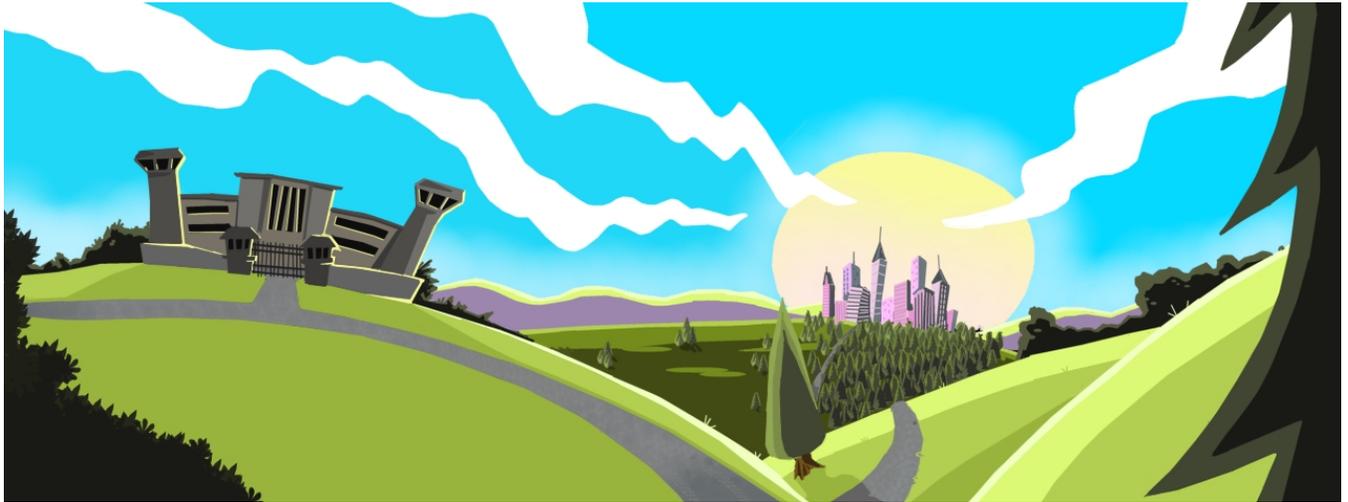


Tiller Techniques 2

written by Bill Tiller

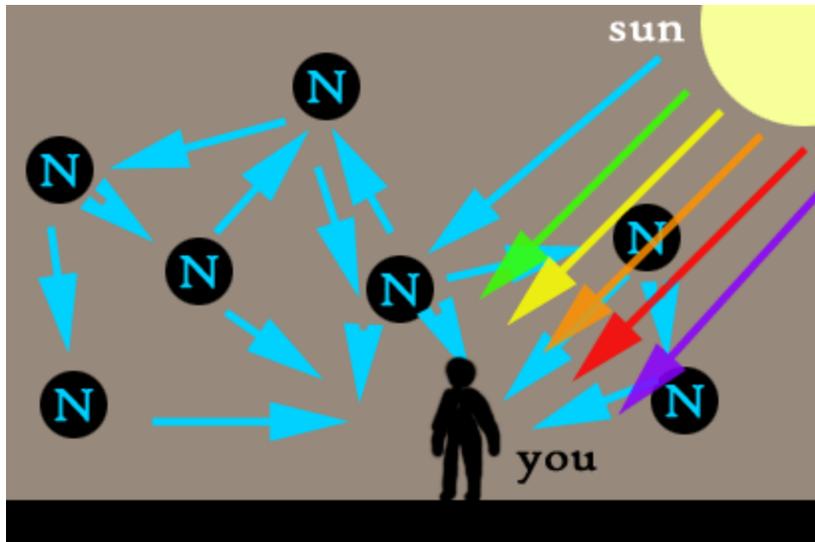


This image by Erwin Broekhuis does many things successfully: it frames the shot with objects in the foreground; he uses odd shapes and angles to keep interest in the viewer and uses exaggerated perspective. And it does a good job giving the shapes room to breath and avoiding bad tangents (bad tangents are when lines converge on each other in a confusing and un interesting way).

