

Wish Dragon

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Introduction

“In April 2018, Wish Dragon was announced to be the first film produced by Base Animation, a new animation studio that is part of the VFX firm Base FX. Their goal of the film and the Base Animation studio is to "make world class animation in China for China... and the world". Director Chris Appelhans wanted the film made in China, with a strong Mainland China creative team, an international cast of talent, and a focus on the hopes and dreams of contemporary China. The film also had a set release of July 26, 2019”[1]



Visual Effects

“Wish Dragon is the first Sony Pictures Animation film to be produced by Base Animation, a new animation studio that is part of the VFX firm Base FX and also the first to feature visual effects and animation provided by Industrial Light & Magic.”[2]



Preproduction

The story inspiration for The Wishing Dragon began 15 years ago. Director Appelhans made a good friend in Shanghai. Over the years, through the ups and downs of his friend's life, he has witnessed the rapid development and changes of Chinese society.

In this way, "Wishing dragon" -- a modern Chinese Version of Aladdin's story about friendship, family love and the value of life -- gradually took shape in Appelhans's mind.

"Young People in China are living in a country that is changing and developing so fast, with so many possibilities and potential. They need to decide what is important to them in life. "In that context, we were able to tell the story of Aladdin perfectly, that when you are granted any wish, you immediately decide what is most important to you."

Like Appelhans, producer Chris Blambo is a big China fan and has lived and worked in China for 15 years.

When Mr. Appelhans sent him a concept of a Chinese teenager holding a teapot with a dragon sticking out of it, he was struck by the connection between ancient and modern China. The two hit it off and decided to bring the story of "the boy and the dragon" to the big screen.

Idea/story

“The family-oriented film is being directed by Chris Appelhans (illustrator on “Coraline”) from his own original screenplay. The modern-day fairy tale picks up the moral challenges that emerge from the encounter between a boy and a dragon who is able to make wishes come true.” [3]

Scrip/screenplay

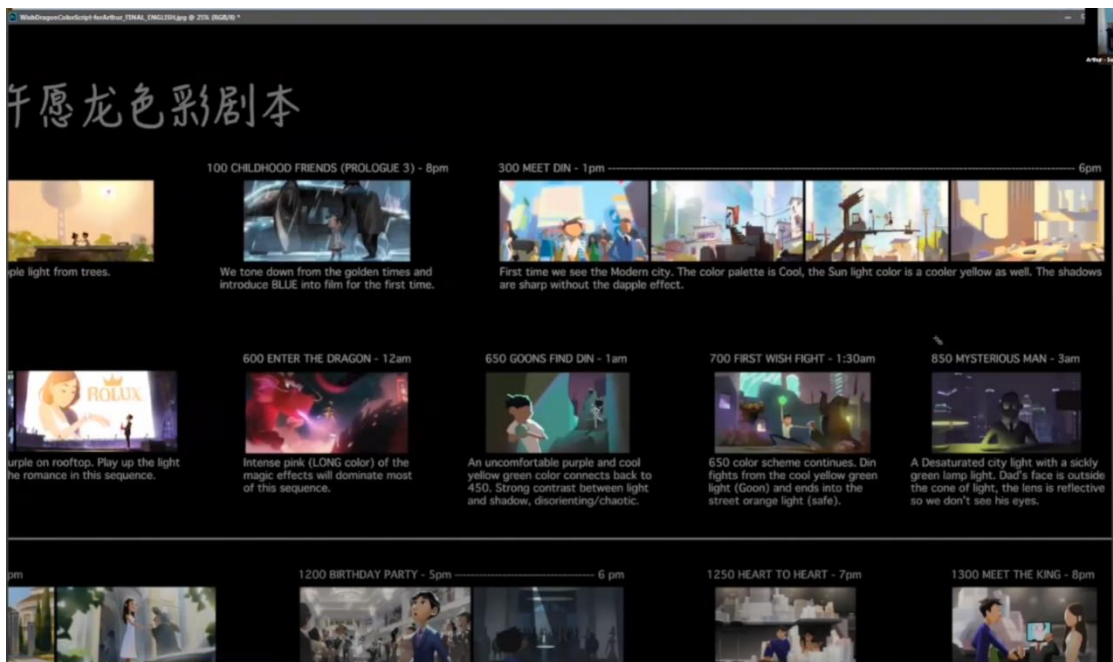
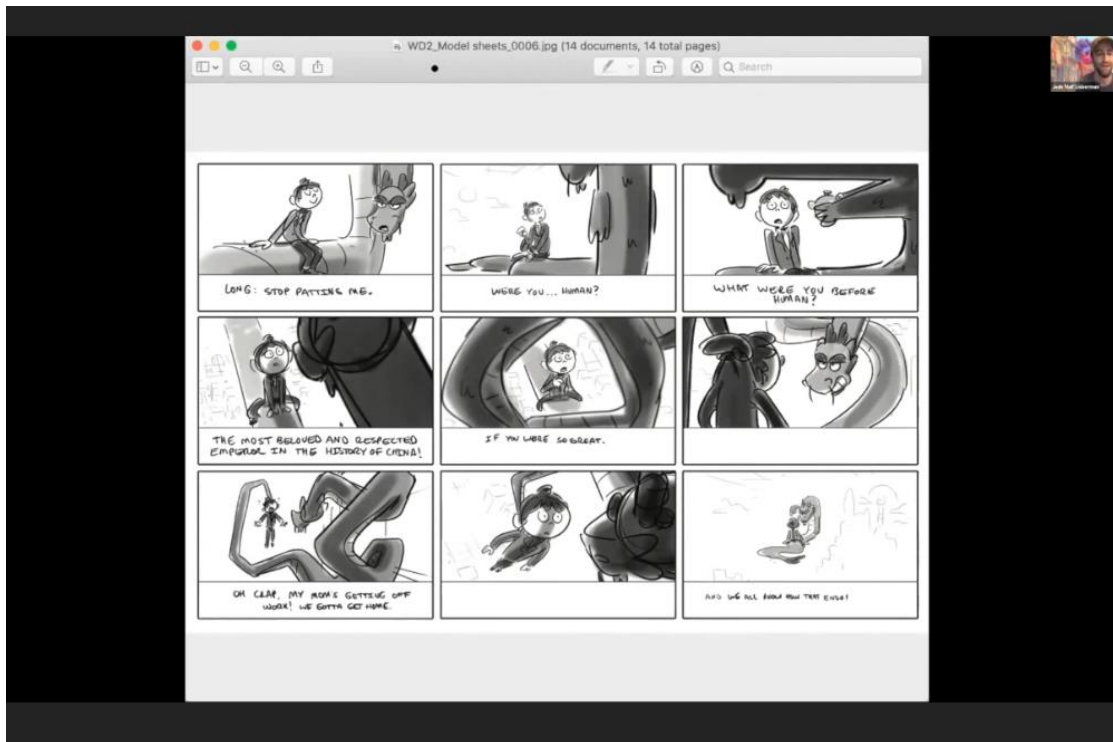
“Wish Dragon stars Mulan’s Jimmy Wong as Din, a young boy living in a densely-populated, working-class neighborhood in China who befriends a girl named Li Na (Natasha Liu Bordizzo). The two spend every moment together as children until Li Na moves to the big city with her father, leaving her old life, including Din, behind.

