

You're listening to Imaginary Worlds, a show about how we create them and why we suspend our disbelief. I'm Eric Molinsky.

CLIP: LION KING TRAILER

Disney's "live action" remake of The Lion King has made over a billion dollars, although it was not critically acclaimed. I haven't seen the movie, but I noticed a lot of critics said the movie actually made them miss hand drawn animation because hyper realistic computer animation of animals doesn't leave very much room for characters to express themselves. That's how I felt watching the trailer.

I'm not totally against this trend of quote "live action" remakes. I thought the 2016 Jungle Book looked amazing, and it actually improved on the original in some ways because Disney died while they were making the original film, so the storyline was a bit thin. Also the 1967 movie had some offensive elements that needed to be left in the past.

But as more of these live action remakes are being planned, I'm becoming more bothered by them. What really set me off is when I saw a picture from Disney's "live action" Lady and The Tramp. It just looks like a picture of dogs. And the trailer ends with them looking lovingly at each other, over a plate of spaghetti. But since they're hyper realistic dogs the expressions on their faces feel weirdly fake to me.

CLIP: 2019 LADY AND THE TRAMP TRANSITION TO 1955 FILM

That was one of the most iconic scenes in animation history. But unless you work in animation, or you're big Disney fan, you probably don't know who animated that scene in 1955. It was Frank Thomas.

CANEMAKER: Frank was a very dear friend of mine, a close friend and uh, knew him for about 30 years. He was the most intelligent of animators and yet his work never smacked of dry intellectualism. It was always, full of emotion.

John Canemaker teaches animation at NYU. He also wrote a book about classic Disney animators. He says Frank Thomas was particularly good at handling scenes that required subtle emotions because, as they used to say, an animator is just an actor with a pencil.

CANEMAKER: What a mess that could've been two dogs scarfing down spaghetti, and yet the timing of it, the tastefulness -- it's superb. Superb acting. He was great. Frank Thomas was one of the greatest actors of all time.

He was doing both dogs?

CANEMAKER: Did both, sure, yeah, and the spaghetti strand.

Laughs

Frank Thomas was one of The Nine Old Men – who were the top animators at Disney from the '30s to the '70s. The phrase was a reference to FDR, who used to complain about the quote “nine old men” on the Supreme Court kept invalidating The New Deal. Disney called his top guys The Nine Old Men as a joke because they were still pretty young at the time.

This is when animators were mostly men. Women were hired in the color and design departments. And the number nine was arbitrary. At the beginning, there were more like dozen guys in that top echelon, but life got in the way. One of them died in a car crash. A few left the studio – some in anger because they led a strike to unionize that failed horribly. So The Nine Old Men also happened to be nine very loyal company men.

And that group of nine got four decades to perfect their craft.

JERRY: You know, they could do any scene they can do, you know, any thing that could be thrown at them on the storyboards, they could tackle it, master it, make it happen.

Jerry Beck teaches animation at CalArts.

JERRY: You could make a full feature film, whether it's Sleeping Beauty or 101 Dalmatians or whatever with these guys, they can do it, they can make from scratch. The business left Disney alone, they didn't the talent, they didn't have the people to do those kinds of movies.

When I worked in animation, I wanted so badly to have been one of The Nine Old Men. In fact, I used to show potential girlfriends a documentary called Frank & Ollie -- about Frank Thomas and his best friend at the studio, Ollie Johnston. And I felt like if these women appreciated that movie, they would get me.

What I loved about The Nine Old Men was their relentless dedication to creating life out of mere drawings. They were on a quest to find a sense of humanity within characters that were not even human a lot of the time. Frank Thomas brought a doorknob to life in Alice in Wonderland.

CANEMAKER: I mean, that character goes through several emotions in a very short time. He's haughty. He's officious. He's mean, he's cold, and he's sympathetic. It's an amazing performance and it's just this head on the screen of a doorknob. (Laughs)

Today we're looking at the legacy of The Nine Old Men. And maybe, just maybe, if more people appreciate what they did and how they did it, we could nudge the demand a little bit forward for having that style of animation back in theaters again.

That's just after the break.

BREAK

Andreas Deja wrote a book about The Nine Old Men. He was also part of an elite group of young animators in the '70s and '80s that were trained by The Nine Old Men just as they retired.

Andreas grew up in Germany. He moved here to fulfill his dream of being a Disney animator. But it was hard work. He remember one day early on, he was struggling with a scene. So he went to his mentor, Eric Larson, who was one of The Nine Old Men.

