How To - Simple Uses for Carrara Render Passes in Postwork

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August 18

EDit_ sorry I just noticed the images had vanished. I replaced them. I'll try and make a pdf of this and upload it.!

ORIGINAL POST FOLLOWS

Carrara comes with a stack of amazing stuff straight out of the box - and it's ability to do render passes makes it invaluable for post work.

A simple render I made to demonstrate some passes. I set it up to fail. There's very little sense of depth. There is no detail in the shadows.

The car file is available at the end of this first post (change suffix from txt to Car)
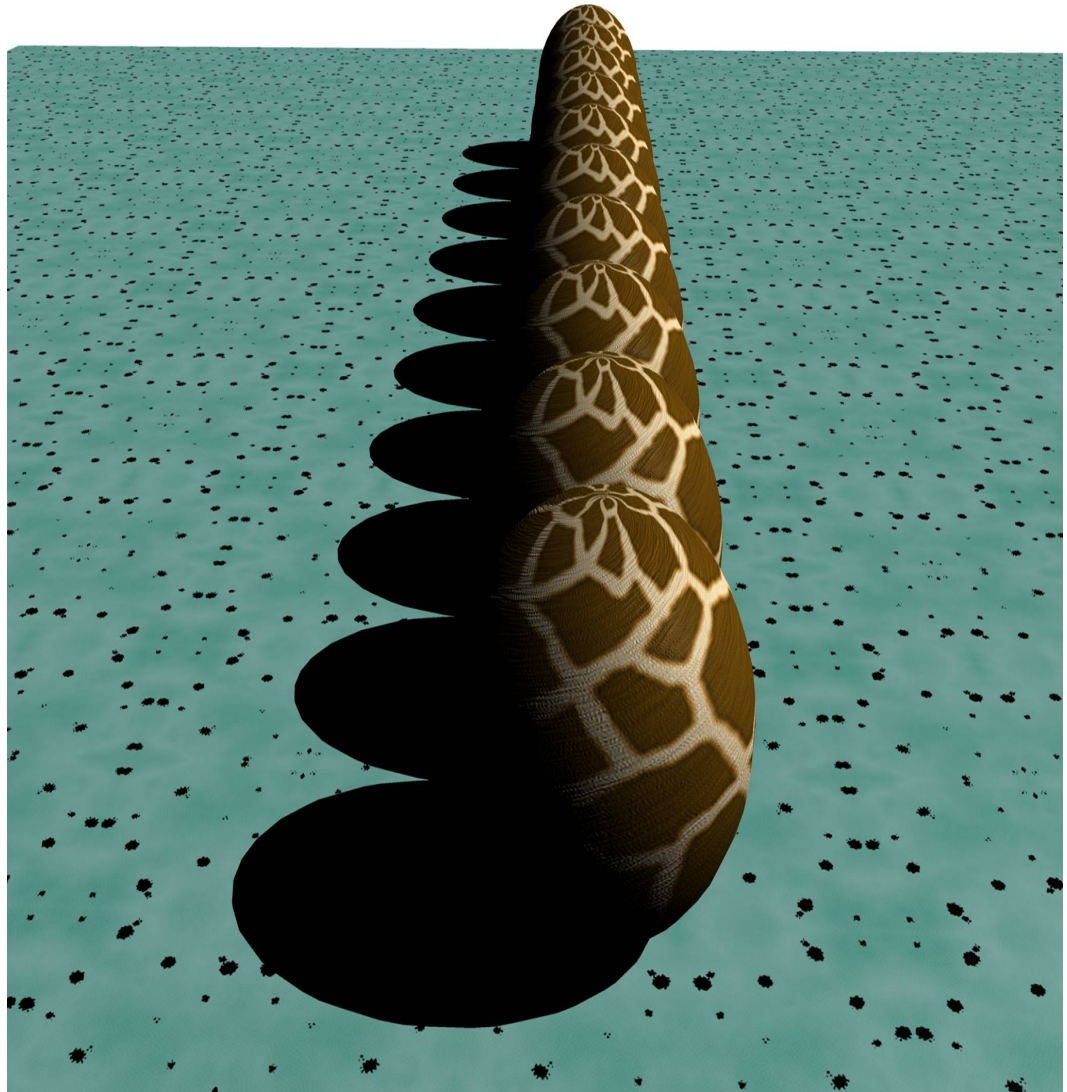
This image has been resized to fit in the page. Click to enlarge.