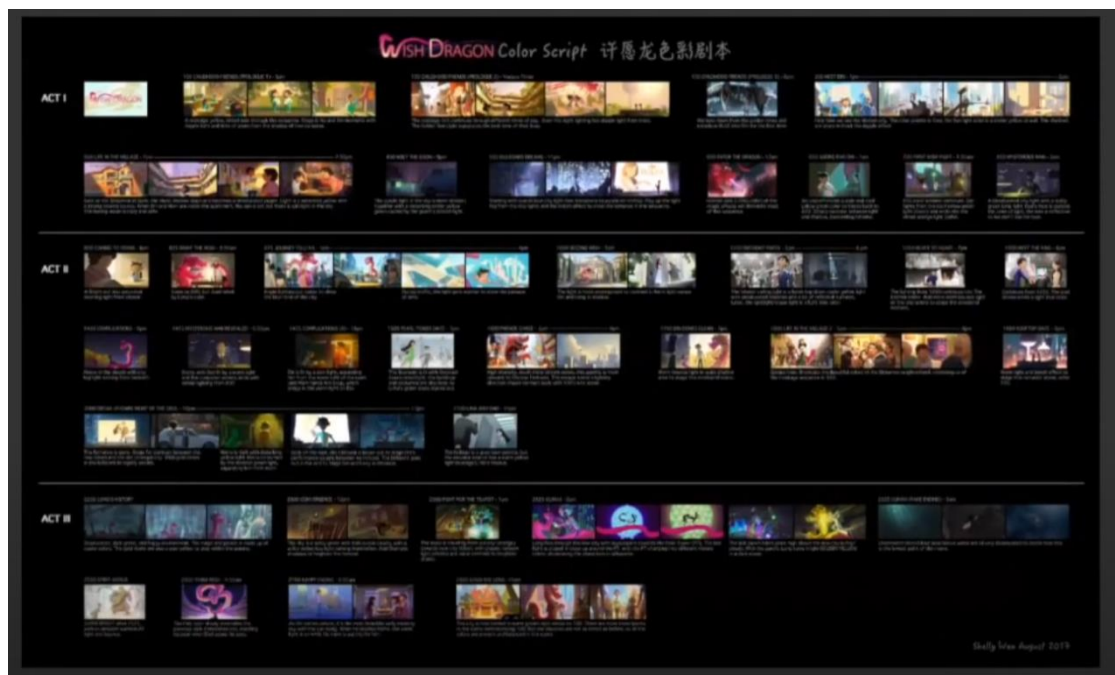
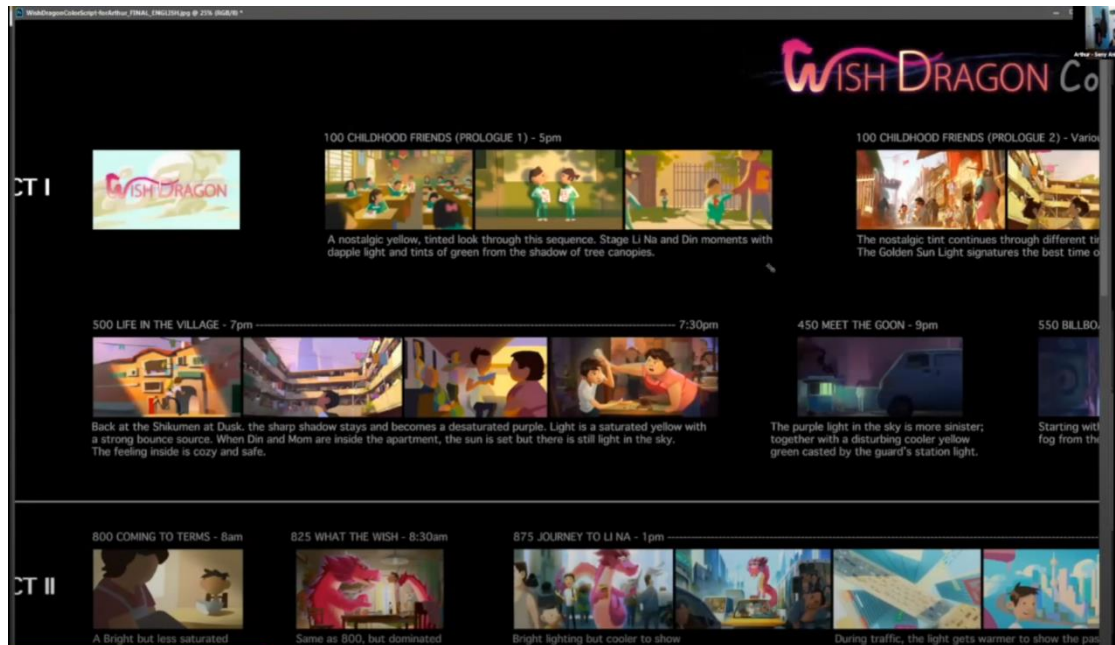
Years later, college student Din, determined to work his way to the top for the chance to see Li Na again, is given a jade teapot by a mysterious stranger. The teapot harbors a pink, fluffy, extremely magical, and extremely sarcastic ‘Wish Dragon’ named Long - played to perfection by John Cho - anxious to

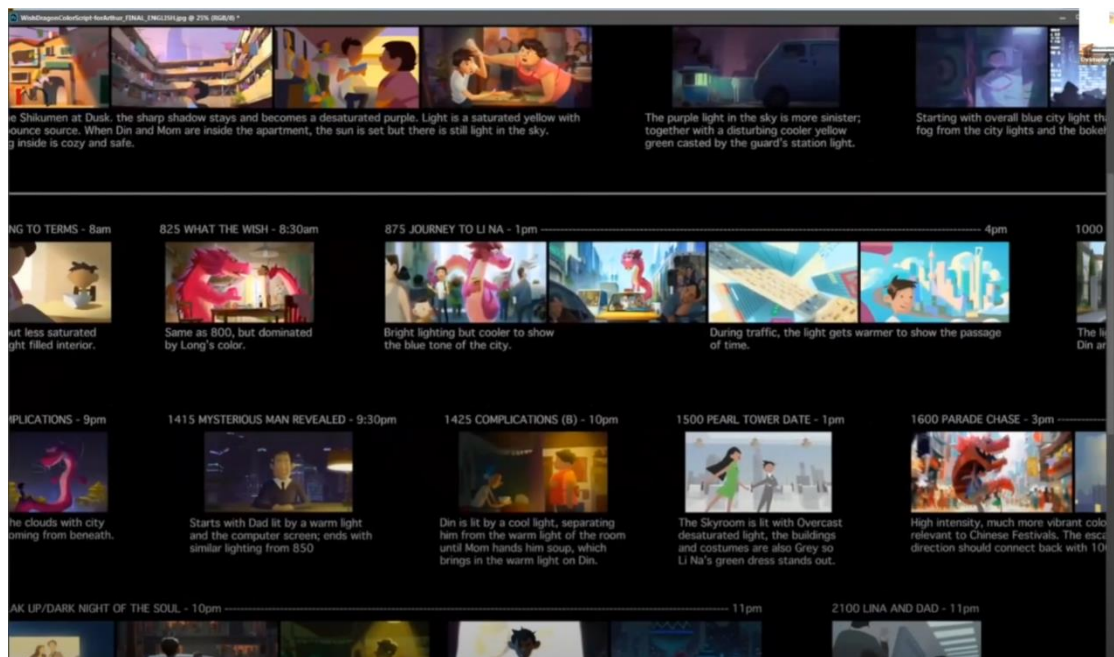
serve the final three wishes to the last master he's cursed to obey before being freed to make a beeline for heaven. The film is filled with bright, beautiful, lively, and lustrous animation, carefully employed to illustrate an emotionally fulfilling story focused on the importance of family, human connection, and what it truly means to be 'rich.' "[4]

