

How to Draw Monkeys the Lucas Arts Way: An Analysis of the Funny pictures in the *Curse of Monkey Island*

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INTRODUCTION

My name is Bill Tiller and I was lead background artist on The Curse of Monkey Island. The name of this talk is *How to Draw Monkeys the Lucas Arts Way: An Analysis of the Funny pictures in the Curse of Monkey Island*, translated this means how did the art team on the curse of Monkey Island come up with the visual style for the game. I assume most people here have seen the game, but just in case I want to show 5 minutes of video tape from the game. After that I will go over the style development and briefly touch on the art production techniques we used.

BACKGROUNDS

The scene I am going to show is near the beginning of the game, right after the opening credits. The story picks up where the end of Monkey Island 2 left off. Guybrush has inexplicably escaped from the Carnival of the Damned and has floated into the middle of a battle waged between his life-long love Governor Elaine Marley and the Zombie Pirate Le Chuck.



Curse of Monkey Island was designed by two co-project leaders: Jonathan Ackley, who was in charge of the programming and dialogue writing, and Larry Ahern, who took care of the art and animation direction. In the early stages of the game's development, Larry Ahern and I sat down together to come up with a new art style. He concentrated on the animation and character design while I concentrated on the backgrounds. There were three goals we wanted to accomplish. First, was to take advantage of 640 by 480 high resolution graphics (still 256 colors though). Next, we wanted to develop a beautiful and unique style for the game. Finally, and most importantly, we wanted to keep the feel and spirit of the first two Monkey Island games.

In previous games that Larry and I had worked on, such as *The Dig* and *Full Throttle*, the art was done in a resolution of 320 by 200, 256 colors using rectangular pixels instead of square ones. Now that high resolution was feasible, it really allowed us many new opportunities to try things with *Curse of Monkey Island* we couldn't have done before. Gone were the days of animating with a mouse, creating designer characters with disproportionately large heads and 'pixel pushing'. We were still limited to 256 colors. But with hi-res, colors are blended together by placing two different colors next to each other to form a third. This meant that I could go crazy with the color. I'll talk about how I chose the colors for the game a bit later.

Hi-res also allowed the animators to animate on paper. In the past, paper was used rarely for game animation. But for the traditional animator, paper is their true medium. Animation done with D-Paint just don't compare with scenes done using traditional animation techniques.

Hi resolution also meant that our character designs could now have some fine details that were missing in low res, like curls in Guybrush's hair, irises around Governor Marley's eyes, and teeth in Murray's mouth. We could use smaller shapes and not fear that they would become lost in the blur of anti-aliasing. Guybrush now could have fingers and buckles on his shoes. We could give him smaller eyes with distinctive pupils, so that the player could tell where he was looking- something we weren't able to do before. Most importantly, the characters' facial expressions could be seen clearly in high res. This helped a great deal with expressing emotion. Although we did our best in the old games to convey emotion, it was pretty difficult when you only had forty nine pixels for the entire head. We finally had the ability to make our game look as good as any cartoon show on television.

