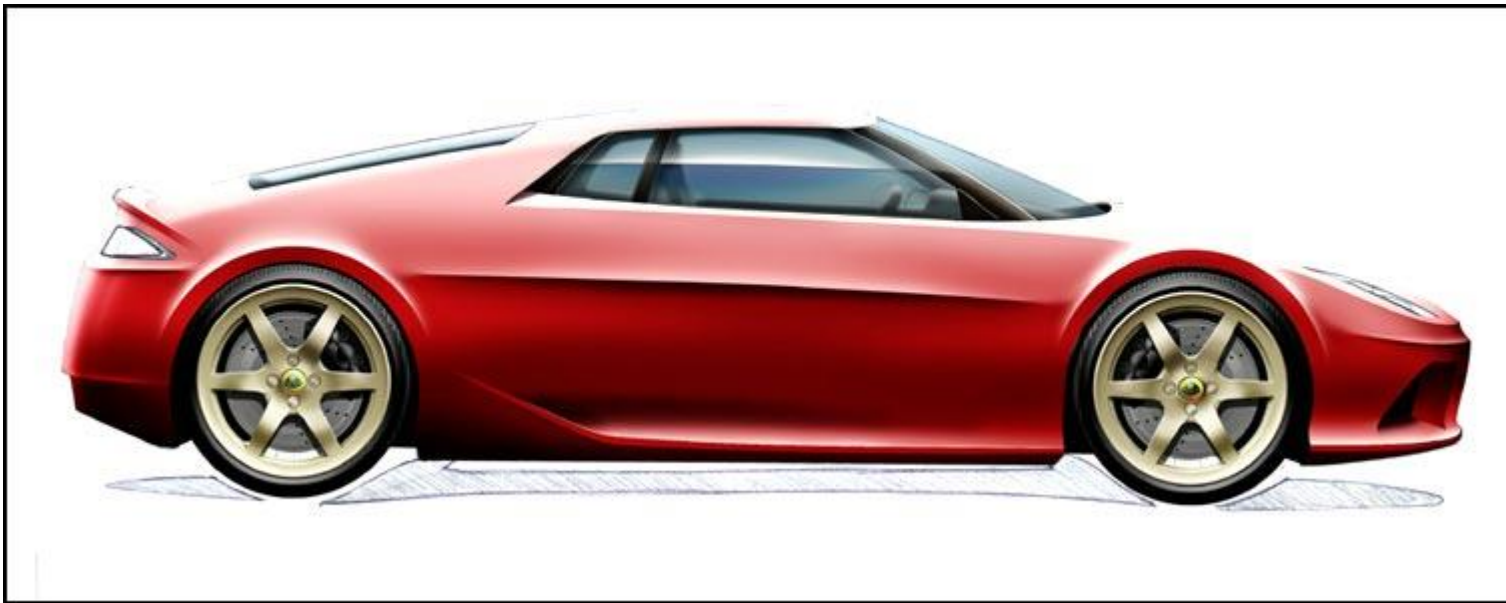


**Create** a new layer above the bodywork but below the copied wheel arches. On this layer use the Paintbrush tool to further sculpt the design. Rather than using black and white, use a light blue for surfaces pointing skywards and a dark brown for surfaces facing towards the ground. Vary the opacity of the brushes in accordance to the position of the surface and light source. Once the Paintbrush work is done, Dodge/Burn the lower part of the copied wheel arches until they match the bodywork then merge all bodywork layers.