Storyboards

"A storyboard is an especially important part of the animation design process. Just like for any video, it provides a visual map that communicates the script or narrative, but it can also include critical requirements that will give clients an idea of cost and time to produce." [5]







Animatic/pre-visualization

“An animatic is a series of storyboard images that have been timed into a pre-visualization video to preview an animated film, show, or video game.

Animatics vary greatly in detail according to the length of animation and budget.

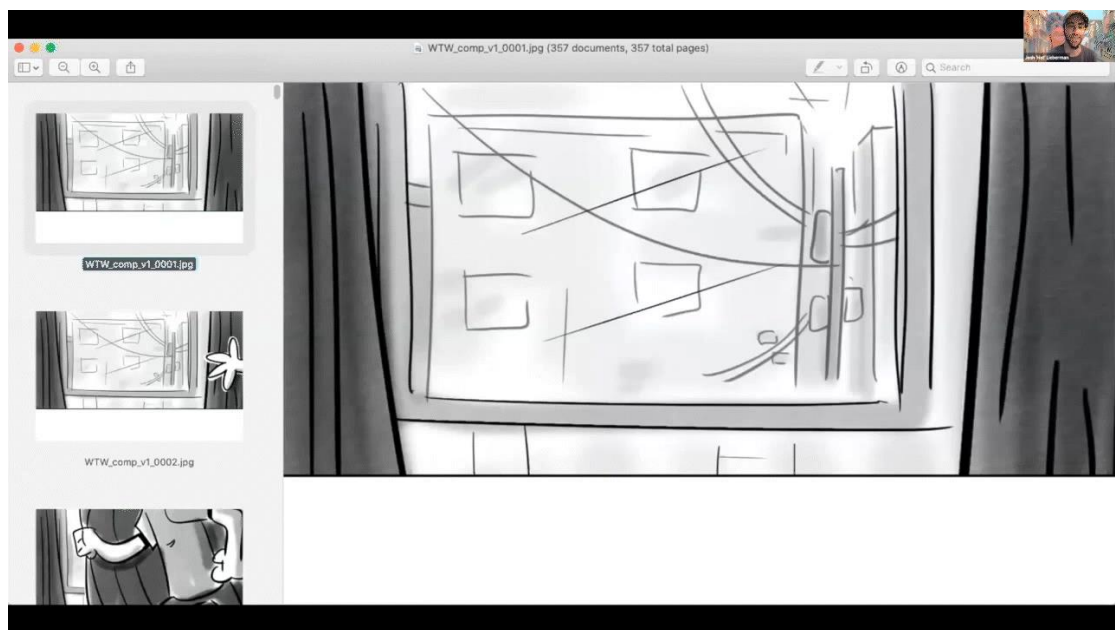
Some are static storyboard frames showing just the timing of

shots. Other types of animatics include more detailed camera pans and even some basic animation effects.

Most also include a first draft of the audio soundtrack and/or voice acting.

The job of an animatic artist is to estimate the time needed for each shot — and in some cases the in-between movements.

Studios & animators use an animatic to make sure animations flow well, and to make sure they can easily be adjusted before it is animated properly. This saves a lot of time and budget.”[6]



Design

“In order to make ‘Dragon Drago’ more flexible and vivid, the design department referred to the hair texture of various animals. The shape, material and tactile sensation of the hair on different areas of the "Divine Dragon" body are different: the hair on the chest is like that of a cat or a dog, which is very comfortable to touch; The hair on the back is woolly and layered; The hair on the horn like the hair of the antlers, thin, in the light will form a very beautiful circle of backlight.

‘The antler-shaped dragon horn is also one of the traditional design elements of Chinese dragons and is a symbol of auspiciousness. Western dragon horns are mostly goat horns and ox horns, which are more aggressive, but the antlers are fluffy and have a kind of affinity. Our whole design language is to make people love it, not fear it.’ *Wish Dragon* digital assets director Xu Junying interpretation.

This kind of traditional and modern collision is also reflected in the bold design of "Divine dragon" colors. Aaron Warner, the film's other producer, who led the "Shrek" series, is known for creating memorable characters with strong personalities. This time, he and director Appelhans also insist on giving "Chinese Dragon" a new color."^[7]