Here's the finished image after the postwork. It has more of a sense of depth and also details in the shadow areas.
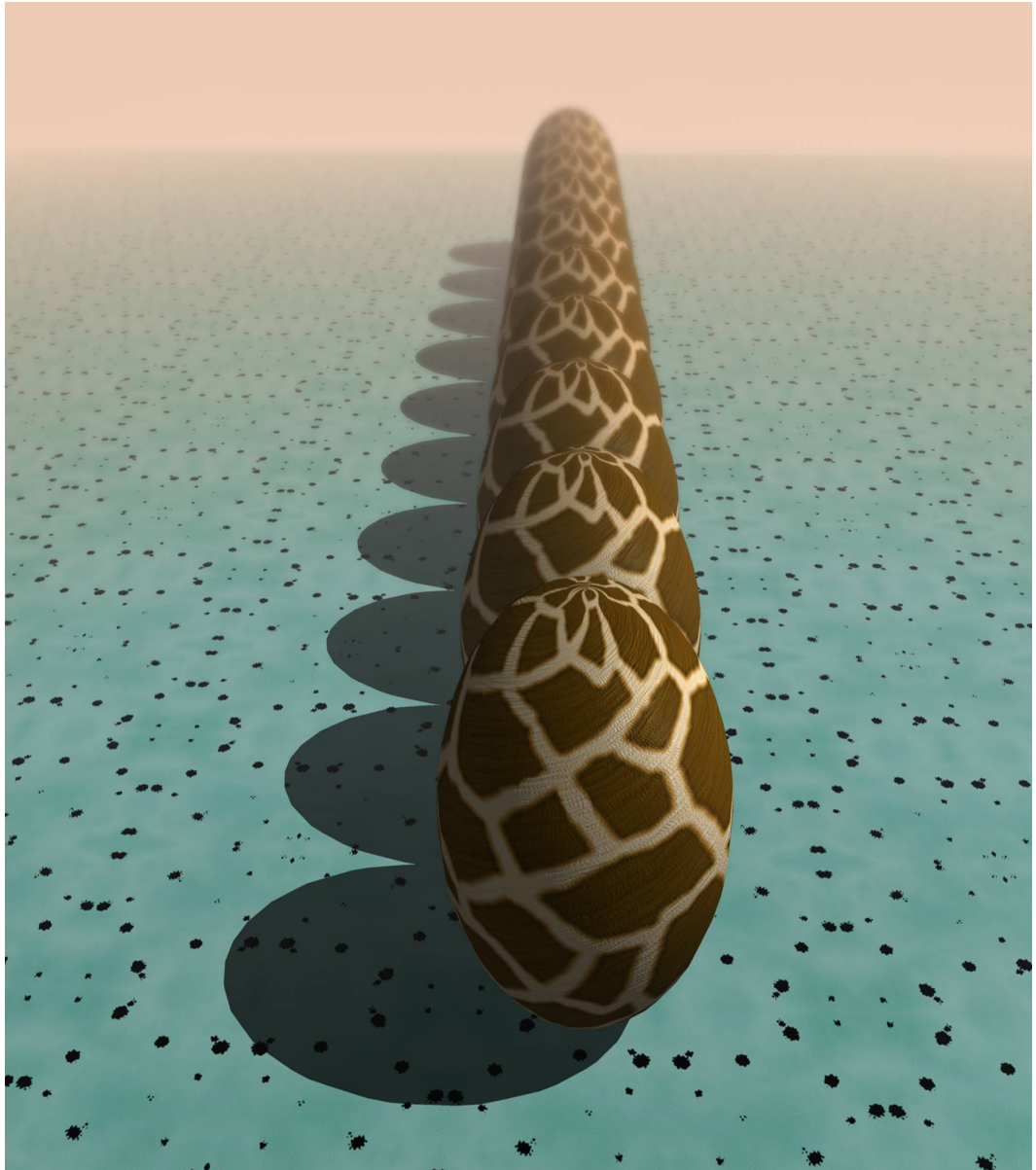
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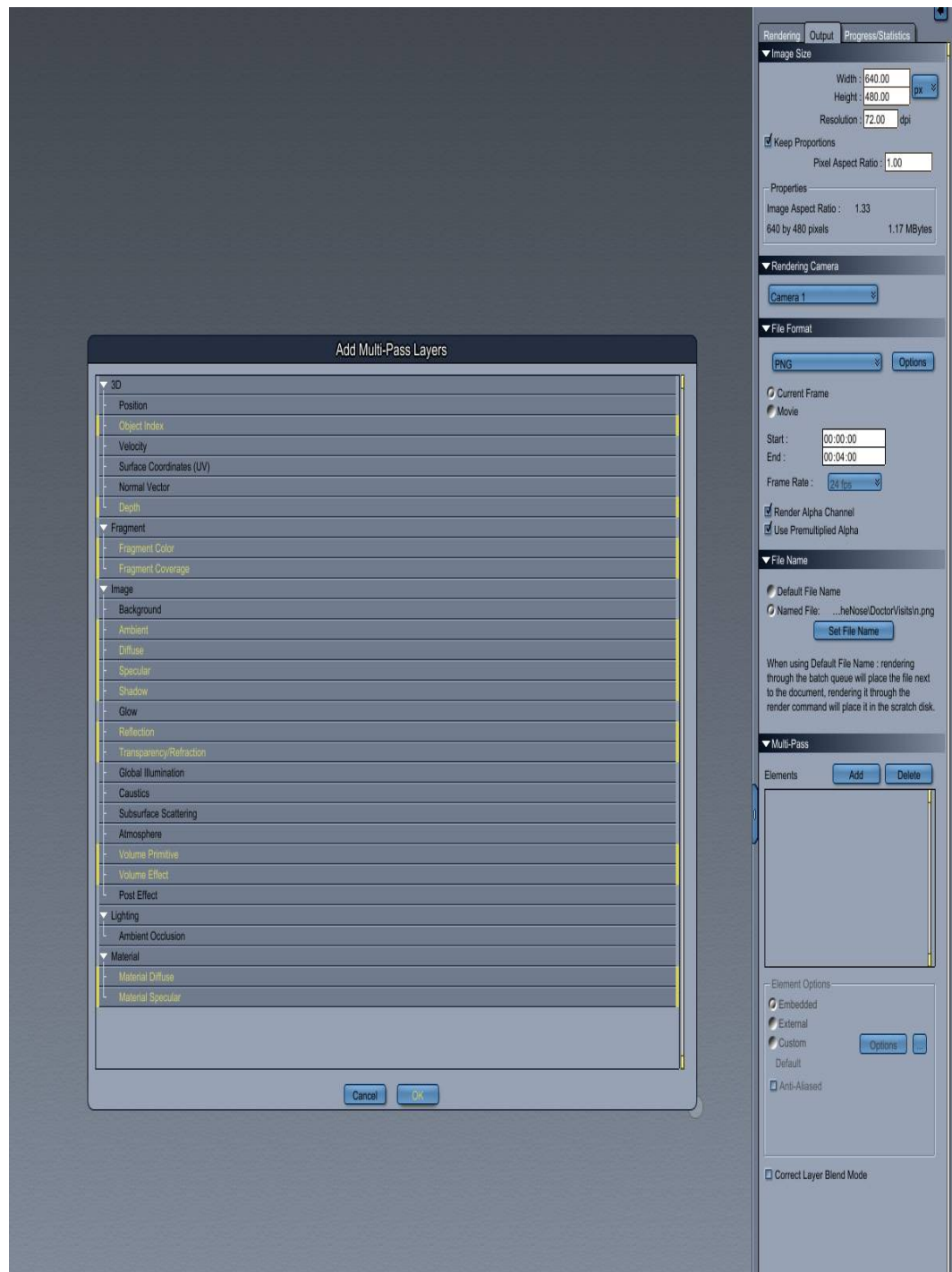
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STEP ONE

