Concept Art: Combining 2D and 3D Tools To Create Compelling Imagery

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In this intermediary class I will show practical examples of my workflow for producing concept art. My workflow combines both 2D painting and 3D rendering to produce the most detailed images possible in the shortest amount of time. I have split up my image-making process into 20 stages, starting with rough 2D sketches and photobashing. I then move on to rough 3D and then a more detailed 3D stage, followed by a final 2D stage of painting tiny details and compositing the final image. Whether or not you're a concept artist for visual effects, animated films, or video games, you'll gain insight into techniques that can help your own process. We will primarily use Adobe Photoshop, 3ds Max software, Chaos Group's V-Ray rendering engine, and Red Giant Software's Magic Bullet—but you can apply the principals discussed to the software of your choice.

Learning Objectives

At the end of this class, you will be able to:

- Learn design and composition theory that will help to make your image standout
- Learn how to use 2D and 3D tools together to take advantage of both worlds
- Learn how to avoid the empty canvas curse using photobashing
- Discover simple composition tricks to add realism to your paintings

About the Speaker

Neil Blevins began his career in traditional painting and drawing before getting into 3D graphics while living in his home country of Canada. After getting a BFA in design art, Neil moved to Los Angeles where he worked for Blur Studio, creating graphics for video games, commercials, and television, as well as for feature and ride films. For the last 12 years Neil has worked as a digital artist for Pixar Animation Studios in San Francisco. In his spare time he makes science-fiction 3D/2D hybrid artwork, he authors tools, and he writes art-related lessons and tutorials for his website.

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Art Process Overview

Whether you're doing concept art, video games, animated films, visual effects, etc, we're all doing the same basic thing, trying to create compelling imagery (unless you're doing motion, but that portion won't be taught here).

I've split up my image making process into 20 stages. Here are the stages:

1. Idea
2. Research & Reference
3. Composition
4. Text
5. Shape Language
6. Patterns
7. Silhouette Sketch
8. Rough Sketch (aka Quick Sketch, Line Drawing, Initial Sketch)
9. 3D Sketch & Cameras
10. Photo Sketch (aka Photobashing)
11. Color Scheme
12. Color Sketch (aka Color Brief, Color Rough, Value Sketch, Color Preliminary, Color Thumbnail)
13. Detailed Sketch
14. Compositing (aka Image Assembly)
15. Rough Rendering (aka Rough Painting)
16. Lighting & Rendering
17. Modeling / Sculpting / Model Assembly
18. Surfacing (aka Shading and Texturing)
19. Final (aka Final Painting, 2d Painting)
20. Tweaks

No matter what job you do, you are basically doing some subset of these stages.

- If you are a **Concept Artist** or **Matte Painter** who likes incorporating 3d into your workflow, you may do all 20 stages.
- If you are a more traditional 2d **Concept Artist**, you may skip stages 16-18, and focus mostly on stage 19.
- If you are a **Concept Artist** but like keeping your paintings rough, you may do stages 1 to 15, and 20 only.
- If you are a **Modeler** in Feature Animation, you may only do stage 17.
- If you are a **Shader / Texture Artist** in Visual Effects, you may only do stage 18.

Some other notes:

- You also may skip stages you don't need for a project, like I've outlined 6 different types of sketches, I've never made all 6 for a single project, I usually only do 1 or 2 before moving onto stage 15, the Rough Painting.
- Also, the reason these are stages and not steps is because a lot of the time you may do these stages in a different order, like you may do a Color Sketch, then realize you need to work on the silhouette more, and so jump back to that stage to do some more exploration. So these stages are here to help, not to define a rigid workflow.

Here's more info on each stage:

1) Idea

The initial idea, this can be anything from "I'm going to make a robot" to something more specific like "I'm going to make a robot whose purpose is construction and he'll have really thick arms". Or "I have a CD cover to do for a client, and they want a giant evil building in the background with the band members walking towards it."

2) Research & Reference

Get good reference based on the idea. This can be other artists work, photos of real things, photos of completely unrelated things but that might help support the initial idea, a photo of a material I want to use in the image, etc. Also, remember to build your "mental visual library".

3) Composition

Do some strong thinking on the composition of the image. Will the canvas be long and thin like a film frame, or square because I'm making a CD cover? Will the overall composition be circular? Triangular? Do I want to use the Golden Spiral? How much detail does the piece need and where will it be placed?

4) Text

Write down interesting words, they may be useful for image titles, or for inspiring an idea. Write down description of interesting concepts. Write a little backstory for your character or scenario.

5) Shape Language

What will the general shape language of your image be? All circles? All Triangles? Straight Edges? Swooping curves? If the piece is aggressive, will spiky shapes convey that idea better?

