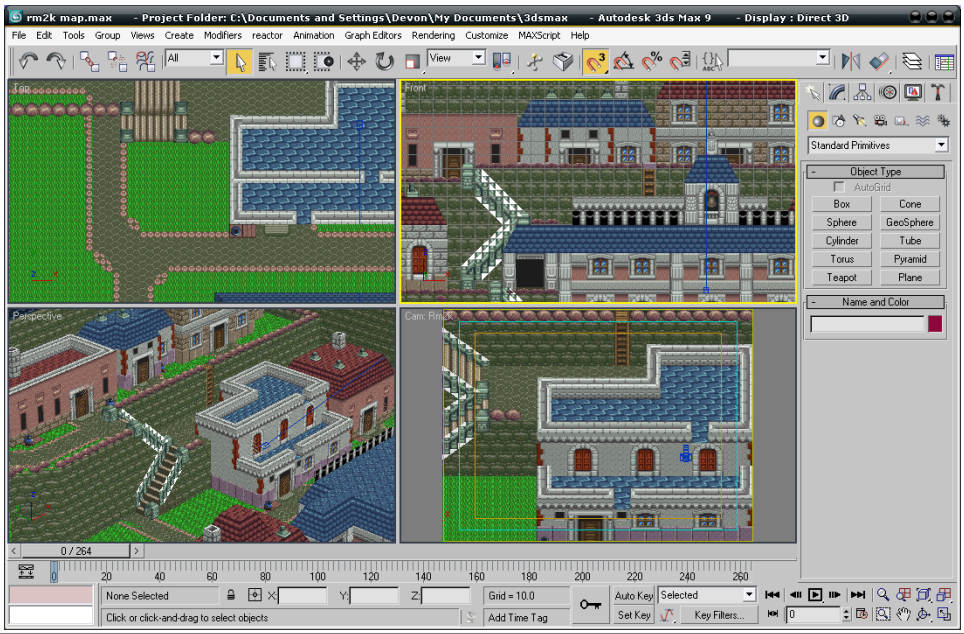
Back in 2004, I experimented with creating a seamless 2D to 3D transition effect for my Night Raider game, that you would see during its ending credits. It's actually a video, but it's designed to look like RPG Maker is suddenly doing 3D somehow.

Of course, that means I had to literally re-create the entire town in 3D.



Creating this effect involved a bunch of sneaky tricks. But the main one is changing the amount of 3D depth from a flat 2D image, to something with normal 3D depth.

This involves changing the camera's zoom level while adjusting its distance to keep the building in the same place on the screen.

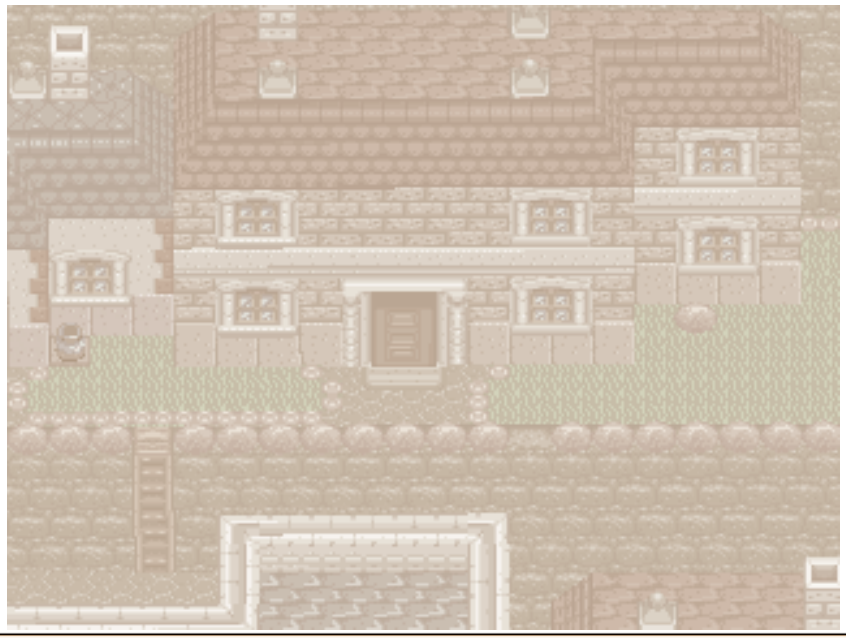
In motion, this "pop-up" book effect is very noticeable...

... so to hide it, I added a camera rotation to distract the viewer.