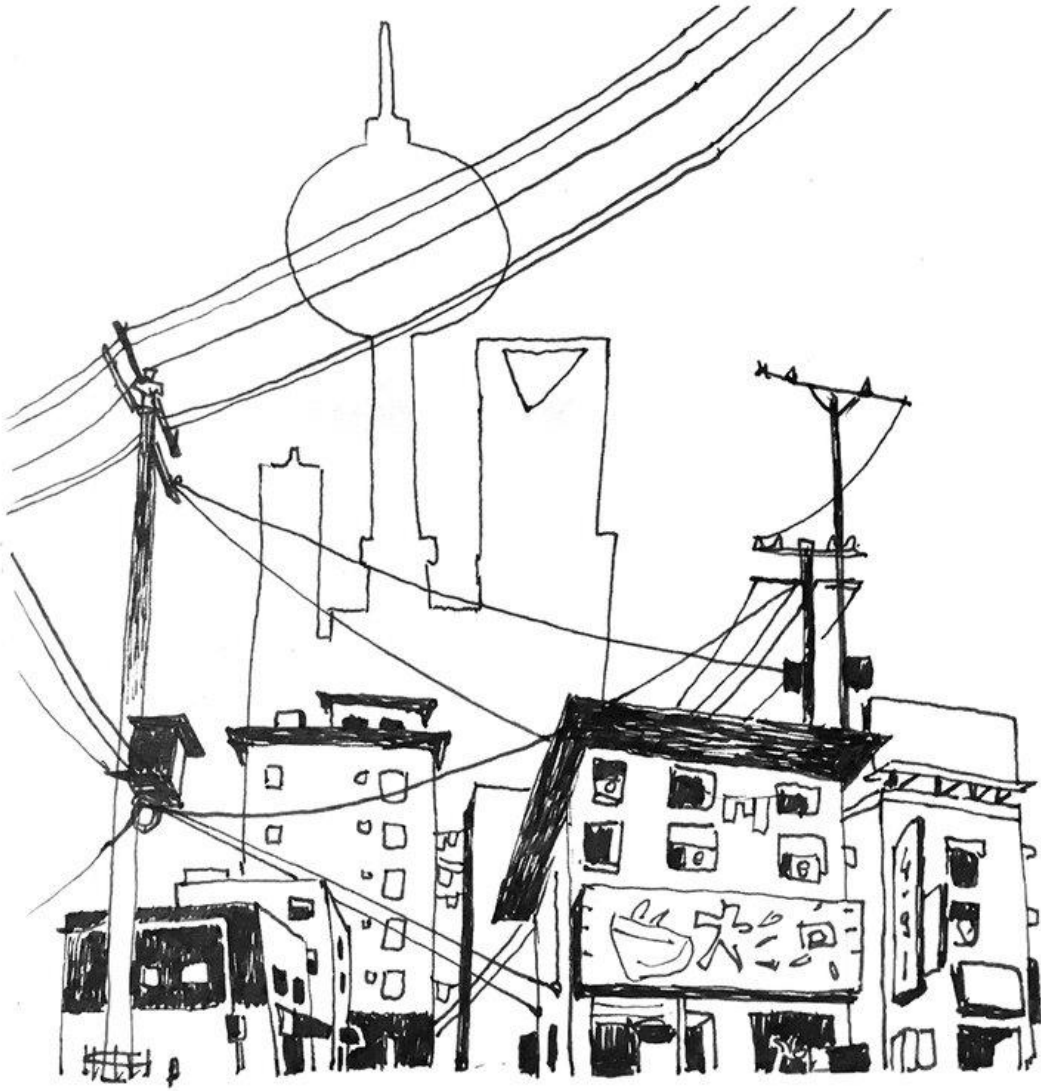




In order to tell a story of Chinese culture and emotion, the creative team of Wishing dragon moved to Shanghai to experience the local customs and customs of the city while surveying the scenery and collecting the wind.

In the process of landscape survey, Shikumen's old Shanghai style caught the eye of the creators. As it happened, one of the visual effects directors on the production team was a Native of Shikumen, so she took the director to visit her

neighbors door to door, sharing old family photos and
childhood stories.



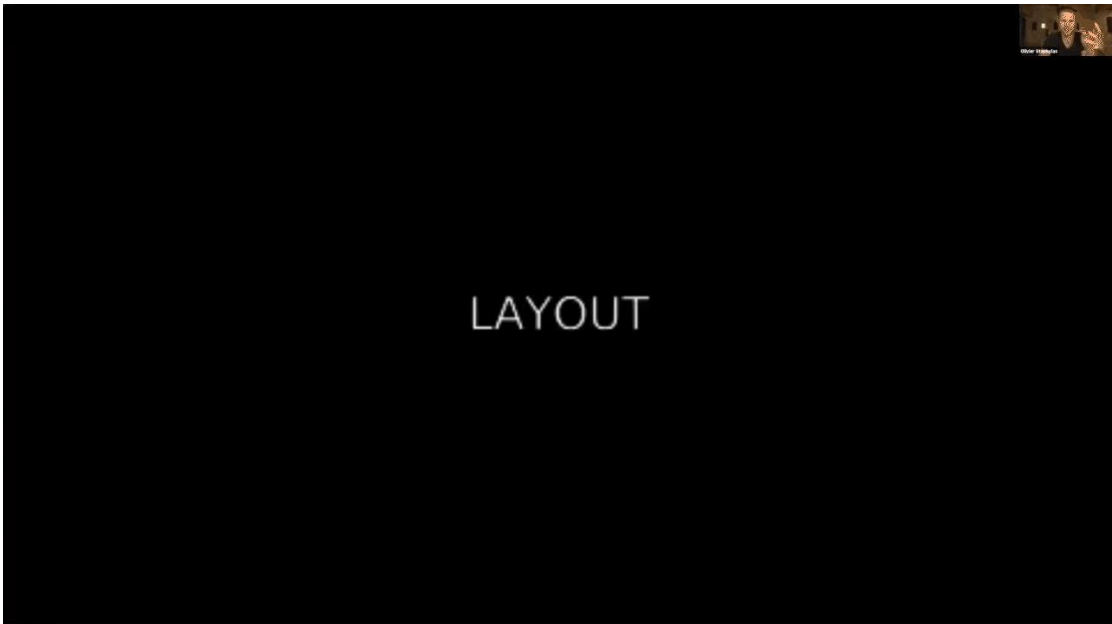
Production

This section includes layout, development, modeling, texturing, rigging, animation, VFX, lighting, rendering, etc. The visual Development Department is responsible for research and development, texture, VFX, environmental effects, etc., while the modeler is responsible for modeling, the skeleton animator is responsible for skeleton rigging, the animator is responsible for animation production, simulated cloth, hair production, etc., and the layout planning team is responsible for lighting projection and virtual camera setting.

Layout

“The dictionary definition of a movie set is: The enclosure in which a film scene is shot; includes scenery and props. While this definition is simple and correct, a set itself, and what occurs on it, is far more complex.”[8] At the beginning of the production phase, the layout determines the final effect of the film.



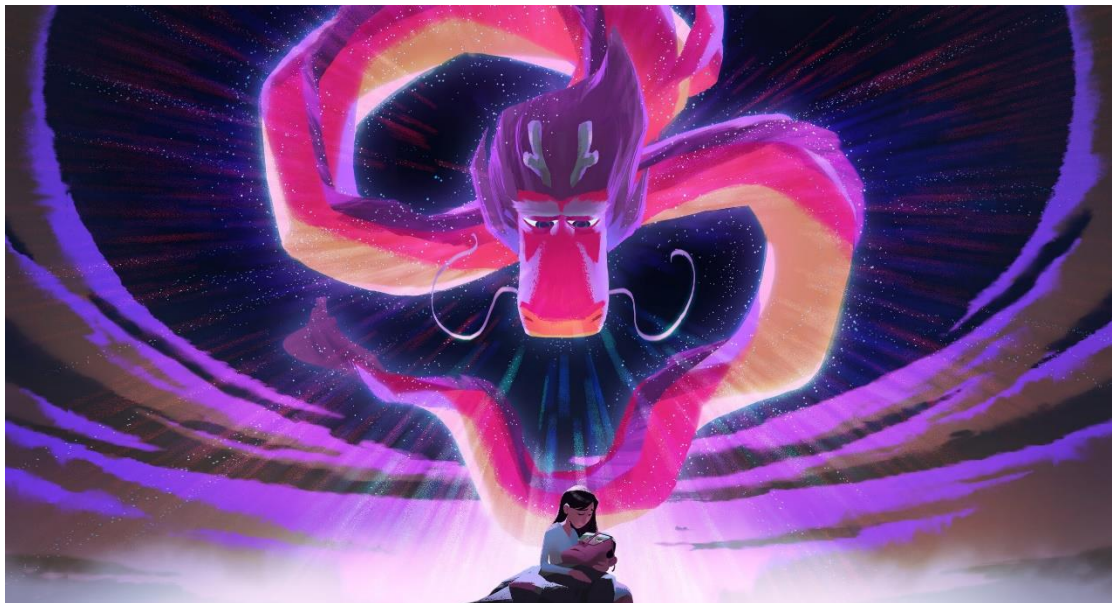


Color

"We have a list of all the colors of the dragon. In the end, we all agreed that pink was the best. That's because it's the exact

opposite of what you'd expect. We wanted to be as different as possible and make it clear to the audience that this is not a dragon in the traditional sense." "The director said in an interview

Color can shape character, pink for the "dragon" into the base cute lovely people temperament, "dragon" this kind of god beast is no longer high, but full of grounding affinity.