There are just four things I would change to make this image more successful. First I would turn the mid plain and far plain more blue to reflect what the atmosphere does to far away objects and land formations. Then I would take out a lot of detail from the background and place it in the foreground where it belongs. Third I would change the perspective on the prison so that we can see more sides than just the front. These changes will make the illustration seem more three dimensional as well as create more varied shapes. And last, I would redraw the road in the foreground and the far background to be more interesting and so it followed the perspective lines better.

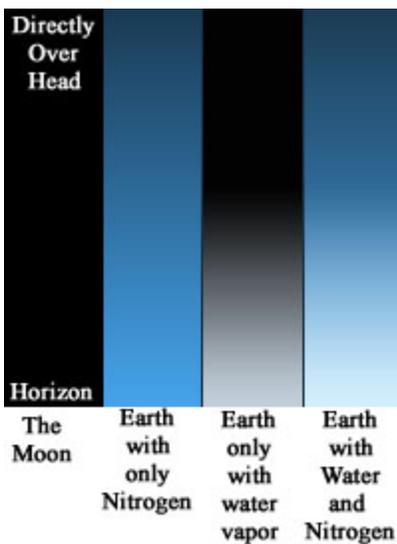
Lets start with the adding the atmosphere to the middle ground and the background planes. The reason we do this is to reflect the fact we live at the bottom of an ocean of air, a very thin one but an ocean nonetheless. The two biggest ingredients to our ocean of air, at least as far as artist are concerned, is nitrogen and water. Nitrogen is the gas that causes our sky to look blue. It occupies 78 percent of our atmosphere. This was discovered by Daniel Rutherford in Scotland, and others, independently, in 1772. (Doesn't it sound like I know what I am talking about? I love cut and paste, and the Internet!).

This blue fog is created when blue light from the sun strikes a nitrogen molecule in our atmosphere and bounces off, thus changing course. This blue beam of light will then hit another nitrogen molecule and change course again, this will keep happening until the beam of blue light finally lands on earth hitting you in the eye. But by this time the blue light is coming from a completely different direction and a different angle then where it originated from, the sun. This also accounts for why all outside shadows (on a clear day) look bluish. So if you hear someone ask "Why is the sky blue?" Say, "Because the atmosphere is filled with a light blue gas called nitrogen!" And if you say it with real authority you might even elicit a reply that goes like this- "Show off!" or "Know it all!" Ignore them, - they are just jealous!



This ocean of air is not very deep so if you look straight up toward the very center of the sky you will be looking at the shallowest part of this ocean and thus you will see less blue light. It will appear darker, almost a medium blue. Conversely, if you look at the horizon you will see it gets very light, almost completely white, -on a clear day of course.

A is the viewer standing on the Earth. Looking straight up, b, one will see the thinnest part of the atmosphere, while looking toward the horizon, c, the viewer will look through the thickest part. The blue particles represent the atoms and molecules of the gases that make up our atmosphere. Now the white color you see at the horizon isn't just nitrogen. Other elements fill our atmosphere and one of them is of course water, in its gaseous state. Water vapor is heavier than nitrogen so it tends to pool near the bottom of the atmosphere, and it changes thickness depending on all sorts of reason including temperature and air pressure.



So, as Monet pointed out in his famous series of location paintings, a landmark can look completely different, at the same time of day, from day to day depending on the atmosphere. And this is why I am telling you these boring facts about the atmosphere, - because they affect your landscape in very profound ways.



Notice the sun is in the same spot in each picture indicating it is the same time for each day, but the atmosphere keeps affecting the colors and haze of each painting.