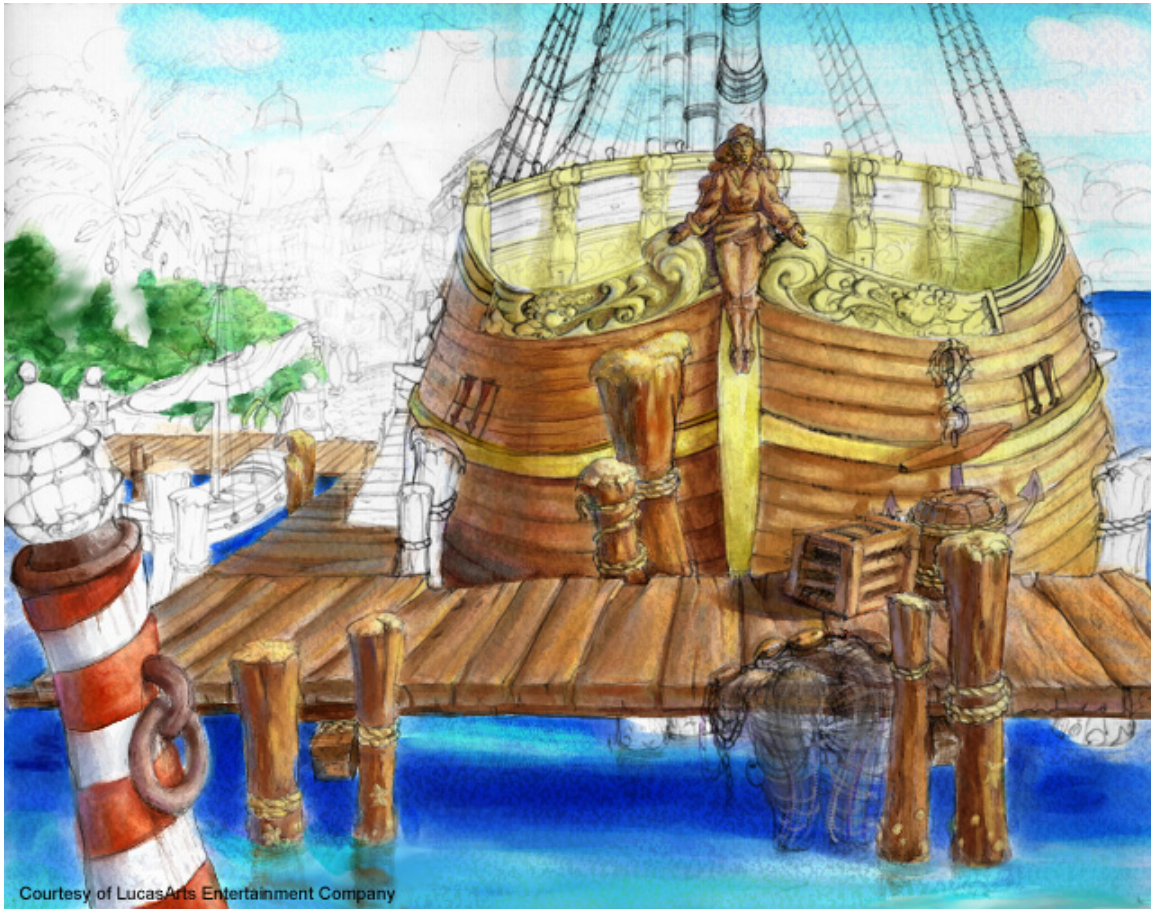


Courtesy of LucasArts Entertainment Company

However, because of the unique artistic requirements of adventure games, and all computer games in general, we actually had to make the game look better than television. Simplistic background art works fine for television, but will create negative effects in a computer game.

One negative effect of using simplistic backgrounds is that puzzles become very obvious and are too easy to solve. If, for example, in the Voodoo Lady's hut, there were no objects in the room save for the chewing gum, the paste, and the voodoo doll pin, there would be no challenge in figuring out which items would be useful for later puzzles. The player would have such a limited choice, the decision would be overly apparent. The way we designed our backgrounds, and the way I think works best, was to put in all sorts of interesting items and detailed things to look at. This forces the player to search around and examine things more closely. It gives the player a sense that he is exploring the Voodoo Lady's hut and interacting with the environment. This also gives a chance for our programmers to write funny dialogue for each item even if the player doesn't need the items.

Another negative effect with sparse backgrounds is that they don't keep the player entertained while he is playing. He could be looking at the same five or six rooms for hours on end trying to solve numerous puzzles. If the backgrounds are boring to look at, the player will soon lose interest. Not something we shoot for. But if the backgrounds are detailed and rich, they can encourage a desire to explore and create a feeling of being immersed in another world.



In traditional animation, the background is only intended to support and compliment the animated characters in it, or for most shots anyway. There are exceptions, like close ups or long tracking establishing shots, where the director intentionally has the audience focus on the background. With an animated film, if the background is too interesting it works against the character, upstaging it, and defeating the purpose of the scene. But in a computer game the backgrounds ARE the game, be they three dimensional models for the world of Zelda, or two dimensional background sprites for a side scroller. Seeing the backgrounds clearly in a game is usually a matter of life and death for your character.

But with adventure games, life and death are usually not the main concern for the character. The important thing in these kinds of games is to keep the player entertained and happy even if he is stuck in, say, King Andre's treasure cave bargaining for Elaine's diamond. At least the player can look around at all the treasure, shipwreck ruins and Smuggle Bunnies TM hidden in the room.