For other characters matching colors, the main creation took a lot of thought. Din lives in a poor but happy place, so the color palette is mostly warm, and the colors come mainly from the

alleys of Shanghai.

Din's Neighborhood

The color choices for Din's neighborhood will be stylized and colorful, but appropriate to classic day Shanghai. In order to achieve this, we will design sets with the right color proportions and use only materials that we would typically find in the area (for example: dark wood, brick walls, concrete, plants, etc.).



concrete (45%)

brick and wood (25%)

buckets, blankets, and clothes (20%)

plants (10%)



Li Na is rich, so the color is the cool color of glass, cement and other high-rise buildings.

Li Na's Neighborhood

The color choices for Li Na's neighborhood will be stylized and colorful, but appropriate to modern day Shanghai. In order to achieve this, we will design sets with the right color proportions and use only materials that we would typically find in the area (for example: tinted glass, steel, marble floors, chrome, etc.).



concrete, asphalt, and steel (30%)

glass and chrome (40%)

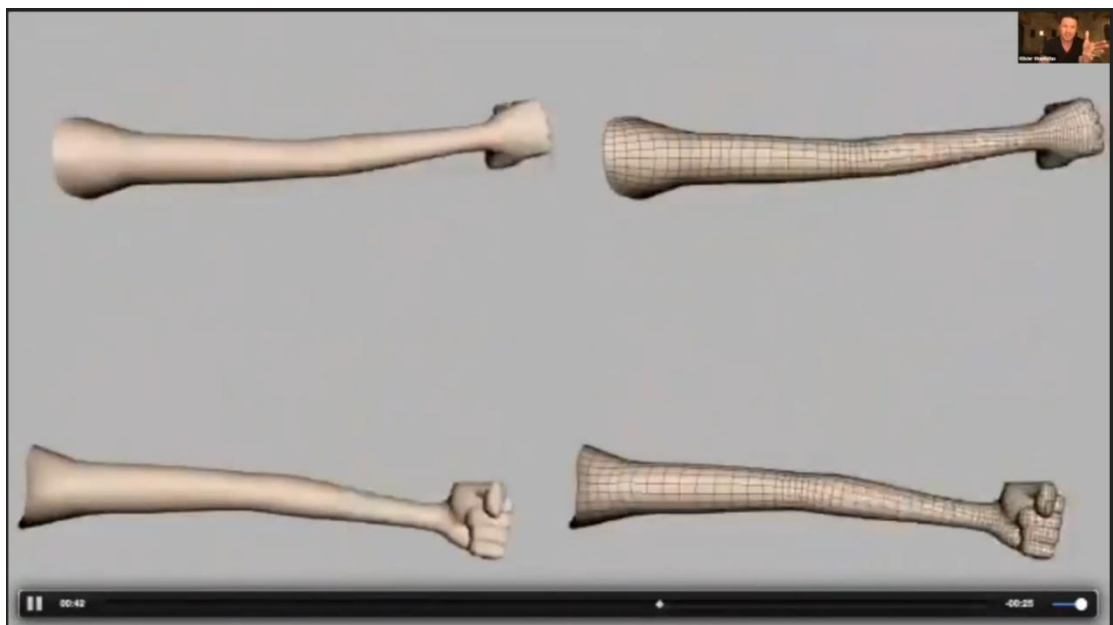
clothes and suits (20%)

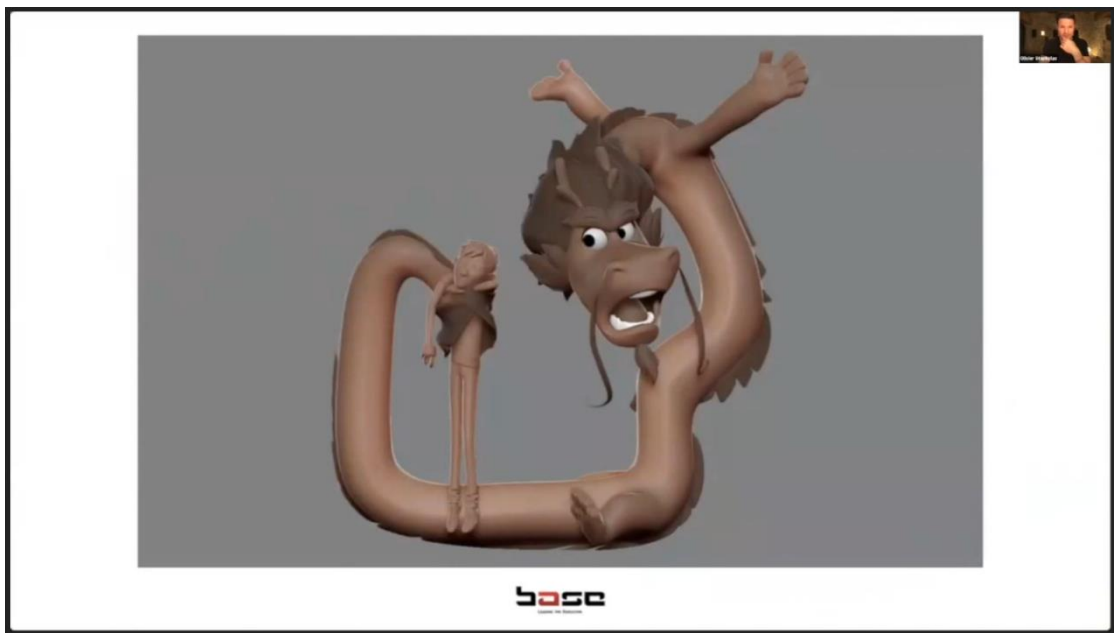
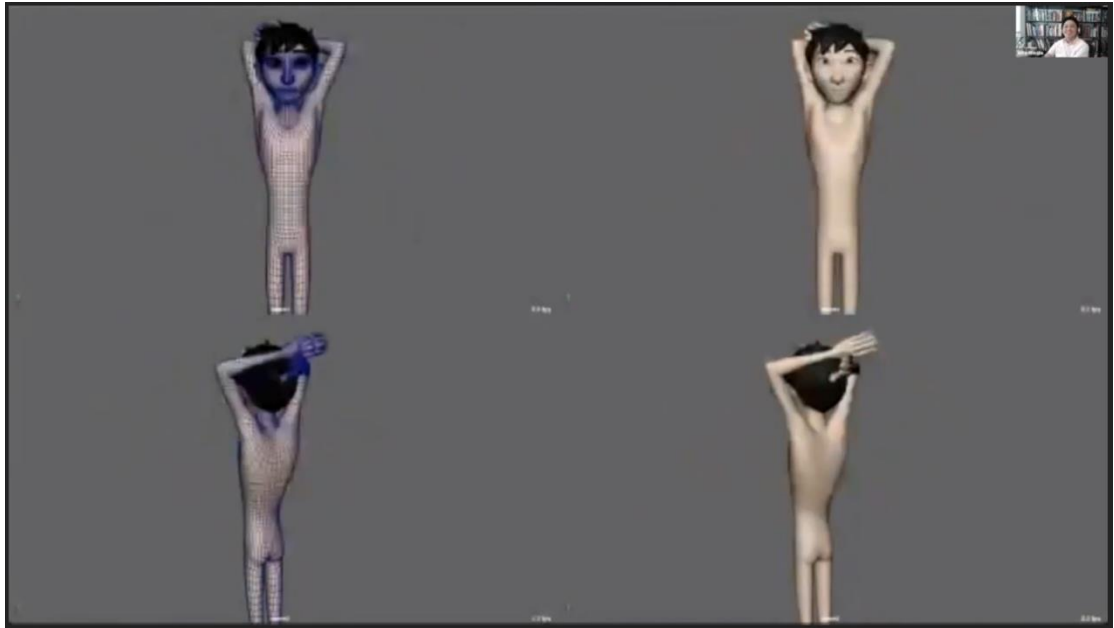
neon lights and night buildings (10%)