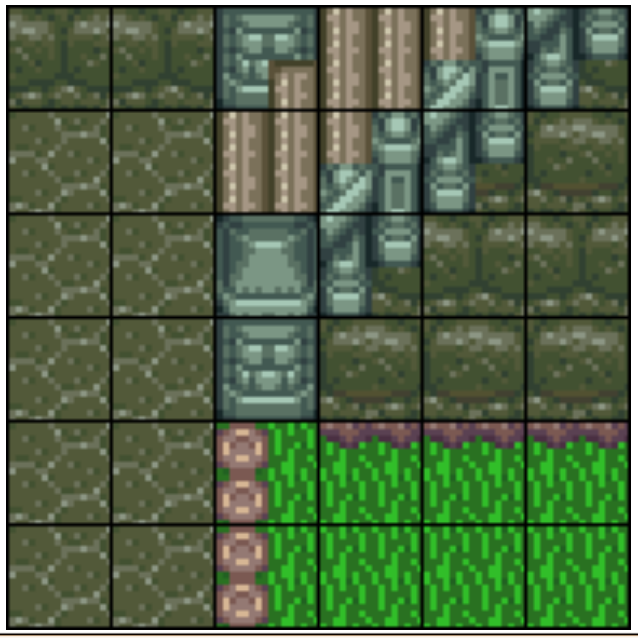
Basically the "pop-up" is gradually happening at the same time as the rotation, which makes the entire transition seem to happen in a single motion.

The black bar letterboxing is actually necessary, because the 2D image from RPG Maker looks like this.

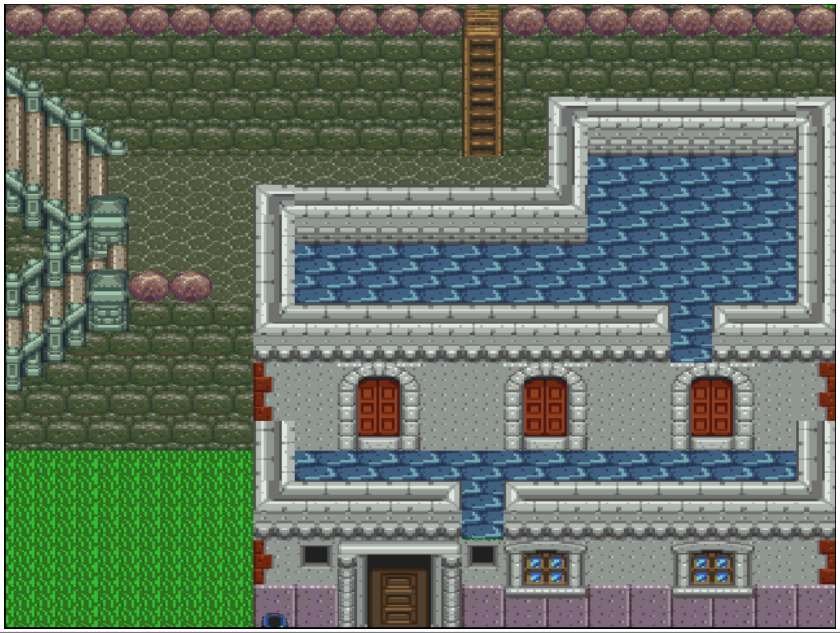
And the 3D image looks like this.