That leads to our second goal: trying to develop a beautiful style for the game. When trying to make art look good, one can go overboard and throw everything into the background, use too many colors, and render everything to death. What you end up with then, is a big mess, which is not only ugly or garish but is too hard to look at - the exact opposite of what an adventure game artist wants. The player will get sick of looking at the game and will once again feel the need to go outside and get some exercise. In a way, my goal is to stop people from getting exercise because they just can't tear themselves away from the beautiful art in our game.



This is where those long hours in design and composition class really pay off. The composition of the art is probably the most important thing to pay attention too. I can't go into all the aspects of basic design, rather I will just go over what rules of composition I followed for doing the Monkey backgrounds, in no particular order of importance.

Rule #1: Avoid one-point perspective if at all possible. Some times this isn't possible. For instance, the design document may require that the player see two doors on opposite walls. One way to solve this problem is to imply a door by rendering a shadow of the doorframe on the ground. Another solution would be to simply cheat the wall toward the camera more, which won't make the room rectangular but at least it will make it more interesting.

Rule #2: Frame your composition by placing objects in the foreground. This will draw the eye toward the focal point of the action. Most of the time these objects should be darker or more out of focus than the middle ground elements. This is a hard one for me to follow sometimes, because I like to put a lot of detail and rendering time into objects in the foreground. But it is better for the overall look of the piece. These elements are there only for support, not as the main focus. This point leads to...

Rule #3: Use extreme values and contrast to draw the eye to toward the focal point of the action. This will highlight the area in the room that is most important for the player. You don't want to create an unintentional puzzle out of a visually confusing background. Or, maybe you do, if you've run out of puzzle ideas. For example, if the player needs to talk to a shop keeper, don't use your whitest white or darkest black in far corners of the room. Use them near the counter where he is going to be standing. That way it will say "The action is going to take place here, not over by the stove."

Rule #4: Use contrasting and varied shapes in background compositions. Various shapes next to each other at odd angles are more interesting than like shapes all in a row. For example, place big fat clouds behind long thin clouds, which is what I chose to do in Curse of Monkey Island. Or you could put a short squat bush next to a long curvy palm tree. This principle applies to character design as well. Varying shapes of your characters helps distinguish them from each other and define personality.

Rule #5: Define the shapes of your objects by positioning them in front of one another, posing them to create positive and negative space and then, when rendering them, use contrasting shades to distinguish one from the other. For instance, put part of a table in front of chair or put a barrel slightly in front of a stucco archway. The shape of the chair is more interesting if a contrasting shape is cutting into it. If the curve of the arch is interrupted by the shape of the barrel, that too is more interesting. This is what my art teachers called tangents. But be aware of and avoid bad tangents at all costs. They happen when shapes share the same line or when two separate shapes touch each other on that same line. Bad tangents can make the information in the shapes confusing and unattractive. They are all over the place, so be careful. I am notorious for them. Larry was so good at spotting them in my compositions that I sometimes called him the tangent detector. Photoshop is great for fixing them.

Rule #6: Stay away from even balance in your shapes and overall composition. For example, if one were drawing a crate and wanted to make it interesting, turning the crate three quarters so that one side was showing more than the other is more interesting than seeing both sides evenly.

I knew if I stuck to these six basic rules when doing the art for the game it should look pretty good, and hopefully professional. I have to give credit to Larry for not letting me settle for just pretty good. He wanted to put style into the game to enhance the player's experience.