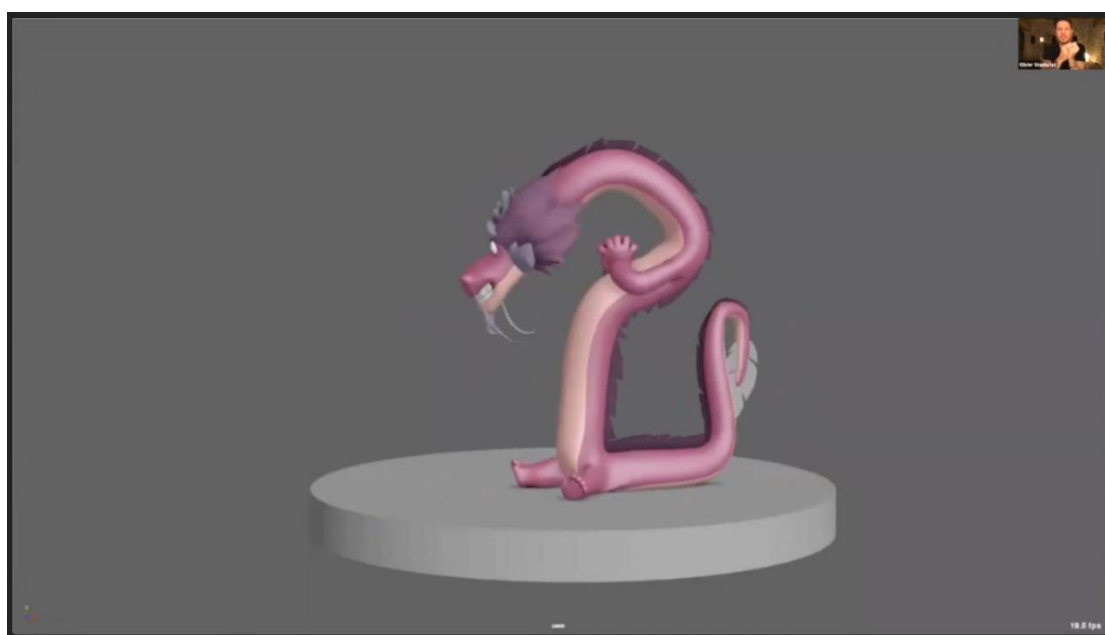


Modeling

The modeling was done by Base Animation, a subsidiary of Base FX



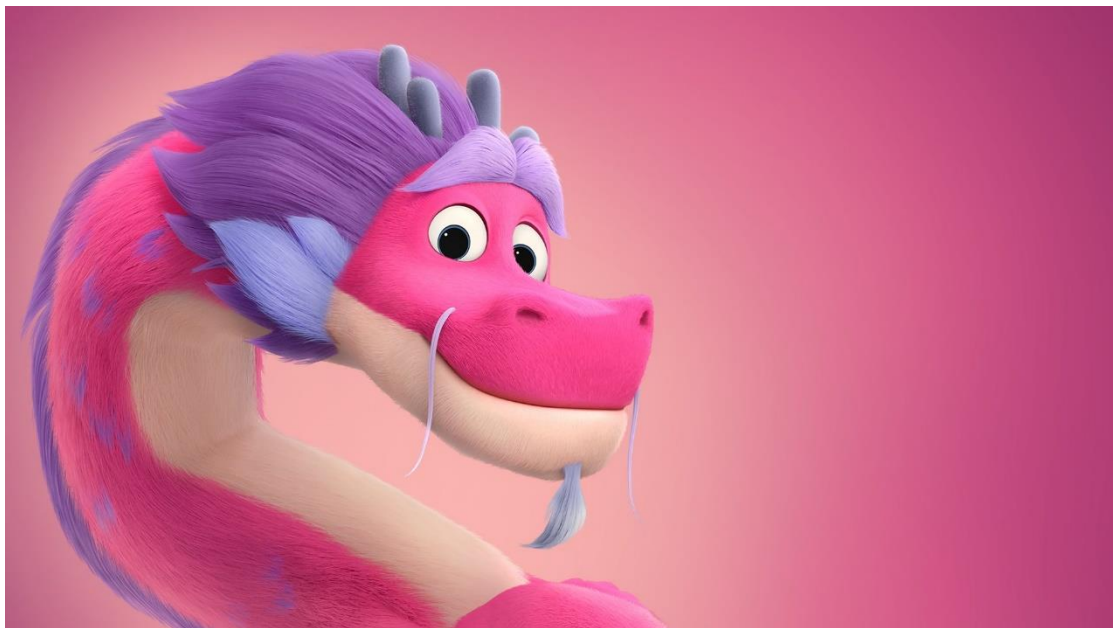




Texturing

“From live-action studios to animation studios, teams have to overcome not only content challenges, but also technical challenges. "Dragons are one of the most complex characters ever created in an animated film," admits producer Chris Brambo. It took the team two years to create just one core character.

