

Inbetweener

Curated by Elizaveta Shneyderman

Rosa Aiello, Cosima von Bonin, Gaylen Gerber, Robert Lazzarini, Giulio Paolini, Andrew Ross, Susan Rothenberg, Rio Roye, Pascual Sisto, and Paul Thek









з



A significant portion of the bodies we see onscreen and in contemporary popular culture are virtual—neither physical nor photographic. Built through extensive processes of skilled digital labor, these virtual bodies are the result of "modeling." That is, they are the final step of a process that creates three-dimensional models to be manipulated and animated within software.

The material processes of modeling, which predate computing considerably, have long been central to the production of visual culture. In particular, representations of the modeled body play a fraught but important role in shaping expectations of visuality for new technologies and the subjectivities both depicted by and taking shape within them. This expectation holds true for the contemporary production of virtual forms, which introduces new protocols that differ radically from those of hand-drawn animation and cartoons. That is, in order to produce a three-dimensional appearance out of two dimensions, digital animators must simulate the effects we associate with objects in the lived world. They must articulate the points where distinct elements connect—such as appendages to the body—and they must assign quantifiable material qualities, like mass and texture, to those elements. In other words, animators must give joints and weight to wholly virtual bodies or forms. As a result, these virtual volumes appear to have uncannily corporal qualities of fleshliness, wobbliness, and heft. The end results of this complicated

modeling process are the images and avatars that now constitute some of the most familiar elements of contemporary visual culture, from video games, to blockbuster films, to advertising.

Computing and "naturalistic" simulation have profoundly changed the consequences of modeling—and not only on a technical level. Contemporary artists working with modeling have made significant contributions to how we understand the relations between social space, corporeal experience, and visual technologies. But what does it mean to be moved by images of bodies that have weight and heft assigned to them retroactively? Modeling has generated a unique set of aesthetic qualities and representations of corporeality and embodiment that we consistently, but unconsciously, watch in the world.

Through a combination of artworks and nonart objects, Inbetweener poses a gestural and open field of inquiry through both material and digital practices, presenting a disassembled set of bodies and prostheses. By considering this digital process through tactile forms of modeling, the exhibition contemplates the stakes, limits, and unexamined qualities of modeling as a critical mode of approaching embodiment and corporeality—one whose cultural consequences we already experience but are still grappling with.



First Person Leaky, 2014 HD video, stereo sound 4 minutes and 29 seconds Courtesy of the artist

> Moving through a computer-generated space in the first-person perspective familiar from video games, *First Person Leaky* toggles between legibility and illegibility, inverting a typical viewing experience and putting the viewer in the position of the camera.

Through the smoke screen of computer-generated imagery (CGI), *First Person Leaky* overlays traditional cinematography techniques, such as deep focus, and the tropes of live-action cinema, like non-diegetic sound, on a digital environment. The result is a highly uneven realism which turns the camera into an instrument of psychology.

Cosima von Bonin

Quiet Lads - No Shouts, No Calls, 2006 Mixed media on cotton Marieluise Hessel Collection, Hessel Museum of Art, Center for Curatorial Studies, Bard College, Annandale-on-Hudson, New York

> The bulbous, gloved hands of Cosima von Bonin's substantial tapestry Quiet Lads - No Shouts, No Calls reference early cartoons and the instability of the rules of physics that govern their animated spaces. Gloves were a clever way for animators to cut corners, as it is far easier to model gloves than to hand draw fingers and skin. They also more easily anthropomorphize nonhuman creatures. Von Bonin's floating gloves become a standin for the reliance on a simpler fiction that is equally corporeal.