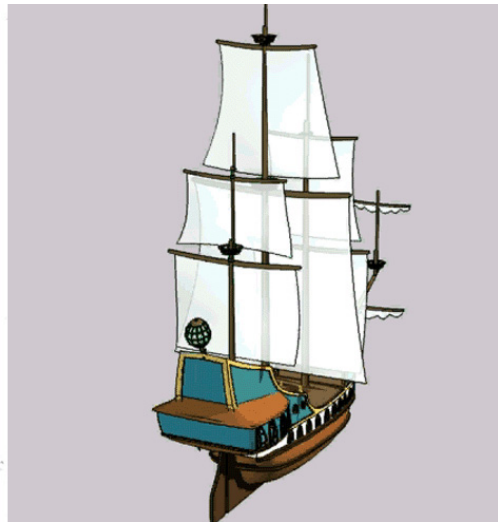
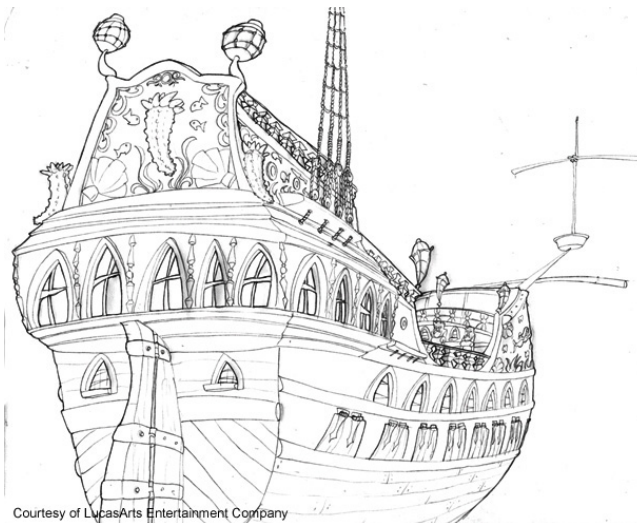


The kind of art that Larry enjoyed and is inspired by are things like *Duckman*, *The Simpsons*, experimental graphic novels and other non mainstream art styles. I am really inspired by art styles like the ones used in *101 Dalmatians*, *Sleeping Beauty*, and the illustration styles of Ivan Earle, NC Wyeth, the Brothers Hildebrandt, and Arthur Rackham. We didn't want to make *Curse of Monkey Island* look exactly like any of those artists, but rather use elements from all of them to inspire us to form a completely new style.

CREATING STYLE

Creating a style for this game had its own unique challenges. Curse of Monkey Island was the third in a very popular series. The first two games were conservative in their art style, in part because of the limitation of low resolution graphics of the early '90s. Also, fans had strong opinions and expectations of how they wanted the third game to look. We didn't want to deviate too far from the style of the previous games and upset our fans, so we kept elements from those earlier art styles. We felt that if we pulled this together, fans would appreciate the fact that we gave them something new and still retained the feel and spirit of the first two games in the series.

As I mentioned earlier, I was very influenced by many of Disney's animated movies. I even went to an animation school where many Disney's top artists taught. So the Disney style was ingrained deeply into my artistic psyche. Although this would have been great if I were working at Disney, it was actually a bit of a liability for me on Curse of Monkey Island. The first two Monkey Island games started off as a spoof of Disneyland's Pirates of the Caribbean ride. So their art followed this theme and had very beautiful Disney-like backgrounds. Larry Ahern didn't want to have any of it. His mantra on the backgrounds was "If people look at it and say it looks like a Disney film, we have failed." This sort of put me in a panic. I mean, I was all about the Disney style. What was I going to do?



Luckily for me, we were ahead of schedule and I had about five months of pre-production time. My first ideas were nice but not right for the style of the game. Larry didn't have an exact idea of what he wanted. He wanted me to develop it and then he would let me know when I got there. Freedom is nice but sometimes it can become very frustrating.

I didn't get off to a brilliant start at first. I made several drawings that had lots of detail, on large pieces of paper, spending considerable time on them only to have Larry say they weren't quite right. I was a little discouraged until I remembered some of the lessons from my days in animation school. My teachers taught us to rough out our designs first in little thumb nail sketches, do many variations, and then push each concept sketch into a newer and bolder direction.

So I started doing five or six backgrounds on one piece of paper, somewhat roughly, trying radical designs in each one. This took one tenth the time and gave Larry many choices to look at. He might like some elements of the first thumb-nail sketch, but prefer the overall feel of the second sketch, while favoring the layout of the fifth. I would then go back to the drawing board and come up with a bigger, more detailed sketch that would encompass everything Larry wanted. This speeded things up a lot and helped develop our previously unknown style into something tangible.

As it turns out, giving character and personality to all the background elements was the key. In the beginning of our style development, I just drew everything pretty realistically, the way you would see something in real life - like a mountain, a fort or a tree. Some of my early paintings used realistic colors and rendering techniques and when we put some of the character concepts into the backgrounds it was obvious they didn't quite fit in well.