When I render out a scene in Carrara I save my files as PNG files - that way the render passes aren't embedded in the files.

I also name my image file before I render - that way I don't have to save all the files and name them by hand (yawn)

I usually render out with render Alpha Channel ticked.

I render out these passes

A LITTLE EXPLANATION OF THE PASSES

The object index pass and the coverage pass are both useful for isolating different elements for post work,

The depth pass gives atmosphere if you use it with the screen paramter (You can also use it in your masks for getting a depth of field blur effect)

The shadow pass is very handy as you can access soft shadows by gausian blurring it.

You can also use it select dark areas of your image so you can fill in missing textures.

The two Volume passes will let you access your hair by putting 'hair' on a sperate render pass.
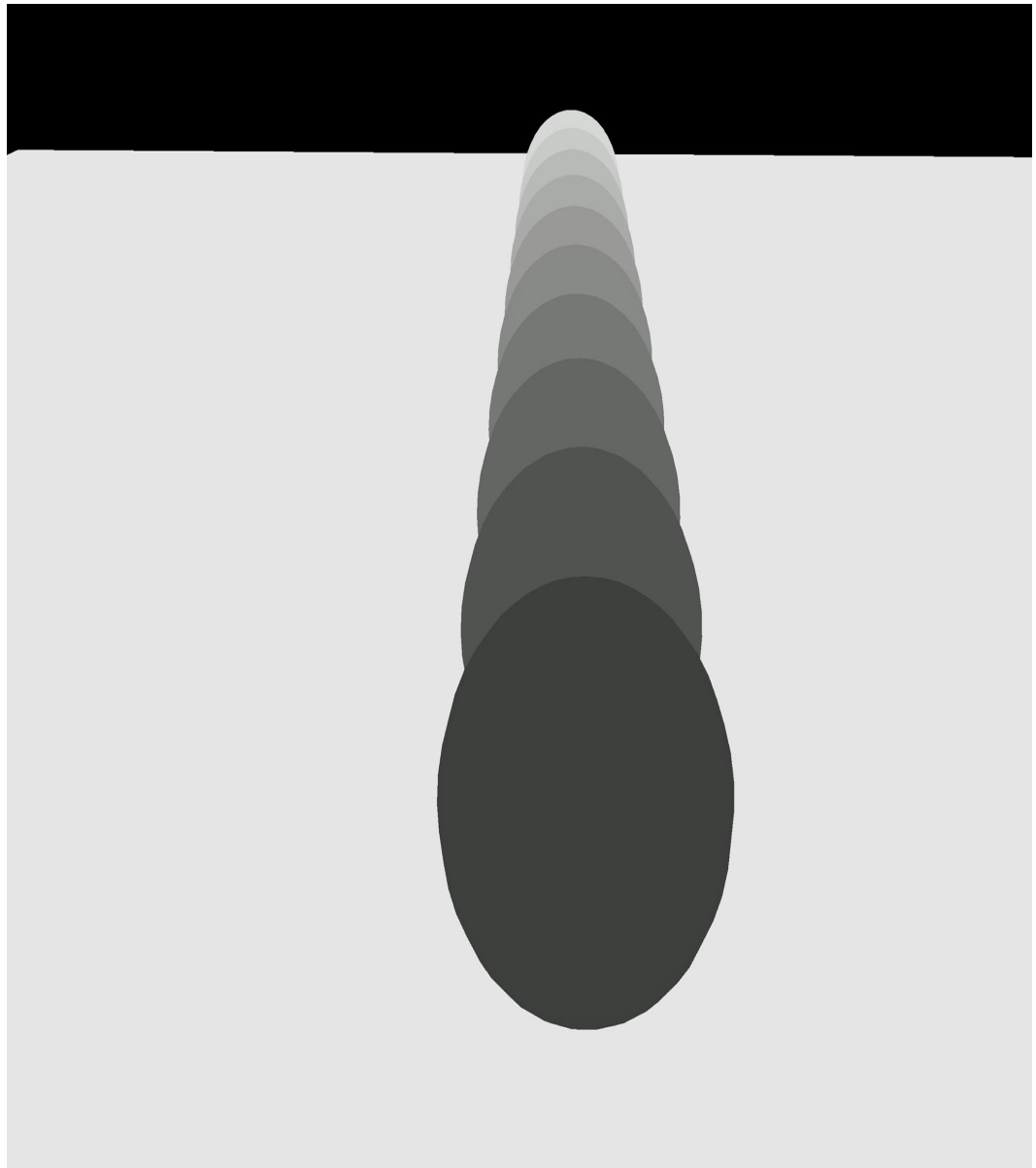
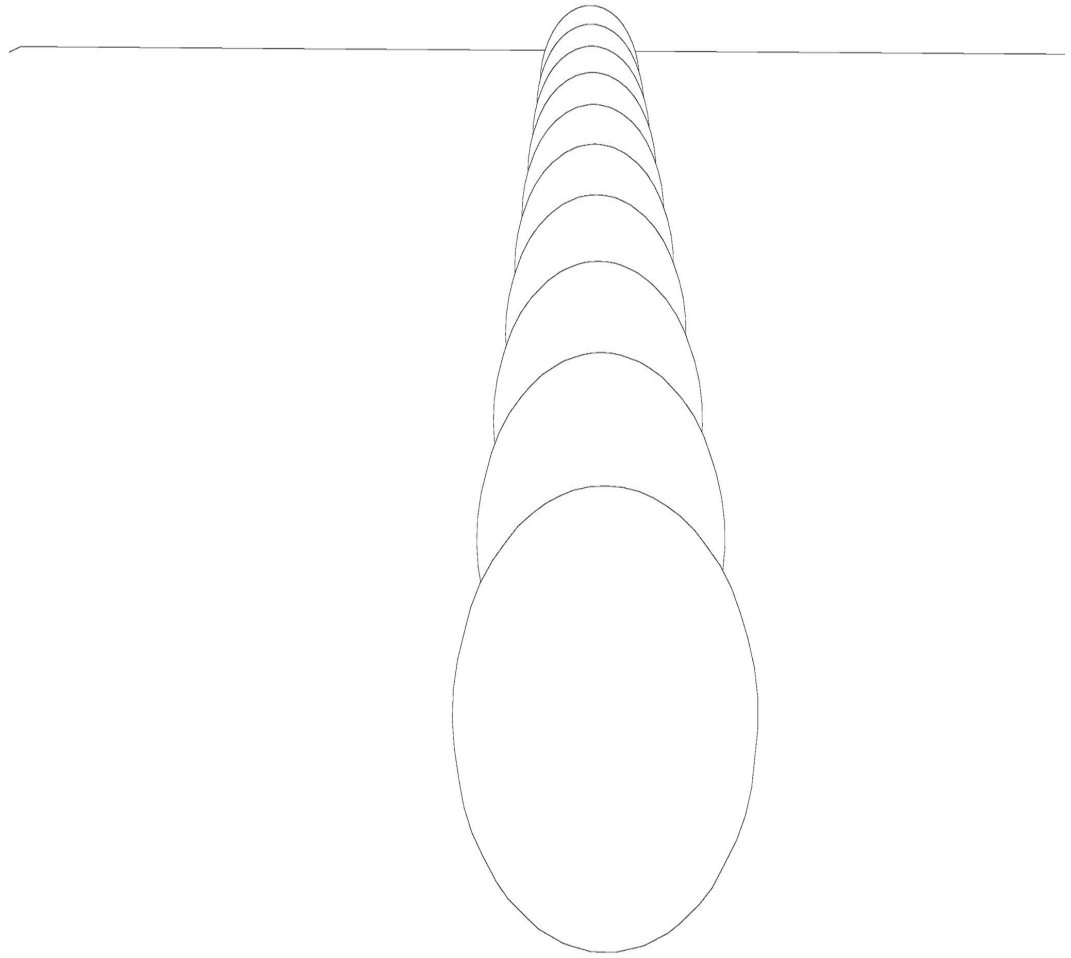## Attachments