GOTHIC ARCH
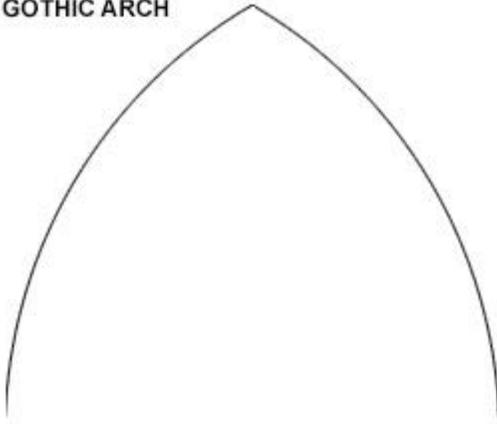
6) Patterns

Will any specific patterns be necessary? Like stripes on an animal? Paneling on a starcraft?
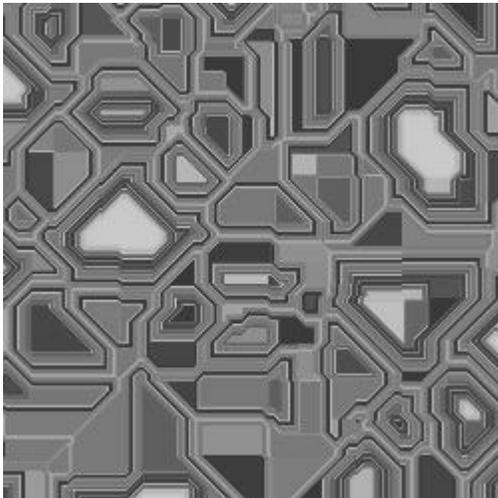
7) Silhouette Sketch

Here's the first of our sketches, the idea here is to focus on the edges of your object, general proportions, don't worry about detail. Make sure your subject is instantly recognizable, even if all you see is the silhouette.

8) Rough Sketch (aka Quick Sketch, Line Drawing, Initial Sketch)

This is an outline drawing of your piece. You can use pencil, pen, digital, whatever. But you're starting to explore the forms from your silhouette sketch a little further, including adding some simple detail.

Neil Blevins 2009
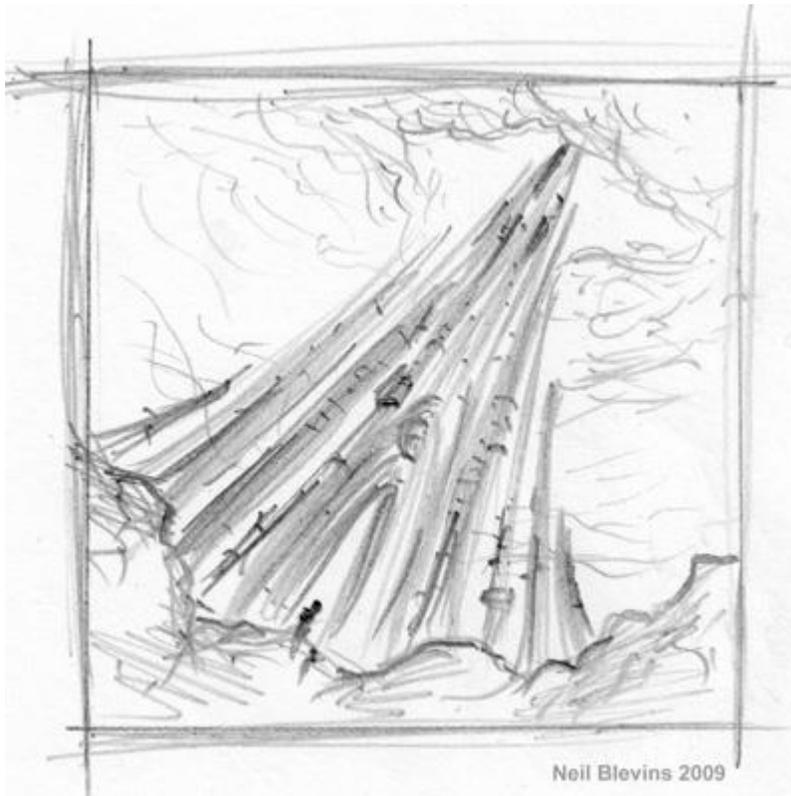
9) 3D Sketch & Cameras

To explore camera and perspective, it may be a good idea to put together some simple shapes in a 3d program like 3dsmax, maya, sketchup, etc, loosely following the sketch. The 3d process may suggest other camera angles you wouldn't have thought of if you stuck in 2d, also, the final 3d sketch may be useful to paint over later. You could also make a quick traditional 3d scene or model a character in clay and then take a few pictures.

Neil Blevins 2009

10) Photo Sketch (aka Photobashing)

To avoid that blank canvas effect, try throwing together a sketch using photos of real things as a basis to paint over (and don't worry, this is just a sketch, you don't expect much of anything from the original photos to show up in the final painting, it's just to give you something textural to start from).

11) Color Scheme

What will be the main colors of your piece? Are there accidental colors you can add to make your piece more color rich? How do the colors support the idea?