I decided to approach my backgrounds the way an animator would approach designing a cartoon character. Cartoon characters look the way they do for a reason. They are clearly recognized as caricatures of what they represent rather than literal representations. My animation teachers were always talking about making characters 'read' better. The way to do this was to design a silhouette that enabled you to instantly recognize the character, even though it had no facial features or other details. My story board teacher, Joe Ranft, who's credits include *Toy Story*, *A Bug's Life* and *Who Framed Roger Rabbit?*, had us use a character he called Mr. Egghead when we did our assignments. Mr. Egghead had an egg shaped head, thus the name, a nose and no other facial features. This forced us to use body language and a pose to convey feeling and emotion. The same applies to the elements in the backgrounds I created for Monkey3.



Courtesy of LucasArts Entertainment Company

To capture the feeling of the ever changing Caribbean sky, I exaggerated the wispy quality of the clouds by making them into wavy curly-Q's. To capture the feel of palm trees, I exaggerated the bends and the angles of the trunk and used sharp angles for the palm fronds to contrast the round curves of the clouds. When drawing the gun towers on the fort I drew them as if they were defiantly sticking their chests out. Every shape - from a window pane to the shape of a hill - was drawn to give it a bit of character and to make it interesting. I used almost no straight lines in any of the shapes. Straight lines tend to be boring, while curving or bent lines are not. I would often use straight lines against curves in order to complement the shapes.

Another technique I employed was the use of thick outlines on shapes to make them more clear. I would use thin lines for the details inside the objects. The details broke up the empty space within the shapes while the thick outlines held it all together.

COLOR

Choosing color for the game was pretty easy for me because I love working in color and have a lot of experience at it. The important thing was to capture the bright colors we all imagine the Caribbean to have. I really pushed the saturation of the colors I used, sometimes a little too much. This exaggeration had the effect of capturing the feel of the bright Caribbean flora and fauna, the clear blue of the sea and the warmth of the sun.



I followed the basics of color theory, using cool colors in the shadows and warm colors for the highlights and making sure not to have reflected light and highlight at the same value. For example, when painting a palm frond I would start off with a middle green hue for the middle values, and then use a bluer hue for the darker values and a yellow green for the highlights. I would then make sure the highlights were more saturated with color than the shadows.

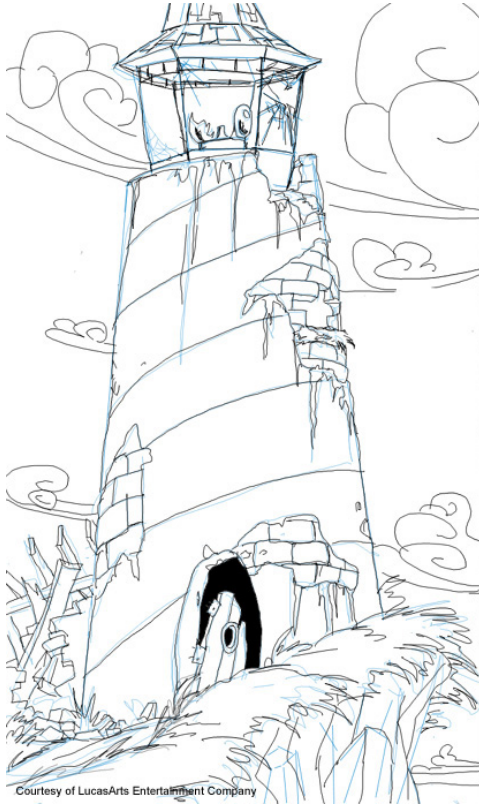
When choosing an overall color scheme for a room, one important rule I followed was to use analogous colors for eighty to ninety percent of the picture and use a complementary color for the other ten to twenty percent. That little bit of complementary color really heightened the main color scheme.

One of my favorite combinations of colors was using pale yellow with purple. I utilized this a lot in Puerto Pollo for buildings and exteriors. A reddish orange combined with a purple worked pretty well for the roofs of the buildings and for some of the ships. For the night scenes I wanted to try a new color scheme that I was inspired by. In the 1880's the south pacific island of Krakatoa blew up in a volcanic eruption, sending millions of tons of ash into the upper atmosphere. All that ash made the night skies around the world much brighter and greener, and made the moon very yellow. I had seen some paintings done at that time and thought they looked really beautiful. I tried using the same colors on a couple of my earlier night scenes and everyone seemed to like them, so I decided to keep the style.