TXT

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Here is the object pass. You can see that each object has a different grey. You can selecet each object individually using this.
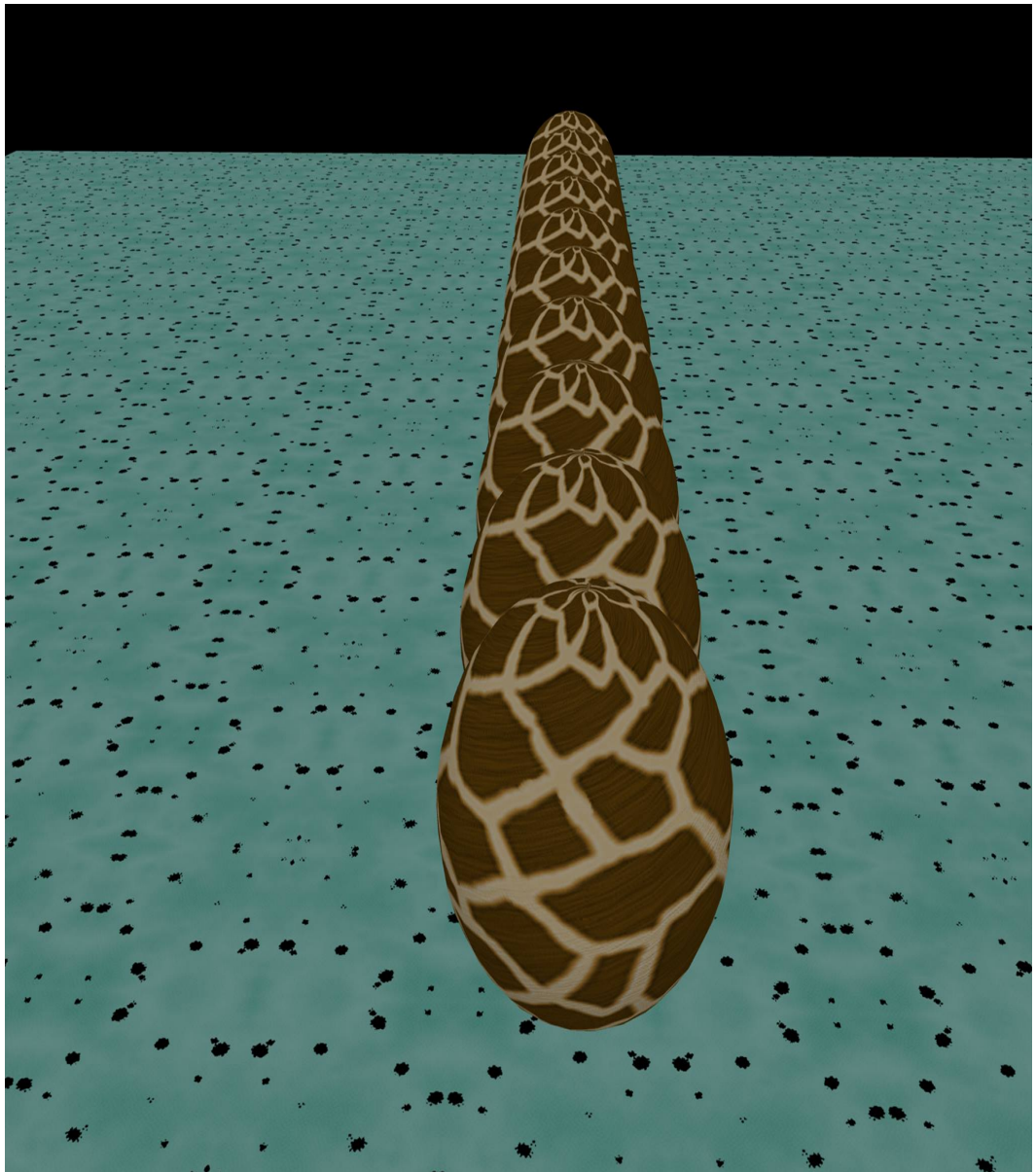
Like wise with the coverage pass.

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This is an ambient pass. I turned up ambient in Scene to 50 percent to get this. You can see it has no shadows. We are going to use it to fill in the missing textures.

This image has been resized to fit in the page. Click to enlarge.

Post edited by Headwax_Carrara at 5:05AM

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The shadow pass. If you think ahead you can design your lighting just so you can access interesting patterns with this pass. Great for black and white stark work.

You can also add it over your material diffuse pass and use the multiply parameter (photoshop or similar) to get something akin to the pure render - (but you have much better control of your shadows doing it this way)
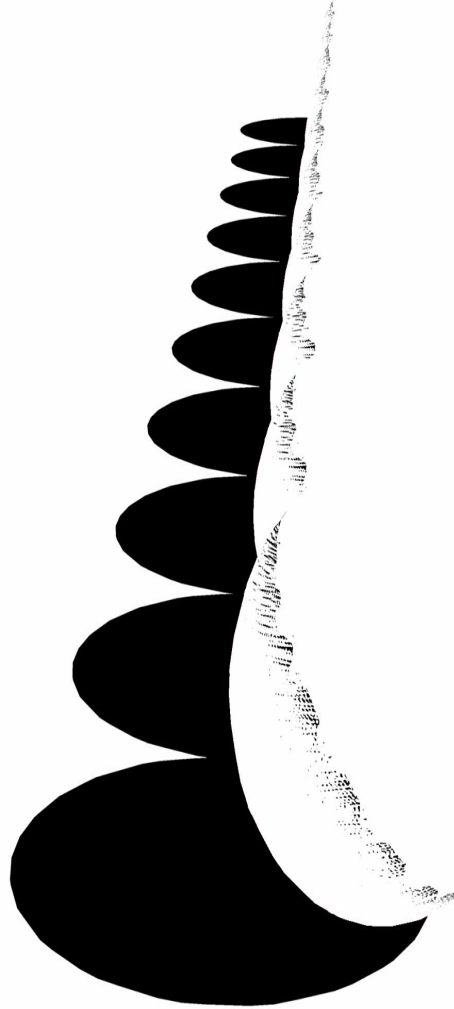
This image has been resized to fit in the page. Click to enlarge.

PUTTING IT ALL TOGETHER

Below we have an image with the Depth Pass overlayed over two other layers.

The base layer is the orginal render - the one that had no details in the shadows.

The layer abover the base layer is the ambient layer - I have used the Lighter Colour parameter in that layer to fill in the missing details. Then adjusted opacity of that layer to suit.

The top layer is the Depth Layer - I have used the screen parameter in this layer to reduce the contrast in the 'distant; balls.