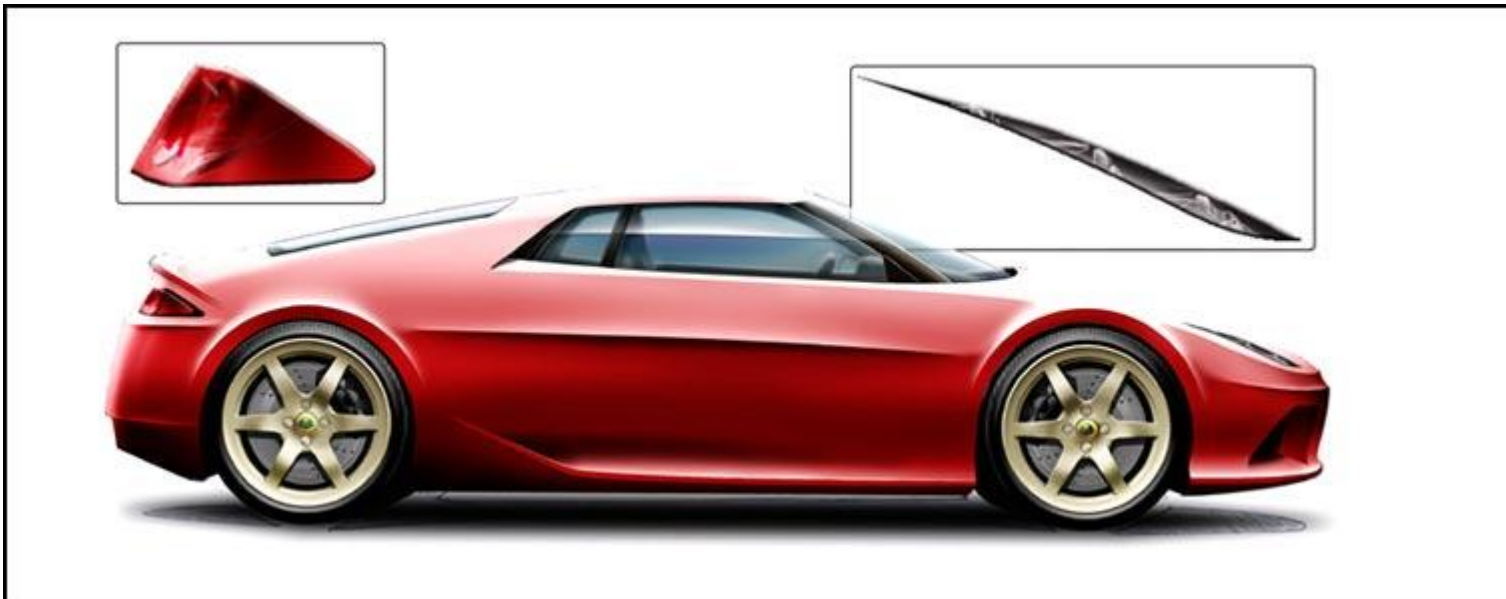


**On** a new layer below the bodywork create a Path/Lasso for the far side glass area. Fill this with a Sky Blue at 40% opacity. New Layer and mark out the far side interior structure. Fill with a mid-tone at 100% opacity and Dodge/Burn for depth. Yet another New Layer is needed for the interior components (Seats, Steering Wheel, Fascia) which need filling with a darker tone. Again, Dodge/Burn to apply form. New Layer, mark out the near side pillars/framework and fill with black.





**Select** and outline the near side pillars/framework and cut from the near side glass. Inner Bevel the layer containing the far side interior structure (Layer, Layer Style, Bevel and Emboss) and merge with the layer containing the interior components. Apply a small Gaussian Blur and then merge with the far side glass area. Mark out a horizon line on the layer containing the near side glass area. From the centre apply a white 50% opacity Paintbrush above the line and Burn below the line. Inner Bevel the layers containing the glass area and the pillars/framework.



**Make** the light clusters on a New Layer below the bodywork. Mark out the shape of the Lights, fill with a base colour. Onto this draw some detail lines with a small Paintbrush, (see inset). Fill in the far side wheels (just visible under the car) black on a new layer just above the background layer. Create another new layer for the shadow. Using the Polygonal Lasso mark out a strip, slightly shorter than the length of the car and tall enough to meet both the near and far wheels, fill with 75% black and apply a Gaussian Blur of about 25 pixels.



**Using** the Polygonal Lasso and referring to the duplicate layer of the sketch, outline a body panel. Copy, Cut and Paste the panel and return it to its original position, zoom in to make sure everything lines up. Outline the next panel, Copy, Cut and Paste and align. Repeat this process for all body panels. By doing this every body panel has a layer to itself. Apply Inner Bevel to each layer containing a body panel. Once all panels are bevelled, merge the layers so there is one layer for the bodywork.



**Details** such as door handles and wing mirrors (and wheels and lights) can make or break a rendering. The door handle here is set in a recess; Lasso, Dodge and Burn. Start the wing mirror on a new layer. Lasso the outline of the mirror, apply the body colour, Dodge/Burn and apply Inner Bevel. On a new layer below the mirror, Lasso a rough shape that the mirror would project down the side of the car, fill with a 75% opacity dark body colour and apply Gaussian Blur.



**Backgrounds** are down to the individual although here, because the top surfaces of the car are getting lost in the white, a dark background is put in. The top half is filled with a dark, low saturated red with a 20% Radial Gradient in sky blue hinting at the light source. The lower half is a lighter low saturation red with a Grain Filter on a duplicate layer that is then erased either side of the car. The render is now complete...



...or if you don't know when to stop you can do something like this. I've applied the classic Lotus 'Type 49' livery (hence the gold wheels) by marking out portions of the bodywork and altering the Hue/ Saturation/ Lightness. I've also deleted the Grain Filter on the background floor and replaced it with a reflection of the car. For this, copy and paste the car, flip vertically and reduce the opacity of the layer to about 8%. That's it, move on to the next sketch.