This effect the atmosphere has on the world is why I chose to make the sky bluer, the mountains on the horizon bluer and lighter, and the same for the city and the forest. The middle ground hill is a bit bluer and less saturated too. The darkest dark needs to be in the bushes to the left and in the pine tree to the right. No shadow or dark value should get darker than those two because they are nearest the camera and thus have no atmospheric effect on them.

The prison windows are black, so I changed them to a navy blue because they are about 200 meters away and they do get affected slightly by the atmosphere. So the value of the shadow, or the darkest value in the tree and bush in the front is 10, the value of the dark windows and bushes next to the prison is now 25, the value of the bushes on the right in the middle ground is 47, the value of the forest near the city is from 70 to 81, and the dark shadows on the buildings are 92. The farther away on object is the higher the value gets of it darkest shape. It also gets more blue and lighter.

Now an important rule to follow is never have your highest value, - 100 white-, be anywhere in your picture, because you need to save that for the sun, of anything that reflects the sun. In this case the sun is yellow and has to be below 100 gray value, because it is a caricature of the sun, not an actual representation.

Also notice the sun is on the horizon, and doesn't that mean it is setting or rising? And if it is setting then it should be red, right? But this feels like morning doesn't it. But scientifically the sunrise and the sunset look exactly the same! I don't know the exact answer to this but I have two theories, which I have yet to prove. One the temperature is colder during a sunrise because obviously the sun hasn't heated the air up yet. And we all know that mist and morning dew are heavy in the air just before sunrise because it is so cold and the water vapor is condensed into mist and fog. Well I think this mist and fog soften or desaturated the red color of the rising sun enough for us to notice the difference between the sunrise and sunset. My other theory is that it is just all in our mind, the sunset and sunrise are the same but we just think they are different.. Who knows for sure?

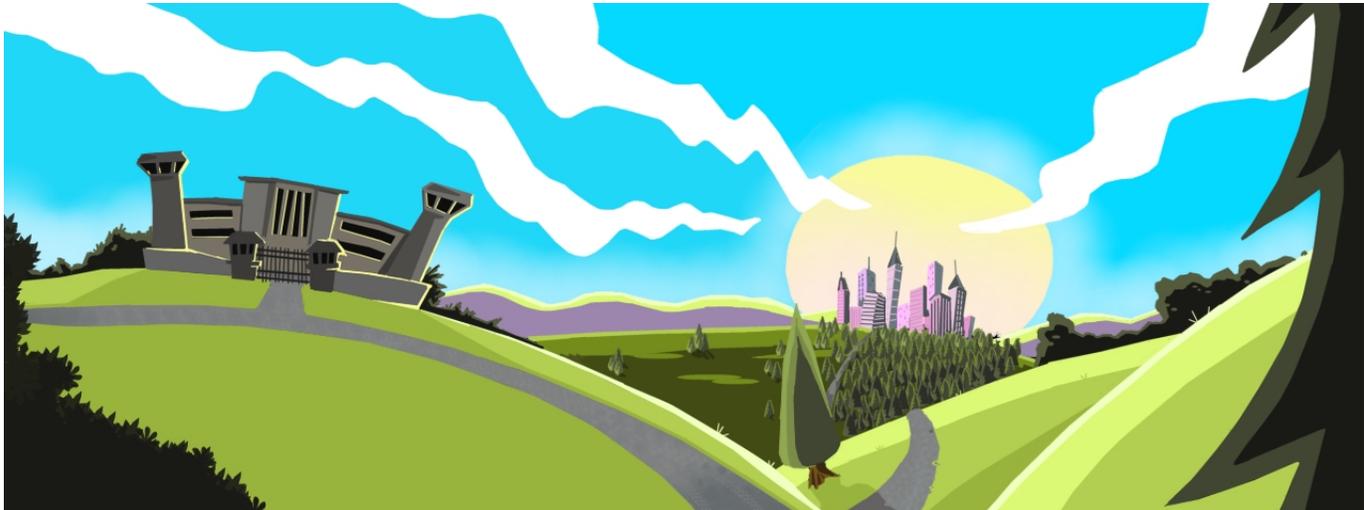
I don't know much about this game but if the main character is going from the prison to the city then we have the correct 'left to right' composition. In the western cultures we read sentences from left to right. This is the same with art. People tend to view images starting from the left and then moving to the right.