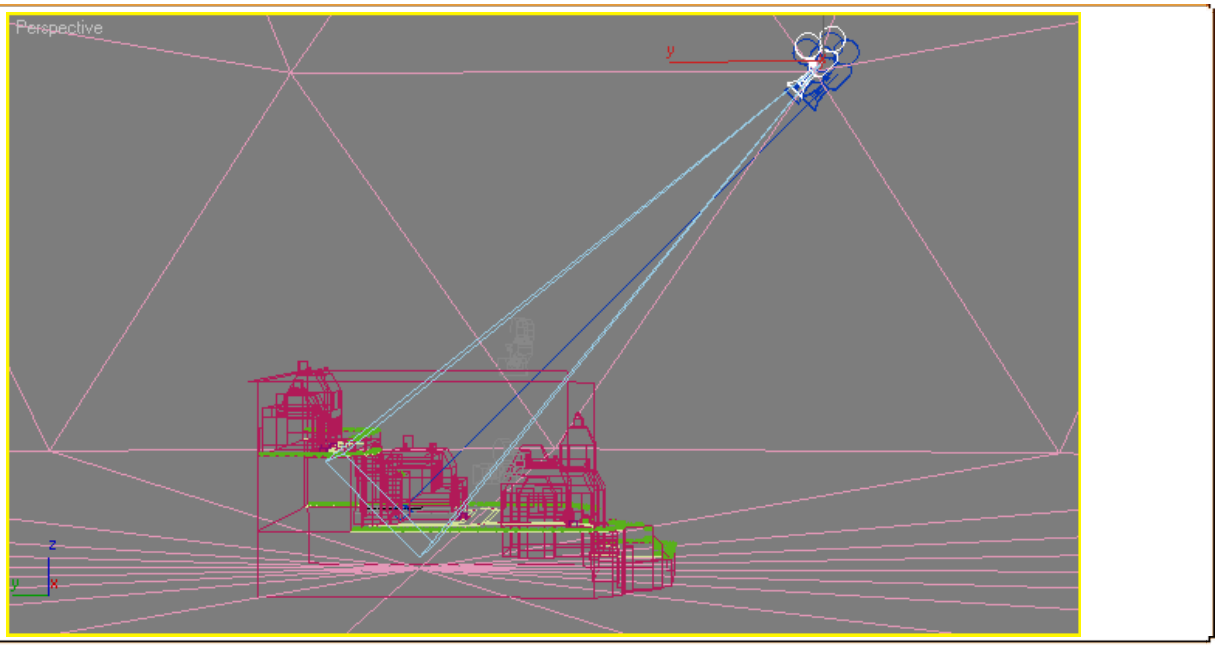


Notice how the 3D one looks squished? In RPG Maker 2003 a floor tile is 16x16 pixels, and a wall tile is 16x16 pixels.



But in 3D, the camera is looking down at a 45 degree angle so it sees half of the top of objects and half of the side, so floors and walls look half as tall.

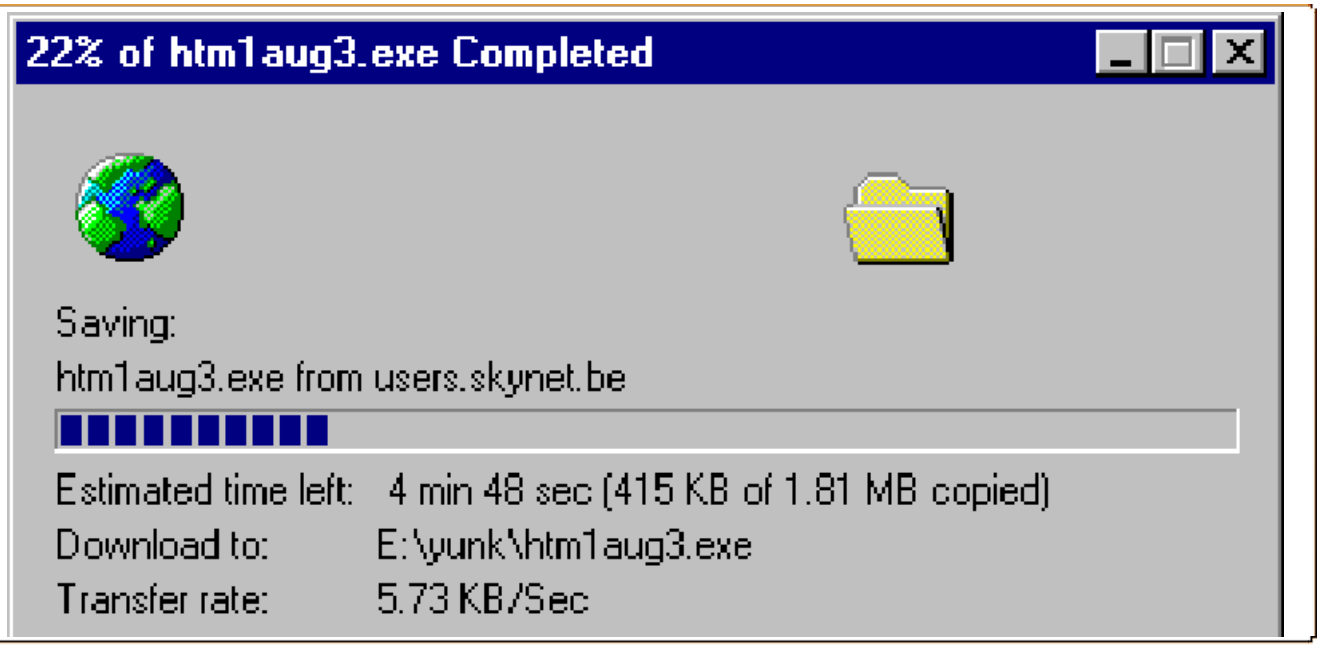




So I have to transition from a tall 2D image to a "squished" 3D image, and I do a cross-fade at the same time to hide the fact that these are two slightly different images. If you look closely, the jar on the left changes and some objects on top of the roof disappear.

And to make the letterboxing look like it “belongs” I added a couple of 2D scenes before this one that use “cinematic” letterboxes to display the text of the credits.

That way, the audience doesn’t question it when another “letterbox” appears. And since they’re looking up for the text, they probably won’t notice that the image is squishing down this time.

And then, suddenly... WTF it’s 3D now!?

I hope you'll forgive the choppiness of the animation. Back in 2004 I rendered this at 12 frames a second to avoid adding too many kilobytes to the game's file size so people could actually download it over their crappy DSL internet connections. Adding this one video ***tripled*** the size of the game!