I've cut it down the middle so the right hand side is pretty well the original render.
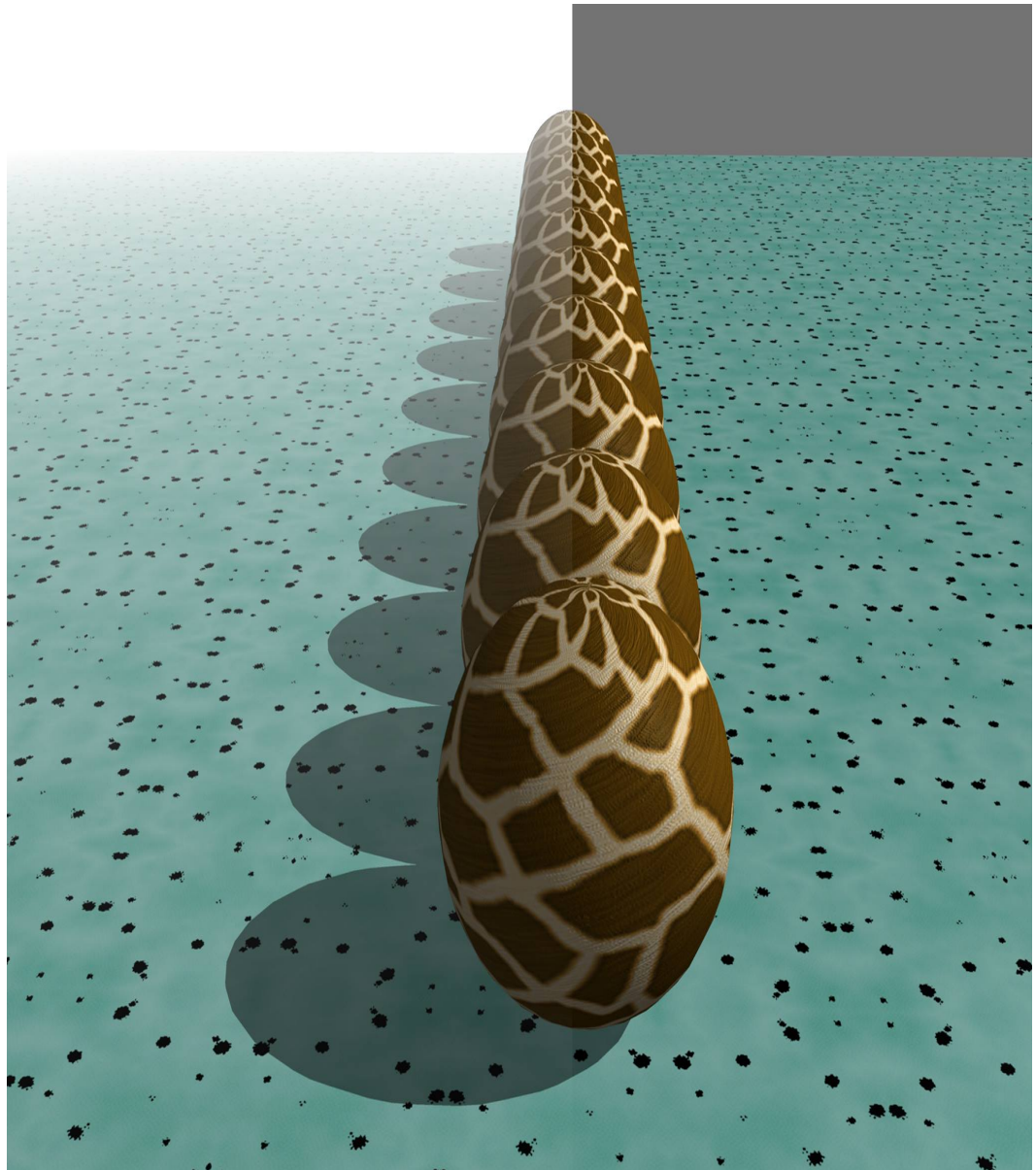
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I also render out material diffuse pass because quite often you can get your textures back similar to the ambient layer in the previous post.

But I did notice that there is a bug in Carrara so if you render out the diffuse pass with all the others then it goes weird. So you need to render it out in a seperate render if you want to access textures without shadoiws with it.

SUMMARY

So in summary - If i were working on a big scene with lots of figures I would isolate the figures using the object pass, then cut and paste each figure.

You then add a layer under the figure and paint in some kind of foggy effect behind the figure (or a light shaft etc) and that helps you get the feeling that one figure is in front of the other.

The object pass selection method falls down badly with trans maps (apha maps) like hair - so that needs to be done by hand unfortunately.

Hope this is of interest.