(Fig. 12)

SPLAT! Redux: Imaging Bodies and the Cartoon World Order

Perhaps cartoon physics speaks to a utopian condition of bodily invulnerability then, and all the coyotes, cats, and ducks represent more of an attempt to hold on to (for kids) or return to (for adults) the body that could take a lickin' and keep on tickin'. —Scott Bukatman¹

Before a character model can be posed and animated, it must be bound to a system of interconnected joints and bones. Otherwise, a model is a static mesh—an unwavering digital asset, not unlike a still image. A character animator folds an invisible skeleton into a 3D mesh, specifying joints and defining their overall motion. The animator must go as far as to specify the weight of each bone, in a process called "weight painting," as well as to define the joint hierarchy that follows. This last step works by establishing a choreography for the bones: the farther the vertices get from the root bone, the less they are affected. For example, in the sequence "root \rightarrow spine \rightarrow shoulder \rightarrow elbow," the elbow moves less in relation to the root bone than the spine does. An animator must demarcate the degree of freedom of this digital skeleton/this 3D mesh-known as the "rig"-as realistic human motion is typically constrained to one axis. The elements of a rig are modular; they are assembled into larger-scale objects but can also maintain their separate identities. After all the joints and bones have been indicated, a model is considered fully rigged, and an animator can bend the model into the desired poses.

Scott Bukatman, "Some Observations Pertaining to Cartoon Physics; or, The Cartoon Cat in the Machine," *Animating Film Theory* (Durham, NC: Duke University Press, 2014), 309.

Gaylen Gerber

Support, n.d.

oil paint on fiber and pitch water basket, N ative American (Paiute or Washoe), Great Basin area, 19th century Courtesy the artist and Galerie Emanuel Layr, Vienna and Rome

Support, n.d.

Oil paint on memory jug (Memory Vessel, Spirit Jar) Courtesy the artist and Galerie Emanuel Layr, Vienna and Rome

> Gaylen Gerber's Supports series takes readymade objects and recontextualizes them in new arrangements that emphasize their status as discrete objects. The items in this long-running series often contain specific cultural connotations; in this case, Gerber has used an Americana memory jug and a nineteenthcentury Native American (Paiute or Washoe) water basket made of fiber and pitch. Each Support is painted in an identical uniform gray, an intervention challenging the conventions of production and neutrality within industrial parameters.

(Fig. 7)

Robert Lazzarini

Teacup, 2003 Porcelain cup and saucer, metal spoon Marieluise Hessel Collection, Hessel Museum of Art, Center for Curatorial Studies, Bard College, Annandale-on-Hudson, New York

> An experiment in "complex nonlinear distortion," Robert Lazzarini's porcelain teacup deploys two-dimensional distortion within a three-dimensional model. The archetypal teacup was then reproduced in three-dimensional form, creating wave patterns along different axes of its surface. The result of this perspectival distortion is an exaggerated and playful topology. *Teacup* embodies the tension between the material world and the technical products of animation software



Bone properties of a rigged hyena model

These days, in order to crawl closer to realism, animation software must account for as many contingencies as possible. It must contain not only the correct formulas for realistic motion but also their reverse: a complex set of parameters that define an armature of *constraint*, and that prevent the model from crossing into the realm of unrealistic animation.

The increasing parameterization of software, which affects rigging in the process, has forced animators to contend with questions that were previously irrelevant. Questions such as: How much does Sonic the Hedgehog weigh? How thick is his skin? Such considerations did not matter in an era that lacked the technical sophistication to apply anything like bone density to the model. In short, software in its earlier iterations did not computationally support the notion and virtual production of a quantified body the way it does now.

This encroachment of real-world physics and parameterized design into a space once ruled by the fatalistic and surreal movements of cartoon protoplasms has had a profound effect on the imaging of bodies. Computer-animated imagery has a long precedent of modeling scenes too difficult to photograph or too risky to replicate by bodies. As a result, much of what gets prioritized in modeling software are simpler solutions for the depiction of realistic bodies, encounters, and catastrophes.

The realistic rendering of cloth, fog, and fire requires massive budgets and serious technical expertise—typically achievable only by the most successful production studios. Thus, the leaders in developing these glossy imaging strategies Giulio Paolini

Andrew Ross

Ante Litteram, 1985 Gesso, plexiglass Marieluise Hessel Collection, Hessel Museum of Art, Center for Curatorial Studies, Bard College, Annandale-on-Hudson, New York

> The work of Giulio Paolini, who is closely associated with the Italian arte povera movement, often reflects on the nature of artistic practice itself. Exploring the relationship between artist and object, *Ante Litteram* troubles our sense of the original versus the copy. Paolini's practice of self-citation manifests here in the arrangement of plaster-cast body part fragments on a pedestal. "*Ante litteram*" is a Latin phrase that roughly translates to "ahead of one's time."

