Since the first edition of Carlo Collodi's Adventures of Pinocchio was published in Italy in 1883, with illustrations by Enrico Mazzanti, many artists around the world have visualized the book's characters and situations. Among the notable cover illustrators represented here are Louise Beaujon, Carlos Bribián Luna, Jim Dine, Sara Fanelli, Richard Floethe, Joseph Clemens Gretter (Gretta), Dusty Higgins, Jarõna Ilo, Richard Kivit, Vincent Paronnaud (Winshluss), Maud Petersham, Tim Rollins, and Tony Sarg. These editions from China, Estonia, France, Israel, Italy, Russia, Spain, and the United States testify to the universality of Collodi's folktale.

A lifelong reader of horror, del Toro was engaged by the publisher Penguin Classics in 2013 to select and write introductions to a six-volume series of gothic and supernatural literature, including Mary Shelley's *Frankenstein*. The books were designed and illustrated by Penguin's executive creative director Paul Buckley, who used a printmaking process known as tempera resist. Del Toro has described Carlo Collodi's original Adventures of Pinocchio and Mary Shelley's Frankenstein as among the most formative and influential artworks of his life. "I identify with outsider creatures like the creature of Frankenstein or Pinocchio," he said, "and with the idea of having to figure out the world on your own, that the things that you are told are not enough, that you must do this and you want to know why this is right and why this is wrong when this feels wrong and this feels right."

Spazzatura, the abused sidekick of the villainous carnival owner Volpe (who lures Pinocchio away from home), has a transformational journey not unlike Pinocchio. After exploring printed, embroidered, and stitched stripes for Spazzatura's wardrobe, members of the UK team sent the in-progress pants shown here to the team in Portland, and everyone agreed that they were "perfectly imperfect." As puppet production manager Jennifer Hammontree explained, "We wanted things that didn't look like they came right out of the garment factory. The pants look as if they were sewn from old curtains in the theater that Spazzatura works in." "Perfectly imperfect" became shorthand for the film's lived-in look, and this fabric sample went on

to inform the shape of lines in buildings, streets, props, and even trees and clouds.

Filming an eleven-inch Pinocchio puppet whose companion is a cricket less than one inch tall could get complicated. In order to animate Sebastian J. Cricket's face and body with nuance, a larger puppet was used and then placed digitally, to scale. A few scenes that show Cricket and Pinocchio huddling necessitated an oversized Pinocchio as well; only his head, his torso, and one of his arms needed to appear on camera, so a handless, legless version of him was made. Cricket can be seen here inside the nook in Pinocchio's chest, which he calls home.

Crafted from cardboard scraps and masking tape during the exploratory look-development process, this study in Pinocchio's nose growth demonstrates the *Pinocchio* art department's preference for gestural shapes over realistic details. To make the final version of this nose, which is Pinocchio's largest and is crucial to our heroes' escape from the monstrous Dogfish, 1,500 pine needles were individually placed by hand on a 3D-printed form.

Few scenes in Guillermo del Toro's Pinocchio

take place inside Volpe's wagon, which serves as his home, but the vehicle offers a world of backstory if you look closely. The space is full of props like reused tea bags, the taxidermied ancestors of Spazzatura, who also lives in the wagon, and luxurious textiles that speak to Volpe's former wealth. Around fifteen thousand props were made by hand for this film, each imbued with purpose and meaning. "The animators are our actors," reflected director Mark Gustafson. Animators filmed themselves performing the characters' movements in live action videos (LAVs). They then referred to that footage while animating in order to better understand the characters' motivations and movement. They strove to capture the human movements often missing from stop motion: active listening, hesitation, fumbling hands, or an aching joint. As del Toro explained, "To me, the most sacred and magical form of animation is stop motion, because it's the bond between an animator and a puppet which goes back to the most basic traditional storytelling."

"Rigging" describes the different kinds of mounts used to hold puppets in place during the production of a stop-motion film. Take note of the various kinds of rigging featured throughout the exhibition. Of particular interest are the green armatures used to pose characters on set; these aren't visible in the final image because separately filmed backgrounds are added in postproduction.

How do dozens of animation units stay on the same page, tracking the inner life of their main character? Although del Toro's Pinocchio, unlike most previous versions of the character, does not transform physically, he does go on a formative emotional journey. The story's central themes of disobedience and belonging emerge as Pinocchio learns which rules are created with compassion and which rules need to be broken. His story and personal turning points were carefully plotted on this board, which animators and craftspeople referred to over the multiple years of design and production. At the center of Geppetto's village is a church that was built over centuries by residents using different materials and woodworking techniques, and which shows both modern and medieval influences. The wooden sculpture of Christ, which resembles Pinocchio, was carved by Geppetto himself. The stained-glass windows and frescoes visually refer to other parts of Pinocchio's story as well as to del Toro's other films, in particular their themes of war, innocence, and monsters. Multiple versions of this meticulously crafted set, a portion of which is on view here, were created to allow multiple animation units to film simultaneously.

Reflecting on the decision to set the story in Mussolini-era Italy, del Toro said, "I thought Pinocchio could be a great opportunity to talk about disobedience. Obedience isn't a virtue; it's a burden. Disobedience is the seed of reason— it's a desirable way to gain your own soul." To emphasize this point, del Toro traded the Land of Toys in Carlo Collodi's original *Adventures of Pinocchio*—where children are lured with the promise of freedom from school but ultimately turned into donkeys as punishment for their bad behavior—for a children's Fascist re-education camp. Director of photography Frank Passingham and his camera team employed

technology known as motion control to be able to move the camera in sync with the characters during this complex training sequence. Most of the time, light sources that appear on screen only give the appearance of lighting the scene; offscreen lights do most of the actual lighting. However, in this pivotal scene, set on a cliffside just outside the Fascist re-education camp, director of photography Frank Passingham was able to make the most of lighting effects created in real time in front of the camera and then combined digitally in postproduction. Functioning as more than props, the bonfire and the torch were used to illuminate the characters. Careful attention was also paid to the scene's wash of moonlight. In their intensity, the fire and the sky underscore the drama of the impending liberation of Spazzatura and Pinocchio.