This isn't a big rule at all. It can easily be tossed away and won't make much difference. It just seem to feel better the viewer if the image is guiding us in the 'correct' direction. If the main character is coming from the city to the prison, I might suggest switching them.

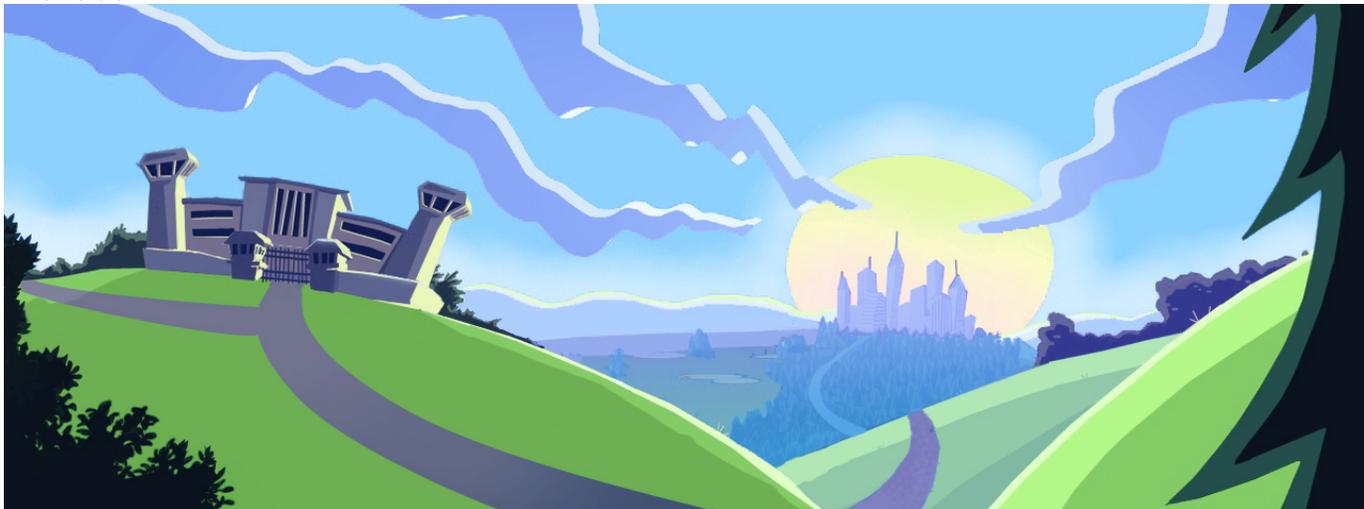
The prison is kind of flat with its use of one point perspective. I think it would look better is it were turned or 'cheated' to the left a bit more so that we can see its side a little more. This will give it a third vanishing point and make it look less flat, and thus more interesting.

I added a few more changes to liven up some smaller elements like I added a shadow to the clouds so the have a bit of dimension, and made the shaded part a bit more purple then sky to help distinguish them more. The pine tree in the middle was drawing to much attention all by its self and was interfering with a lot of lines so it needed to go. And I changed the shape of the foreground bush because it seemed to follow a straight line, which looked a bit unnatural. And I pumped up some saturation on some of the colors to make them more pleasing to the eye.

Erwin's Version:



Bill's Version:



Now none of the changes I made has to be done in order to make the picture better. This image is stylized and style is just away of bending or even breaking the rules. If an artist wants to have orange clouds and a purple sky that is perfectly acceptable. Just be aware that bending the rules like that has an effect on the viewer so if that is your goal and breaking the rules is the only way to do it, and then break the rule by all means. But learn them so when you break them you at least know what you're doing first. Learn them by observing nature much as Monet did, and studying photographs and other artists' paintings. Also experiment with exaggerating what you observe and break a few rule here and there to create your own unique style.