(Fig. 9)

Auto-Didact, 2019 Polystyrene foam, Aqua-Resin, pigment, PLA plastic, wood Courtesy of the artist

> Auto-Didact assembles open-source digital assets—limbs, bones, machines—into a new scenario. The disaggregated forms were heavily dissected, rearranged, and distorted in the computer numerical control (CNC) process of cutting the foam pieces. The sculpture transposes the superhuman space of virtuality onto the material, referencing the unique experience of navigation in modeling software. By drawing on the contemporary workspaces of modeling software, Andrew Ross gives viewers the impression of direct interaction with the shapes they are witnessing.

Moonman, 2015

Cast plastic, acrylic paint, metal armature Courtesy of the artist

> Moonman is a plastic cast of a fictional and anthropomorphized amphibian. The figurine, which is reconstituted from a larger sculpture called When Philosophy Becomes Practice (2015), holds a globe. Originally fashioned as a builder, Moonman presides over both water and earth.

are those companies that can afford to add further spit-shine and richer transparencies to their models. Today's viewers are experiencing bodies that, first and foremost, showcase the costs of their production. This new visual paradigm has the consequence of obfuscating the constructed nature of these images in its quest to present them as "real."

New questions arise from this state of affairs. With verisimilitude being the new modus operandi of animation, how has the depiction of bodies systematically changed along with the new manipulability that has been baked into software? And how does the alternative—taking the edge off surficial representation by concerning viewers with the mechanics behind what gets depicted—get implemented? What is the nature of this kind of modeling as *a thing witnessed in the world*?

Evident in these techniques—and across contemporary visual cultures that use technology to extend or enliven characters—is the correspondence between our subjective bodily imagination and our objective body image, and the irreducibility of the one to the other. Modeling is a small sample of a larger cross section of what it means to "embody" virtual volumes—that is, to infuse life into a set of data that then becomes manipulable. This act moves us beyond preconceived notions of passive, second-order viewer experience and into an operational, psychoanalytic, and corporeal exchange with aesthetic consequences.

...

It comes as no surprise that, with their history of plasmatic, free-form, and potent movement, early cartoons gave rise to some of the tropes of animation we continue to see to this day. Exaggerated proportions and oil-paint smears squashed and stretched their subjects, pushing the limits of animators' new tools in the 1910s. Thanks to these new tools facilitating the transition into topsy-turvydom, viewers came to understand the cartoon world order to be profoundly exaggerated and unachievable. Cartoon physics superseded the normal laws of nature, as fear negated gravity (think of Wile E. Coyote running off a cliff and hovering in the air) and flattened bodies snapped back into normality. The impossible plasticity and accompanying defamation of gravity revealed a sanitized and tragicomic performance of brokenness. Cartoon



- A Giulio Paiolini Ante Litteram, 1985 Gesso, plexiglass
- B Susan Rothenberg Bear Skin Rug, 1995 Synthetic latex
- C Pascual Sisto Bells & Whistles, 2015 Monitor, projector, moving headlight with sound 4 minutes and 30 seconds
- D Paul Thek Untitled (Meat cable), 1969 Wax, metal cord
- E Robert Lazzarini *Teacup*, 2003 Porcelain cup and saucer, metal spoon
- F The Tail Company, London, United Kingdom Scary Alien Tail PLA Plastic, Servomotor (XL size)
- G Leatt, Cape Town, South Africa C-Frame Pro Knee Brace Medically certified knee protection (size L/XL)

- H Chameleon Glass, Phoenix, AZ Lobster Claw Hand Pipe Glass, rubber band
 - Yamano, Tokyo, Japan Contour Gauge CG200MM Stainless steel pins
 - Paul Thek Untitled (Ferocious), 1971 Glass, steel, plasticine, dry flowers and follage

- J Andrew Ross *Moonman*, 2015 Cast plastic, acrylic paint, metal armature
- K Gaylen Gerber Support, n.d. Oil paint on memory jug (Memory Vessel, Spirit Jar)