Carrara comes with a stack of amazing stuff straight out of the box - and it's ability to do render passes makes it invaluable for post work.
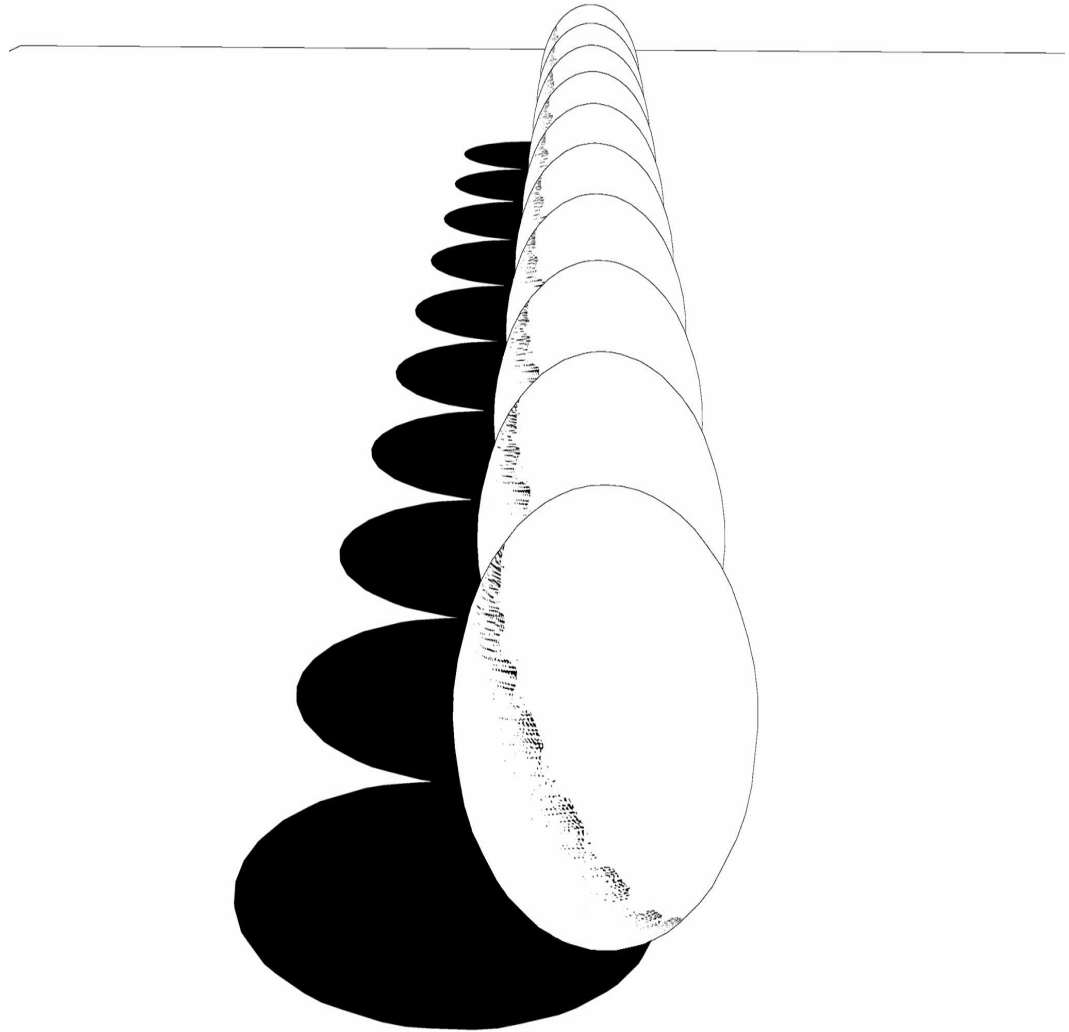
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A LITTLE ADDENDUM ABOUT MAKING GRAPHIC WORK

you can see the power of using the coverage pass overlaid on the shadow pass to
leverage a graphic effect

This image has been resized to fit in the page. Click to enlarge.