A typical character design would use 150 to 350 animation controls, but "Dragon" would need more than 1,000, because to achieve 10 times the body length of the extension and 50 times the body length of the contraction, the natural expansion and contraction of the fur synchronously, which posed a great challenge to the technical department”[7]

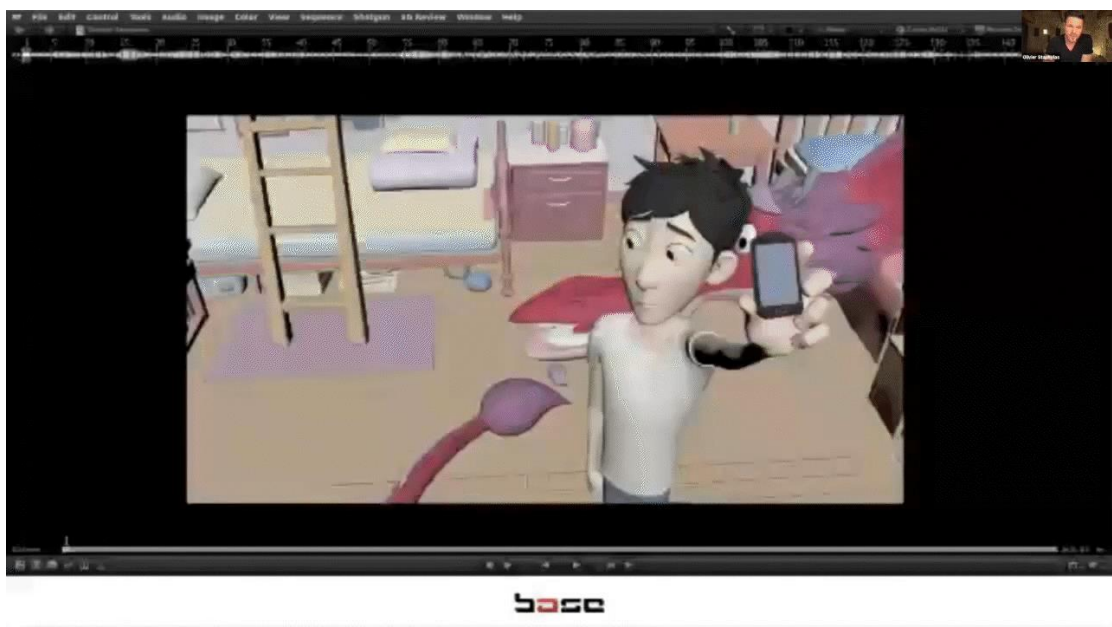


Animation

The animation is done by Maya. In order to better reflect the

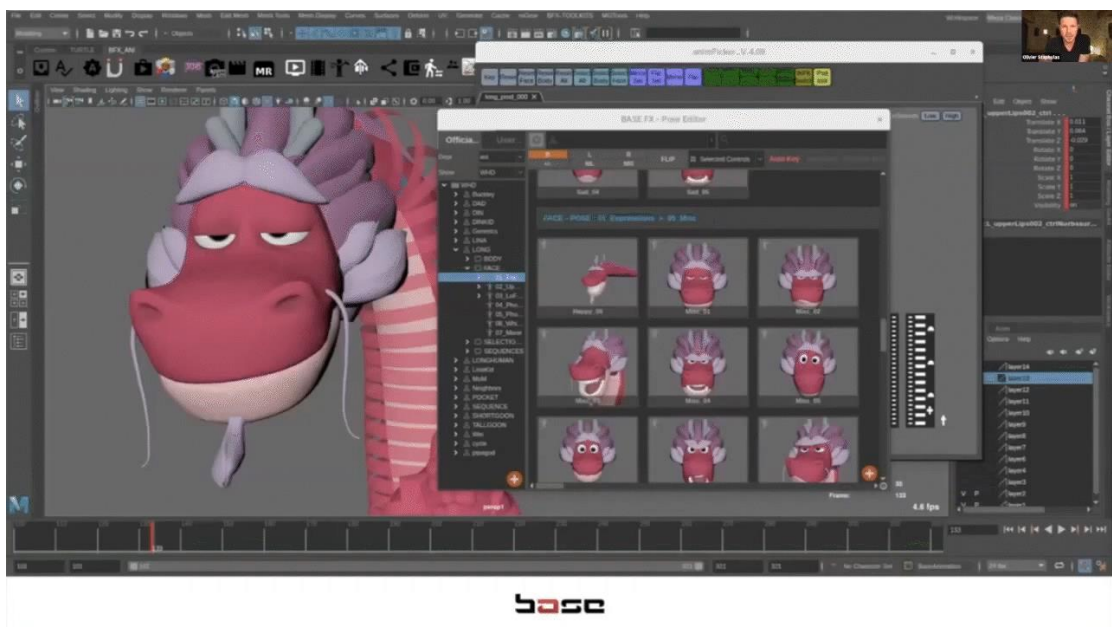
dragon's flying posture in the air, the production team referred to the movement characteristics of snakes, and let the wishing Dragon complete the winding, swimming in the air and other actions.





The dragon emoji was created by Wira Winata [9] Dragons refer to snakes in their movements, but are still more human in their facial expressions.

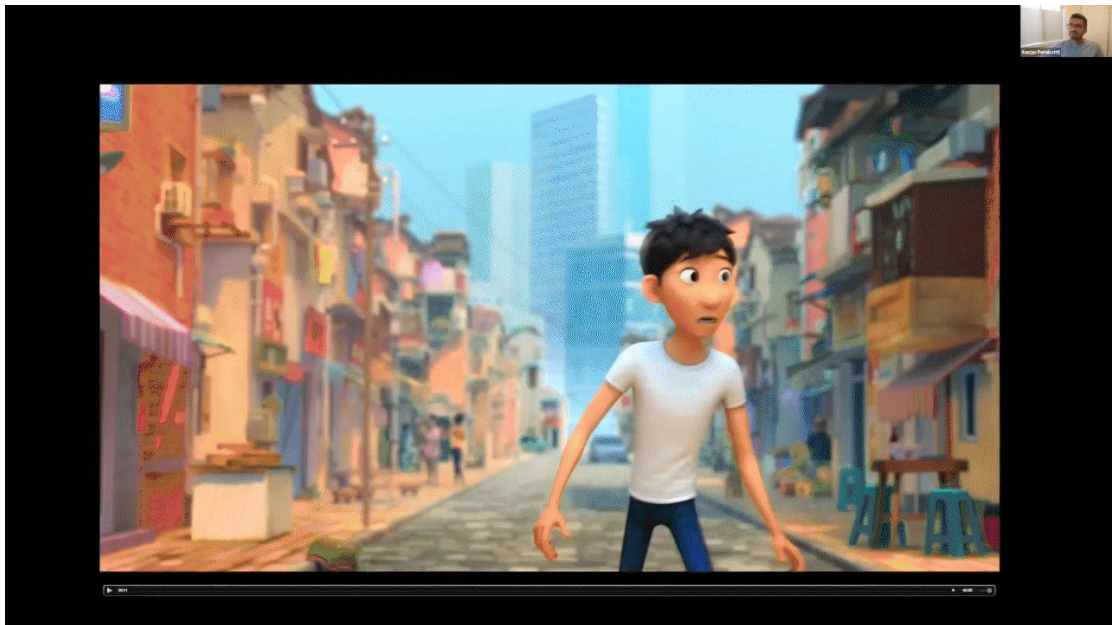




3D visual effects (VFX)

This is a CG movie, without physical shooting, the whole movie is completed by computer, only rendering visual effects so that the director can see the real picture, to help the director better shooting, to modify the action and lighting

effects.