ANDREAS: So I go to Eric's room and he asks me what are, what are you trying to say in this scene here? What is, what is the character supposed to do? So I would tell them, I said, I have this witch and she has his broom and she is trying to jump onto the broom, but the broom has an attitude and throws her off. And he said, okay, if that's what you're trying to do, then we need this drawing. We can throw out this one. We can throw this one, we keep the next three and he kind of would pick and choose the drawings that really matter any and he might and he might actually throw in two of his own drawings. It's like two loose sketches. And then I filmed that and tested and I would go, oh my God, this is so simple and believable. Now it's magic. It wasn't magic when, when I did it, but now, now it's - because he helps you simplify things and he helped you to communicate.

Did you ever have, um, you know, once they all started retiring, I mean, did you ever feeling like, um, you know, when you read about the artists after the renaissance for hundreds of years, they kept comparing themselves to Michelangelo and DaVinci and feeling like, ah, curse these hands, why can I do this? Did you ever feel that way sometimes?

ANDREAS: Yes. The answer is yes. I mean, we all felt like that, all of us who went through the training program and got accepted and started as the new guys at Disney because there really was that burden and that this amazing work that The Nine Old Men and others had done. And how on Earth are we gonna be able to come up to that level?

Let's go back to the beginning. I mean not the very beginning of animation when characters looked like they were made of rubber hoses, and they would bounce up and down while they were standing still because the animators didn't know how to make you believe that character was alive.

There was great animation way back then, but the young Walt Disney wanted to push animation to a new level. Everyone knew a cartoon could make an audience laugh, but could you make them cry over a cartoon?

So Disney set up a school at the studio. The animators could study everything from abstract expressionism to physics or animal anatomy. And he was relentless in pushing them to get better.

The animators discovered the key to making characters feel believable was giving them a real sense of weight. And one of the guiding principles they relied on was called squash and stretch.

This is a common exercise for beginning animators. Trying animating a bouncing ball. The rookie mistake is to draw the ball in a perfectly round shape falling to the floor over a series of drawings. It looks stiff and unreal.

The trick is to draw the ball mutating into a long stretchy oblong shape as it falls. Then it flattens into a pancake when it hits the floor before it shoots back up into that long stretchy shape and finally returns to its natural shape, as a perfect sphere. The drawings look cartoony on their own, but when you film them at 24 frames per second, the ball feels surprisingly naturalistic because that's what's happening to the ball in real physics but on a very subtle level.

Squash and stretch can be applied to anything. Among The Nine Old Men, John Lounsbury (Lowns-bury) was the master of that principle.

ANDREAS: John Lounsbury had really an amazing use of squash and stretch within the face. You really see flesh moving over bones. And when I look at his character, from Lady and The Tramp, for example, Tony and Joe, the two Italian guys, man, when they talk, there is all kinds of wonderful stuff happening that relates, I mean where one part of the face relates to the other, the mouth stretches out for a big A and you see these, these lines going down the nose to support this big stretch.

CLIP: TONY AND JOE

The other breakthrough was realizing how much inertia affects the movement of everything.

Here's another assignment for beginning animators. Animate someone picking up a pencil. If you animate the whole arm lurching forward to grab the pencil – it feels wrong.

In reality, your elbow moves first. Then your arm follows your elbow. Your hand is limp for a split second before your wrist snaps up your hand so your fingers can branch out, ready to grab the pencil. The fabric of your sleeve will drag a split-second behind everything else. The Nine Old Men called those principles breaking of the joints, anticipation and follow through.

Think of Mickey Mouse in The Sorcerer's Apprentice. The cuffs of his sleeves are dragging behind his arms, while his hands are flipping up and down. The movement is mesmerizing and fluid.

CLIP: FANTASIA

Les Clark animated that scene. He was always assigned Mickey Mouse because he was the guy who had the best intuitive understand of who Mickey was and how he's react to situations.

And that's where things get really interesting because The Nine Old Men were often assigned characters that reflected their strengths. And over

time, The Nine Old Men developed their own styles that fused with the characters they animated.

And if they couldn't physically do every drawing in a film, so The Nine Old Men were assigned teams of junior animators who worked in their style, and could help them achieve their vision for those characters.

Again, John Canemaker:

CANEMAKER: There is a, a signature of, of great animators that comes through. Even though there are character model sheets and everybody's supposed to be on model and, and there's to be no deviation from, from the models. You can't help it. I mean the hand of everybody is different. The graphic signature of everybody is different. And so you could with the hand drawn animation of the great animators discern their work.

For example, Frank Thomas had a way of drawing eyes, where he would lean into his pencil so the upper lids and the eyebrows had a heaviness to them. When one of his characters pops on screen, I can tell it's a Frank Thomas drawing.