Or after a bit of fiddling in Fotosketcher - kind of weird cause the shadows are on
the wrong side of the balls but it gives a general idea

Combining it with Digital Carvers Wireframe (using overdraw) Use the multiply
paramter (or darker colour) in the wireframe layer in photoshop
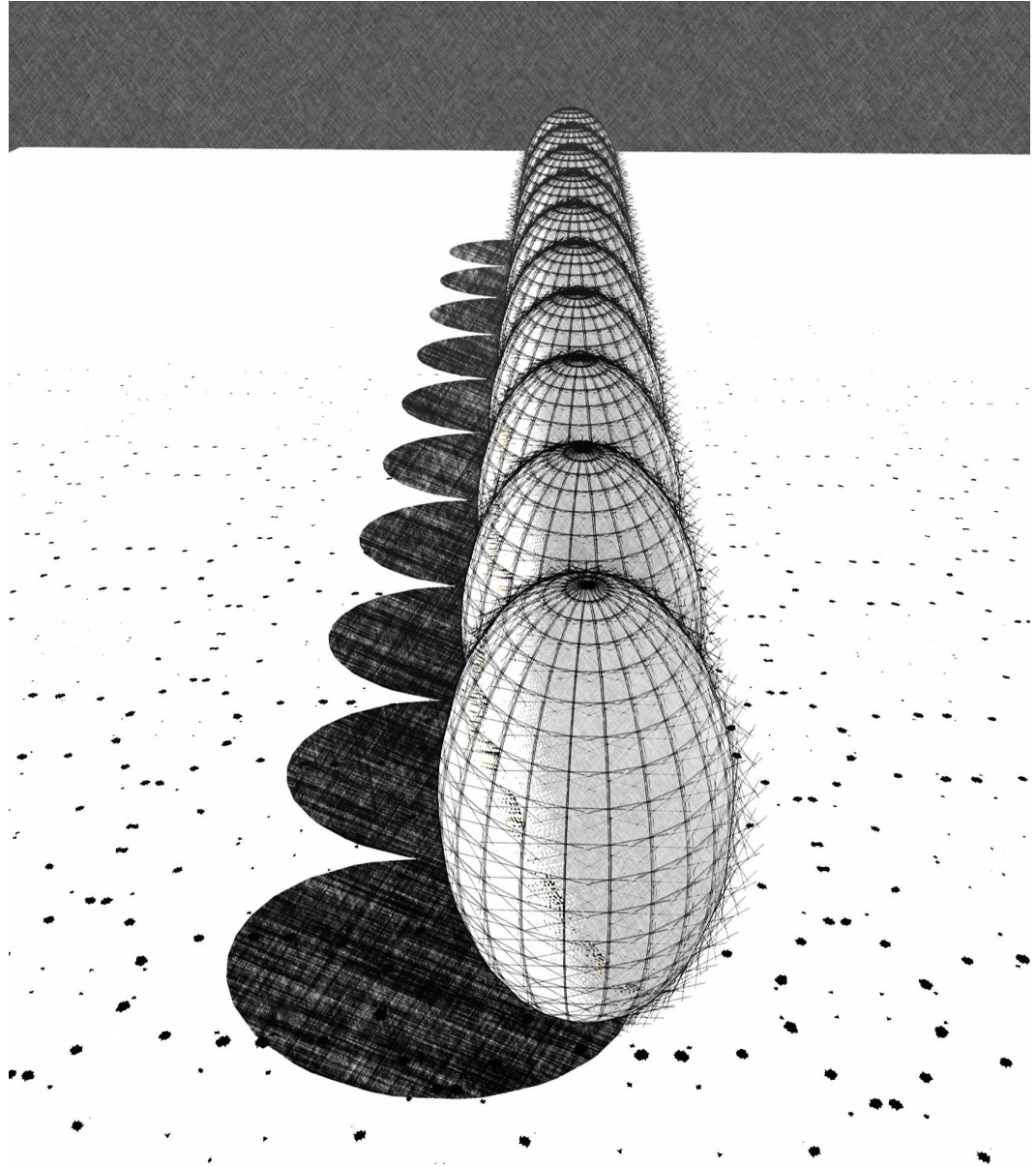
This image has been resized to fit in the page. Click to enlarge.