Del Toro has always been interested in *Frankenstein. "Pinocchio* and *Frankenstein* have similar strands," he explained. "Both are about an innocent, a pure force, created and abandoned in the world, and learning to cope morally with the world. He's not a normal character, so he's viewed with suspicion, with wonderment. He's imprisoned, tortured." Here, Pinocchio lies lifeless on an exam table, bringing to mind Frankenstein's creation. Like Frankenstein, Geppetto made his creation by hand, which resulted in some imperfections: Pinocchio's knees are different heights,

one hand is more finished and one is more tree-like, and a branch springs from his head.

Production on Guillermo del Toro's Pinocchio did not slow down during the pandemic. Crew members transformed their homes into workshops and continued look development and prop- and set-making on their own, communicating through virtual check-ins and digital schedules. Once the entire crew assembled in person, physical scheduling boards were created using a system that tracks each shot for every animation unit. Individual units are represented horizontally, weeks are pictured vertically, and rubber bands track animators' progress. This board, which is one of dozens, was more than just a schedule; it created a physical space where crew members could gather to communicate, make decisions, and look ahead.

Most of the puppets created for *Guillermo del Toro's Pinocchio* were made of silicone and manually animated, but Pinocchio—who never becomes a flesh-and-blood boy in this version of the story—was 3D printed in resin and steel, so that he looks and feels like the solid object he is. In a process known as replacement animation, nearly nine hundred printed faces with interchangeable eyes and noses gave the animators a vast range of expressions with which to give the wooden boy life. The printed faces were stored in these pizza boxes.



"We wanted to make it really reflect his history," director Mark Gustafson said of Geppetto's home. "He lived in this house his whole life, so you see all of his work that he's done over the years. He's a craftsman in the same way that the people who built this stuff are craftsmen." Here, a drunken and sleeping Geppetto has just finished carving Pinocchio, and the life-giving Wood Sprite will soon arrive to bring the boy to life. Wood Sprite, who is too large to fit in Geppetto's workshop and was therefore animated separately and then digitally composited in the film, is represented here with a blue light.

This is a small portion of one of the largest sets built for the film. In the story, the rise of fascism causes this village to go through many subtle physical changes. While nearly everything seen in the finished film is tangible and handcrafted, green screens were used to place artificial backgrounds and enabled multiple scales of puppets to appear in a single frame. Here, the green screen is used to digitally place a hand-painted image of the sky.

Pinocchio encounters the Dogfish, a seadwelling beast, on his quest to discover what it means to be alive. With the goal of grounding the design of the fantastical Dogfish in nature, some of the first look-development experiments for this character involved everyday foods. Silicone and resin castings of tomatoes, kale, and other vegetables—which showed their texture, color, and veining-provided inspiration for the Dogfish's skin, texture, and scarring. Lead look-development artist Caitlin Pashalek recalls "stealing from nature as opposed to 'making a sculpted thing.' . . . I tried to find materials and processes that could be slightly uncontrolled, that had interest and a life of their own."

After the design of a puppet is finalized, the figure is sculpted from clay, piece by piece. Next, each piece is cast in resin in order to create a mold. This mold shows that the texture of Death's tail is similar to that of the acorn from which Pinocchio is born—reminding us that life and death are never far apart in this story. From this mold, a silicone casting was made and then fitted with an interior armature that allowed the puppet to be animated.

Reflecting the notion that there is no life without death—one of the most significant themes of del Toro's *Pinocchio*—the two are embodied as inseparable sisters, named Wood Sprite and Death, who guide Pinocchio to the afterlife, called Limbo. The doors to Limbo were crafted in gray to allow precise on-set lighting in carefully selected shades of blue. "The Dogfish, Death, the Sprite, the Cricket, and the rabbits all have the same sort of unworldly blue-violet skin, because they are all related," del Toro explained. "The rabbits are an extension of death, which is the sister of life. And they wear identical masks."

"I really wanted this movie to land in a way that had expressiveness and the material, tactful nature of a handmade piece of animation, an artisanal, beautiful exercise in carving, painting, and sculpting," del Toro explained. "But also the sophistication of movement that research on rigs and puppetry have taken us to." In this motion test, animators and puppet makers explored the intricacies of Death's wings with a set crafted from paper before arriving at the final design. Cinematographer Frank Passingham worked with lead cam era assistant Gavin Brown to create bespoke lighting that evokes the magical world Death inhabits.



Wood is the most prominent material in *Pinocchio*, and all the wooden elements—from Geppetto's carpentry workshop to the town church to Pinocchio himself—needed to work together from a visual and narrative perspective. Therefore, the exploration of the tone, texture, and overall feel of wood was a key aspect of look development. As art director Rob DeSue recalls, "We worked with noncompetitive colors and values and also used diminished details for grain and relief. That way, in an environment composed of earth tones, stone, and wood, Pinocchio was always the most special object in the frame."

Archival photographs were an important source for the considerable historical research that went into creating the look of Benito Mussolini's Italy, the period in which the film is set. "Even the most stylized building in the movie, the Fascist recruitment and training center, which has a huge *M* (for Mussolini) at the entrance, was based on a photograph of a real place," del Toro explained. "We did not want to make this whimsical. The buildings in the movie have charm, but they are not whimsical. They are not stylized, curvy, stretched, leaning—none of that."