As I mention earlier, Frank Thomas and Ollie Johnston were best friends at Disney. So they were assigned characters that had a strong rapport. When you're watching Bambi and Thumper, Bahgera and Baloo in the Jungle Book, or Captain Hook and Mr. Smee – you're watching Frank and Ollie playing with each other like a comedy team.

CLIP: HOOK AND SMEE

But then there was Milt Kahl. His style was angular and highly detailed. He was good at doing villains – like Shere Kahn in The Jungle Book.

CLIP: SHERE KAHN

ANDREAS: This was the guy who set the standard in terms of drawing. In fact nobody drew like Milt Kahl – it was like a master drawing every time.

If a character was difficult to animate, Milt Kahl wanted that job. Remember when Andreas said he'd go to the archives to study Pinocchio's animation?

That was Milt Kahl. And sometimes he would even have different parts of a character's body moving at different speeds.

ANDREAS: Let's take his last character he did for the studio, which was Madam Medusa for The Rescuers you have the, you have this, this fantastic scene where the, the character takes off a false eyelashes in front of a mirror as she's talking to Penny, the little girl. And so Milt has a bunch of stuff going on. The main head who was moving just very, very slightly maybe. Then there is the motion of pulling the eyelashes with Medusa's fingers, which has its own speed and then she's also talking.

CLIP: MEDUSA

Marc Davis also animated villains, like Maleficent and Cruella de Ville – but he was assigned those characters because he was really good at animating women from Alice in Alice in Wonderland to Tinkerbell to Cinderella to Sleeping Beauty. The Disney Princess look was really the Marc Davis look.

CLIP: CRUELLA

But if you were watching the animation of Ward Kimball – it would be a different experience. Ward Kimball was the closest they had to a Looney Tunes type animator, so he was often assigned the comic relief characters.

CANEMAKER: He was a Vaudevillian at heart. And he said, you're halfway there with your drawings if, if you're drawing is funny looking, you're halfway there and making funny animation. And his drawings were extremely funny.

CLIP: LUCIFER CAT

CANEMAKER: He did the wonderful evil cat in Cinderella as a great scene in Cinderella, and only Ward Kimball could get away with this, but he has the cat going up a staircase. It's this big fat cat and its body forms the shape of the staircase as it goes up. It becomes a zigzag form as it scoots up the staircase. At the meantime, he has the feet going and they're moving animated naturalistically. So you get both things there. You get a real cat movement and an absurd, eccentric weirdo only Ward Kimball could do it movement going up the staircase, it's an incredible scene.

So you have all these different guys with their own styles playing different parts, movie after movie, like a theatrical company where the same cast puts on a different show every year.

And the Nine Old Men trained the next generation to work the same way. For instance, Andreas Deja is best known for animating villains like Gaston from Beauty and the Beast, Scar from The Lion King, and Jafar from Aladdin.

CLIP: JAFAR

He animated heroes too, like Hercules and Lilo from Lilo & Stitch, but throughout all of his work, you can still recognize his style, which is often angular with a strong sense of weight. And he shared the screen with animators that had totally different styles, like Eric Goldberg, who did the genie in Aladdin because his specialty was comic timing.

ANDREAS: If I had animated the genie in Aladdin, it would have been not just a little bit different, it will be completely different character because the way I would have approached that genie, and luckily Eric Goldberg did it because he's a genius and he was the perfect casting for him. If Eric had animated Jafar, my, my character in that movie, he would've done it completely differently.

See, now I'm imagining a Jafar animated by Eric Goldberg and you animating the genie – what would that look like? I'm just curious.

ANDREAS: It will be very snappy and timing and, uh (laughs)

You mean his Jafar would be very snappy.

ANDREAS: His Jafar would be very, very snappy. Uh, I, I'm not saying that he would move him like the genie because the genius sort of this fantastical creature, but it's different. If I had done the genie, uh, I would, uh, emphasize the perspective, the height, cause he's a, he's a big guy. Often there will be a lot of shots where, uh, Aladdin would, would look up at his gigantic characters and I would draw drawing from, from way up high with a small head and maybe useful arms, just stuff like that because, uh, that, that would just be my approach.

When I studied animation in the mid '90s, Andreas's generation of animators were our heroes. We expected them to have 40 years to master their craft, like The Nine Old Men. But computer animation took over.