If you were planning on this type of image you would render out a whol series of shadow passes using different light sources then combine them in post to get the effect you wanted for example:
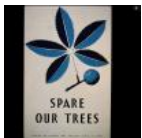
This Gladiator has a few different shadow passes combined.

as do the soldeirs
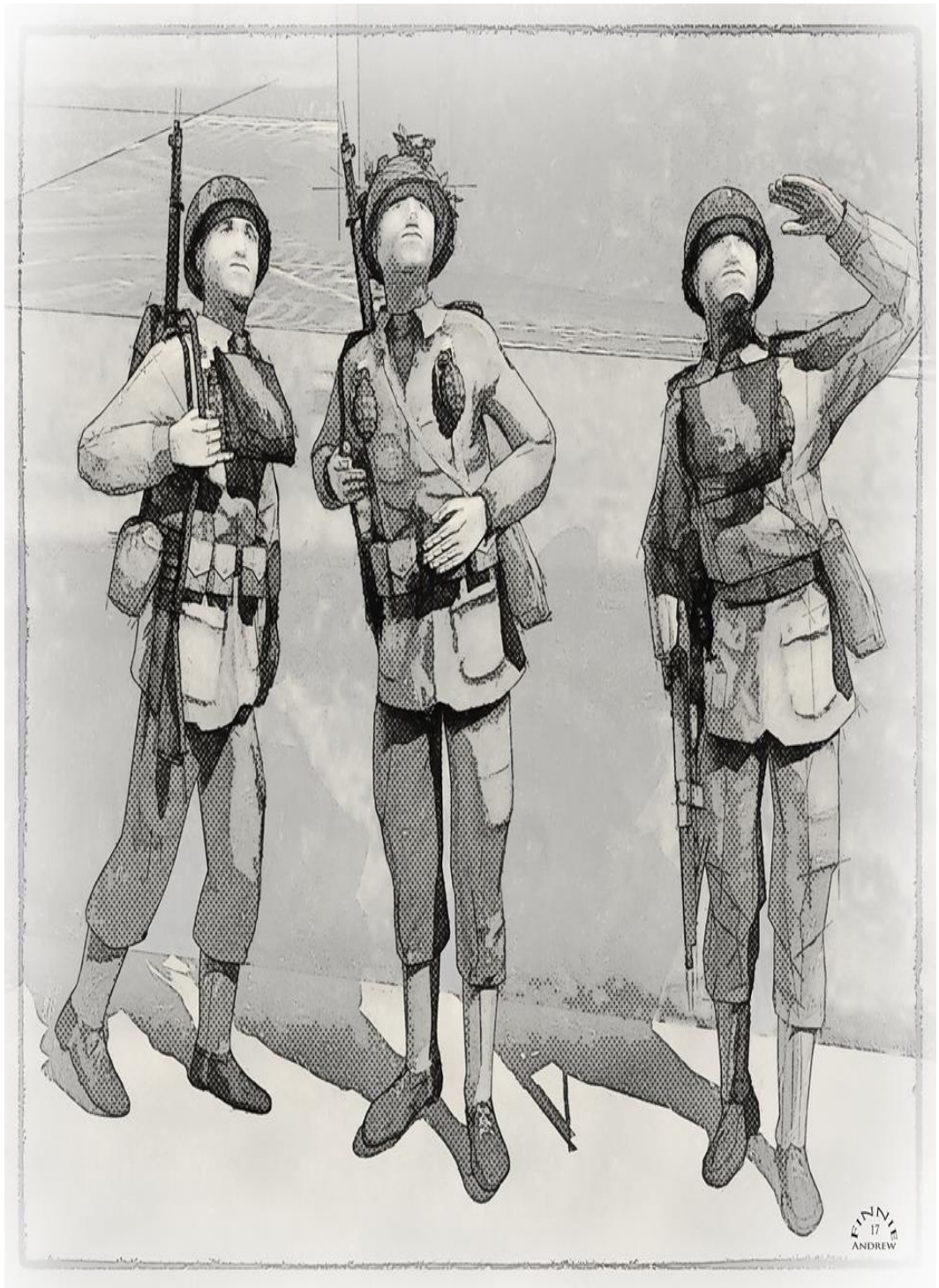
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This is fantastic. Very clearly explained. Thank you.