Lighting/rendering

The final rendering was done using the Arnold rendering engine.

ARNOLD

Just like Maxwell, Cycles or Octane, Arnold operates using the unbiased theory. It is a physically based, ray tracing 3D rendering software built by Solid Angle. It is also an advanced Monte Carlo ray tracing render software that is usually used when feature-length animation or visual effects are needed.

Arnold was co-developed alongside Sony Pictures

Imageworks, and it is currently used as the main render engine at Sony. It has been used by over 300 studios across the globe such as ILM, MPC, Frame store, as well as The Mill and DigiC Pictures.

It was also featured as the primary render engine in the production of movies ranging from popular box offices such as Monster House, Cloudy, The Incredibles, The Pacific Rim, and Gravity.

As the years go by, the Academy of Motion Picture Arts and Sciences saw the great work Fajardo did with the Arnold render engine (creative vision and implementation) and awarded him with a Scientific and Engineering award (Academy plaque) on the 4th of January 2017.

The main reason the Arnold render engine is becoming increasingly popular is that it is simple and a lot easier to learn. It also produces photorealistic imagery with little or no stress. Besides that, it is memory efficient in the sense that it can process extremely complex rendering projects with ease.



Post- production

Music

Soundtrack Credits

The Age of Winter (The Age of Spring)
Music and Lyrics my Eimear Noone
Produced by Eimear Noone and Craig Stuart Garfinkle
Performed by Sibéal Ni Chasaide
Piano by Frank McNamara
Recorded at Metropolitan Opera

Voice

Voice cast

- Jimmy Wong as Din Song, a working-class college student who dreams to reunite with his childhood friend Li Na.
 - Ian Chen as Young Din
- John Cho as Long, a cynical but all-powerful *dragon* capable of granting wishes.
- Constance Wu as Mrs. Song, Din's strict mother.
- Natasha Liu Bordizzo as Li Na Wang, Din's childhood friend, who moved with her father years ago from the neighborhood where she lived and now lives a lavish life.
 - Alyssa Abiera as Young Li Na
- Jimmy O. Yang as Short Goon, one of Pockets' goons; and a security guard.
- Aaron Yoo as Pockets, a henchman hired by Wang to retrieve the teapot that Din has.
- Will Yun Lee as Mr. Wang, Li Na's absent but caring father, whose company business is failing.
- Ronny Chieng as Pipa God, the guardian of the gate to the Spirit world.

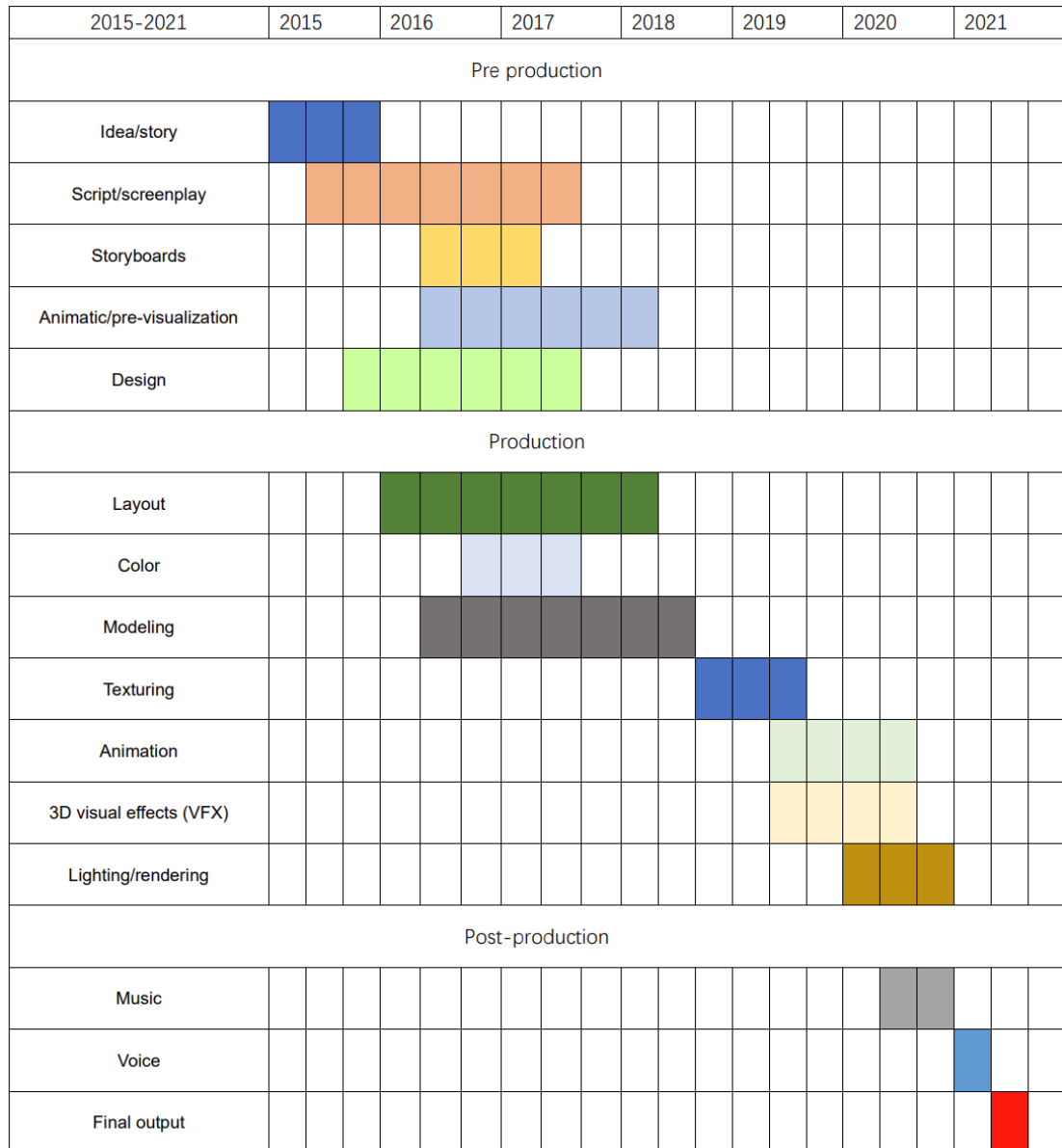
Nico Santos and Bobby Lee voices, respectively: Buckley, Mr. Wang's assistant; and Diao (credited as "Tall Goon"), one of Pockets' goons. The film's director Chris Appelhans voices a hot towel waiter and a Noman retailer. Niu Junfeng and Jackie Chan voice Din and Long, respectively, in the film's Mandarin dub.

Final output

Runtime	1 hr 38 min (98 min)
Sound Mix	Dolby Digital Dolby Atmos
Color	Color
Aspect Ratio	1.85 : 1

Summary

Gantt chart



When I searched for information, I found out that it took seven years and the efforts of hundreds of producers to finally bring an excellent animation to the big screen.

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