I also did something weird with Le Chuck's lava-filled hideout by going with a yellow-orange lava instead of red, which is lava's real color. I figured since Le Chuck was the most important character in these scenes and he was predominately red, he would have just blended into the walls in a red room. So I used the next best color - a yellowish orange. It helped pop him out from the background but not clash with his own color scheme.

INFLUENCES



Most of my inspiration for color schemes came from the artwork of Greg and Tim Hildebrandt. These guys were my big art heroes. I discovered that they were influenced by N.C. Wyeth and Maxfield Parish, so I began to study their art as well. All four of these artists knew how to use color well and I often looked to their work when having problems with a certain palettes for a room or when I was just feeling uninspired.

Peter De Seve was another artist that inspired my work on Monkey 3. Peter De Steve does a lot of illustrations for The New Yorker and other magazines. He uses strong ink lines with watercolor paint in his illustrations. He uses very thin and light lines to sort of sketch things out and then goes back over his main characters with a darker, thicker line to help distinguish them from the backgrounds. I like his use of subtle colors too but it wasn't right for Monkey Island at all. He is a really good caricature artist but doesn't exaggerate any of the shapes in these backgrounds like he does with his characters. I tried to base my use of line for the Monkey backgrounds on his use of line with his characters.

CONTINUITY

I had seen a lot of adventure games where the style of the backgrounds seemed to change from room to room. To avoid this, I decided to draw all the layouts myself. I would do the roughs, get Larry's approval, and then do a cleaned up final drawing, scan them into the computer and then give them to two render artists to paint. Before I gave the files to my artists, I would first rough in the colors I wanted them to use on a separate layer below the pencil layer in Photoshop. The pencil layer I turned transparent except for the pencil line so that my render artists could use the top layer as a guide. This made it pretty easy for them - sort of like filling in a coloring book but with more shading and detail. Doing the color rough for them, I could tell it annoyed them a little bit at first. But as we went along I began to trust them more with knowing what I wanted the colors to be like, I would let them do their own color roughs.

I wanted to paint all the backgrounds myself, just for fun but our schedule wouldn't allow for it. Plus the animators and the programmers needed the final layouts to get their work done. So I saved a few of my favorite layouts for my self like the right side of the Puerto Pollo exterior, King Andre's treasure cave, and the barbershop interior.

For the most part this plan worked out pretty well. I can tell just by looking just who painted what, but everybody else usually can not. I don't think this would work in the future if these games get much bigger. I just wouldn't have enough time to draw it all by my self. To keep the look consistent I think I would need to work harder in pre-production to set strict style guidelines just like a major animation studio would.



[This image was reversed by LucasArts, the text in the picture is clearly correct.]

KEEPING THE MI FEEL

Like I said at the beginning of my talk, we wanted to keep the feel of the first two games. We didn't want fans of the first two to sit down and start playing and say 'What the hell is this? This isn't Monkey Island. I'm going out side for a hike.'

Accomplishing this and coming up with a new style was fairly difficult. The way I tried to do this in the backgrounds was to go back to Monkey Island One and Two, find elements in the background that were pretty recognizable and put them into the our game using the new style. For example, in Monkey Island Two Peter Chan had design a really cool throne in LeChuck's fortress, it was destroyed in the game, so I couldn't use it for throne. But I did put it in the background of his ship where it fit right in. We also put the Voodoo Lady in a creepy swamp like she was in Monkey Two.



Courtesy of LucasArts Entertainment Company

Another way was to use reoccurring characters like Stan the tacky used ship, coffin and now insurance salesman. And Wally, the cartographer from Monkey Two and Lemon head, the vegetarian cannibal from Monkey One. We also continued a joke from the first game where Guybrush crawls up through a tree trunk in Curse of Monkey Island and stick his head out in the forest of the Secret of Monkey Island. And at the end of the game we had dioramas of scenes and characters from the earlier games like Herman Toothrot and the hanged man, Guybrush, Wally and LeChuck in the torture chamber from Monkey two.