12) Color Sketch (aka Color Brief, Color Rough, Value Sketch, Color Preliminary, Color Thumbnail)

A quick painting to help place your colors. Don't add details, this is all about general color placement. In this example, I colorized my 3d sketch and added a few clouds. The client choose the last image.
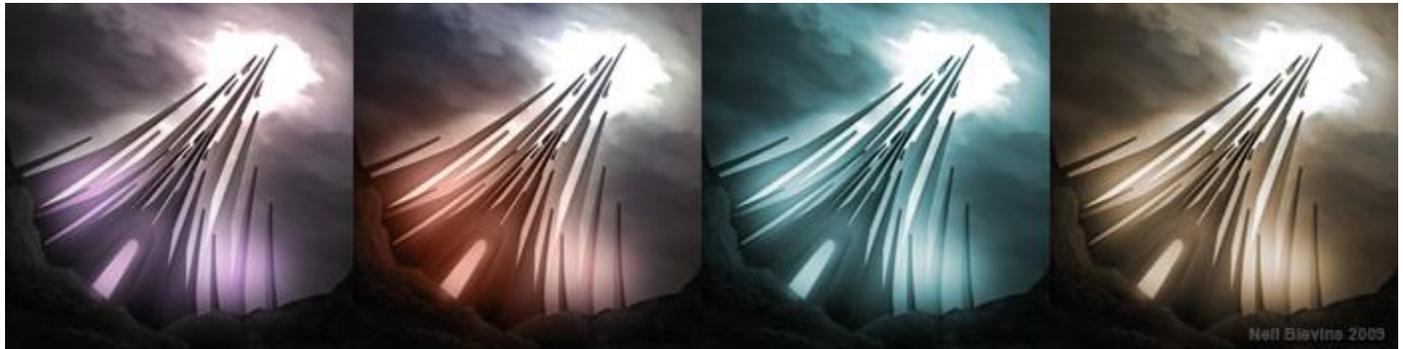
13) Detailed Sketch

Sometimes you need to work out more details in sketch form, like a drawn blueprint for a building or complex robot. Or you just need a more finished looking sketch for a client.

14) Compositing (aka Image Assembly)

I then set up a simple composite for my image in photoshop, this can be made up of elements of any of your sketches. Add some simple color correction layers to further explore the composition and color.

15) Rough Rendering (aka Rough Painting)

In the composite I start a rough painting to flush out the details from my sketches. This may be the last step if I don't want to do a more finished image.

16) Lighting & Rendering

If I'm going to move onto a more finished piece, I take my 3d sketch and refine the lighting in 3d, using my Rough Rendering and/or Color Sketch as a guide.

17) Modeling / Sculpting / Model Assembly

I then do my final modeling in 3d. Modeling generally refers to hard surface modeling. Sculpting generally refers to organic sculpting maybe using a sculpt program like mudbox or zbrush. And

Model Assembly means taking the individual modeled / sculpted pieces and sticking them together in a pleasing final model (like placing a hundred plants in your terrain for example).

18) Surfacing (aka Shading & Texturing)

Adding the final shading and textures to my 3d model. This may be simple, as I will probably paint on top of my final image. Or it could be complex if I plan on keeping it mostly 3d.

19) Final (aka Final Painting, 2d Painting)

I then take my composite, add the 3d elements that I modeled, lit and shaded, and then paint on top. This painting is far more refined than the rough rendering, but I use the rough rendering as a guide, and some elements from the rough rendering may even make their way into the final painting. I use lots of modern matte painting techniques to meld the 3d, photos and traditional 2d paint together. The idea is some things are just way easier to paint in 2d then to do in 3d, so why not use the best of both worlds.

20) Tweaks

So you think you're done? Lets do one last check. The final tweaks to all the elements. Really push the Composition, Color, Form and Texture. Put the image away for a few days to see it with fresh eyes. Mirror the canvas to see if you've missed something. Compare it to your own work or the work of others to make sure it holds up. Ask someone for their opinion. Look at the image on a different computer or platform to see what small tweaks need to be made (I like looking at it on my iphone to see it in a very different way).

Conclusion

So now you have a little more information on the 20 stages I use for my image making process. Obviously this is just a short overview of the process, each stage could easily warrant a full book on the subject. But that's a lot of writing, and you'd have to wait decades for it to get done since I do all of this stuff in my spare time. And a book is also something that's difficult to constantly revise and update, since I'm always learning new things that I want to share with your guys. So what I've decided to do is this: My CG Education page is divided into these 20 stages,

and under each stage is a series of tutorials (both text and video) that relate to that stage. And I'll update the page as I go. That way I can share the information as I have time to write or record it, rather than waiting for the entire stage to be fully fleshed out.

So if you're interested in following along with all 20 stages, you can read all the articles, or if you're more of a specialist, say a texture artist, then you can read just the tutorials in the Shading and Texturing stage. I tried to make the material on the CG Education page as useful as possible to the widest audience possible, from specialists to generalists, concept artists, matte painters, modelers, shading / texturing artists, etc, and whether you're doing vfx, animated films or videogames or something else entirely.

So there you go, go explore my [CG Education Page,](#) and hope you find something in there that's useful in your own work.