Comments:

Another really interesting installment of Tiller Techniques! Thanks for taking the time to do this, these articles are very informative and a pleasure to read.

Posted by Gabezz

(I'm his personal comment editor :-))

Posted by Courthold

Well done Bill, I'm impressed with the art and the tutorial. Erwin, you're a very talented artist ya lucky guy!

Also Bill, I am surprised to see the quality of your spelling has jumped enormously from previous conversations! :p

:)
m0ds

Posted by m0ds

Thank you very much for sharing your valuable knowledge with us, your articles are very helpful and inspiring.

I hope to see many more of those in the future!

About this article: I'm amazed at how much this blue haze does with the picture. It adds a great amount of depth. I would've never thought of using this [blue haze] technique, priceless!

The road and jail changes are clever too, I'm surprised how these small changes affect the image as a whole.

Many thanks for commenting my piece and don't let us wait too long for a new article! (please!)

For those of you interested in my game; more information is to be found on [shameless plug alert]
<http://www.badtiming.emptyhouse.cjb.net>

Oh, and thanks for the nice comments on my artwork :)

--Erwin

Posted by Erwin_Br

ookie dookie :D

Posted by QueZTone

Concerning the city, if you wanted to make the shapes read more as buildings one could add a few simple window shapes, then it would be even more obvious what those shapes were, but again I would not go any farther than that. Those shapes just need to say "look! I am a city in the distance," and that is all. We don't need to see which building is exactly Erwin's. You just need to know he lives in a city with skyscrapers. The viewer will the make the connection easily enough. The road also points right to the

heart of the city. That is more than enough information I think. If any more detail were to be added it should go in the foreground grass hills or on the prison.

-Bill Tiller

Posted by Green Beard

Congrats to Bill Tiller for another amazing tutorial! Very helpful and interesting reading.

Posted by Igor

Yeah, loved the tutorial!
I never thought nitrogen did that much change, but wow, I can see the change!

Really good Bill! :)
Thanks!

And so on to Erwin...
The art to your game looks great!
Looks like DOTT in many ways....

I'm looking forward to your game too ;)

Posted by jannar85

I think the town is clear enough, what with it contrasting against the sun and the skies kinda pointing towards it. The original version made me think of the Cinderella castle in Disneyland Paris :).

Posted by Esseb

First of all a hand to Erwin, great artwork! Really looking forward to your game.

And next to Bill, lovely educative article once again! Nitrogen! Of course! Never again shall I forget hehe.

Then about the changes...hmm all looks pretty neat. Love the sun glow over the prison walls. Of course a little detail to the foreground could be added.

But what kind of bothers me, the city was clearly identifiable in Erwin's version. And since the character of the game lives in one of the buildings there (I figure, since I saw some more pics from Erwin's game) it's a little piece of security when you can still identify the buildings as in Erwin's version. Would it be 'possible', naturally seen, that you could still see the buildings as in Erwin's version?

Posted by QueZTone

Well, one could add more detail to the foreground but it doesn't seem to be Erwin's style. There are a lot of directions one could go, but I just wanted to make a few suggestions in areas I thought could really make a difference. I don't want to redraw the whole thing, just help it communicate better.

-Bill Tiller

Posted by Green Beard

Thank you very much for the tutorial, Bill! I once again learned a LOT from this.

I must admit that there are some things that in my opinion could be changed a bit. Like the highlights on the prison and the perhaps somewhat missing detail on the foreground, but all in all, the final image is fantastic! It's brilliant. I love the coloring and the atmosphere created by it.

Keep up the priceless work, I'm really looking forward to see more tutorials by you!

Posted by Pessi