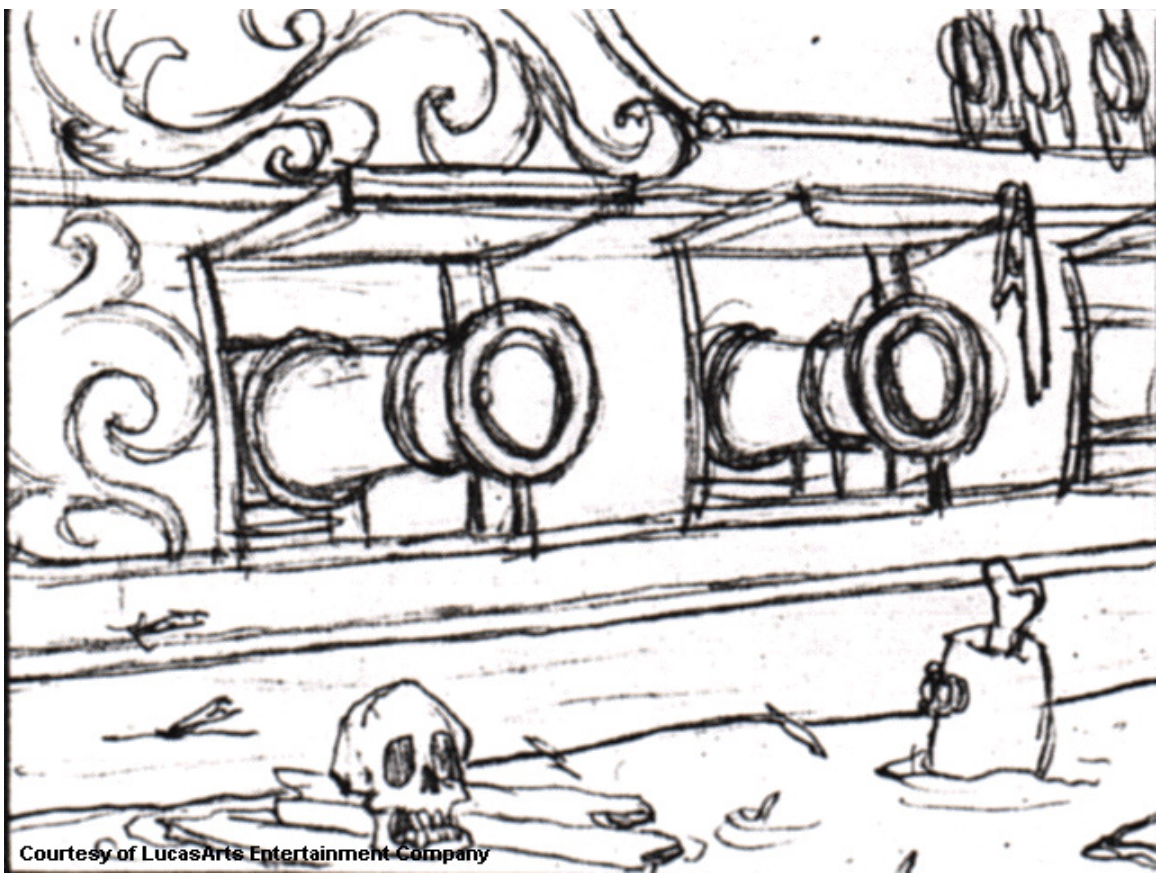


Courtesy of LucasArts Entertainment Company

But I think the best way to we kept the feel consistent from the other two games was by going back the source for inspiration- Disneyland's Pirates of the Caribbean ride. I must have ridden that ride at least fifty times in my life, so I know it pretty well. Pirates of the Caribbean captured the feel of what we want the world of pirates to be like - beautiful, romantic and exciting. Disney did a great job of making silting throats, kidnapping brides and getting drunk with a bunch of filthy pigs seem so much fun. And we on the Monkey Island games tried to do that too.



Courtesy of LucasArts Entertainment Company



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CONCLUSION (FINALLY!)

The real reason for giving this talk about the art style beside the free pass and all the hot super models this conference seems to attract, was to encourage any art director or game producer listening to think about giving your next project a unique style. It really helps give your project its own identify especially if your game is in a crowded genre like the first person shooter or the resource management game. Too many games settle for just looking good and but not think about looking good and different at same time. How many time is an Orc going to be green and have fangs or and elf going to be blonde with pointy ears. I know that is what most players want, but nobody knew they wanted *Star Wars* till George showed it to them, or nobody knew about the horrifically beautiful alien from the movie *Alien* till H.R Giger made his mark.

Take a risk with your art style; as long as it is quality work, and everybody likes the direction you are going, it will work out. It did for us.