ANDREAS: I tried computer animation for, for a couple of weekends. Uh, I had a tutor come to my home where it's very comfortable and there's this program

called Maya, which is very common for beginners. And, um, we did a bouncing ball, and then he wanted me to do a guy who is doing the jump. He jumps over, uh, like from, from one part in the background to the other. And we got halfway through the jump and I said, you know what, let's just stop right here because I can see how this is done, how you manipulate this electronic puppet, but I'm just not having any fun because I can be spontaneous.

When he says electronic puppet, he means a computer-generated character is like a digital marionette you're moving around. CG animators are still applying the same principles, like squash and stretch, but John Canemaker says something is lost when you're not recreating that character from scratch with every drawing.

CANEMAKER: There is a more direct connection between the eye, the mind, the hand and the drawing instrument. Uh, it is a more direct way. Uh, there is a warmth to it. There's a possibility of the happy accident, you know, the human, uh, element coming in there more in a more direct way. It's just different!

Another difference: computer animators are not assigned a character to oversee throughout a film. They animated all the character in a scene. And those scenes they're assigned are scattered through the film. Jerry Beck says:

JERRY: You cannot tell, you know, unless you're best buddies with the guy and you're both working at Pixar and you know how he moves something you will not know who you know, animates each scene in an animated CG film these days.

Obviously there's great computer animation. Hello, Pixar. But in promoting CG movies, the focus is usually on celebrity voices. In some case, the characters are really supposed to be the avatars of those celebrities.

ANDREAS: It's really interesting to see that celebrities and the voices are really the forefront when it comes to advertising for the movie doing trailers or whatnot. It's the, it's a voices -- the animators are sort of way in the back. Nobody really knows who animated what in the, in the CG films and that was different when, uh, one of our films came out. It was always the animators being on tour, traveling the world and saying, this is how I drew Lilo, this is how I drew Scar and let me show you. It was that kind of thing.

That imbalance is even stronger with the “live action” remakes. Andreas is very impressed with the hyper realistic computer animation.

ANDREAS: But then these characters start to talk and they all seem to be talking, look, they're hardly put their lips apart. You just kind of talk like this, and I'm wrong. They should have had me as a consultant. Certain words need a bigger mouth than even live animals can open their mouth really wide, you know, so, so you could pull that dialogue off by being a little bit more adventures and not always hold back because they're afraid. They're afraid. It might look cartoony, you know? So when they start talking, I don't believe that.

Jerry Beck says the other problem is that CG animation doesn't age well.

JERRY: I kind of remember when even when Toy Story came out and Shrek, I'm thinking we're going to be looking back at these in 20 years and look how primitive they are. I remember thinking that then and yet hand drawn animation from that period. And of course back in the 1960s and 50s looks great, still looks great to us today. They did achieve a timelessness

Of course, hand drawn animation has not completely disappeared. It's very much on TV with comedies, although TV animation is more limited, and the workflow is more like CG animation.

With feature films, one of the reasons why Into Spider-Verse really stood out was because it was a hybrid of 2D and 3D. In fact, they made sure the animators drew the facial expressions of the characters with electronic pencils on digital tablets so they could have a human touch. Jerry Beck is actually quite hopeful about the future of 2D.

JERRY: I do want to say as a teacher and as an educator, all the students are, as far as I can see, are into hand drawn animation, whether it's anime or classic Disney or even just the styles we see on TV shows like Spongebob or Adventure Time. It's bubbling way under the surface. A lot of the student films or are hand drawn, which is a great thing for them to learn even if they're going into CG, but I think they want to do hand drawn animation and it's just a matter of time before it explodes back. And I believe they will be jerry rigging, you know how to do it by studying The Nine Old Men. It may not look like Disney Nine Old Men, but it will be a modern version of what we can do with hand drawn, the next phase of that handcraft, that's animation.

That's it for this week, thank you for listening. Special thanks to Jerry Beck, John Canemaker and Andreas Deja – who is working on a half hour animated short that will be out next year. It's about a friendship between a little girl and a tiger.

ANDREAS: And it's this, the ride of my life after my three decades at Disney to keep going and put the director's hat on and decide on final colors, decide on the styling of the whole film. So you wear all these hats plus animating. It's called Mooshka, which is the name of the tiger. And which in Russian means, sweetheart. So yeah!

There is one country where 2D animation never left theaters. Next episode, we'll look at one of the most successful and controversial franchises in the history of Japanese anime: Evangelion.

By the way, if you live in New York and you've always wanted to start your own podcast, I'm teaching a class at NYU called "Creating a Narrative Podcast." It runs every Tuesday night from October 8th to December 3rd. Enrollment is open now.

My assistant producer is Stephanie Billman. You can like the show on Facebook. I tweet at emolinsky and imagine worlds pod. The show's website is imaginary worlds podcast dot org.

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