Gaylen Gerber Support, n.d. Oil paint on fiber and pitch water basket, Native American (Paiute or Washoe), Great Basin area, 19th century

- L Rio Roye Gandiva Ray Cast 2020 HD video
- M Andrew Ross Auto-Didact, 2019 Polystyrene foam, Aqua-Resin, pigment, PLA plastic, wood
- N Cosima von Bonin *Quiet Lads – No Shouts, No Calls,* 2006 Mixed media on cotton
- O Rosa Aiello *First Person Leaky*, 2014 HD video, stereo sound 4 minutes and 29 seconds

Bear Skin Rug, 1995 Synthetic latex Center for Curatorial Studies, Bard College, Annandale-on-Hudson, New York. Gift of Robert Soros and Melissa Schiff Soros

> Susan Rothenberg's *Bear Skin Rug* is a caricatured and flattened sheet of synthetic latex in the shape of a cartoon bearskin trophy. Its flatness gestures to the strange contradiction between the plasticity of cartoons and the immutable laws of physics.

Rio Roye

Gandiva Ray Cast, 2020 HD video 3 minutes and 43 seconds Courtesy of the artist

> Gandiva Ray Cast, a new commission for the Inbetweener exhibition, is a schematic retelling of a scene from the Sanskrit epic The Mahabharata. The video work depicts the moment Arjuna bests Bhishma during the Kurukshetra War. Bhishma, one of the greatest warriors of his time, is felled because his gaze has been diverted from the battle through divine sleight of hand. When the arrows from Gandiva—Arjuna's celestial bow—finally connect, they pierce every inch of Bhishma's body, leaving him immobilized and held aloft on a bed of arrows.

Rio Roye's animation expresses the divine logic of the original story using diagrammatic drawings like those used in ray tracing, a computer graphics technique that renders an image by tracing the path of light through a scene. The cutscene and its aesthetic of "godly light" is a small sample of a larger cross section of what it means to embody virtual volumes—that is, to infuse life into a set of data that then becomes manipulable. figures get defeated but do not die—they must keep expressing themselves. Stuck in a tragic loop of resequenced death, cartoons introduced a new level of abstraction wherein the major referent is no longer the material world but rather the technical culture behind the curtain.²

Frequently ignoring the fourth wall, the first cartoons reference their own making: a collective labor process that condensed days and nights, cityscapes, and animators' familial dynamics into images that move of their own accord. An early rotoscope cartoon, Cartoon Factory (1927), illustrates this history of cartoons as being concerned with the nature of animation itself. Cartoon Factory begins with a photographic image of the animator's hand drawing its subject, a pernicious jokester named Koko the Clown. The cartoon cycles through the processes of its own making. We see an animator sketching the clown, who, throughout the short, continually reflects on his relationship to his maker. Viewers even get glimpses of the animation studio and the structural hierarchy that comes with it, a blip that showcases the uncredited labor performed there, the tedium, and the classed, gendered, and racialized bodies doing the animating. The short animation gestures toward the disjunction between available tools and the exaggerated movements birthed from them. Animation, with its continual reactivation of past activity, highlights the fundamental gap between the work that goes into making it and what is made.



Koko the Clown and Fitz the Dog from *Out of the Inkwell*

2 This plasticity manifests on an intellectual-property basis, too. Seeing the same, familiar face of Goofy means reentering that intimacy and all the archetypes that come with it. Paul Thek

Bells & Whistles, 2015 Monitor, projector, moving headlight with sound 4 minutes and 30 seconds Courtesy of the artist

> Bells & Whistles isolates the elements that constitute a performance—its choreography, lighting, and so on—and arranges them into a synchronized, autonomous performance. Pascual Sisto recasts the space of background as foreground, emphasizing the animated tricks typically used to enhance a main subject or protagonist. The resulting in-between space changes the viewer's awareness of their own bodily comportment.

Untitled (Ferocious), 1971 Glass, steel, plasticine, dry flowers and foliage Estate of Paul Thek and the Watermill Center

> Untitled (Meat Cables), 1969 Wax, metal cord Estate of Paul Thek and the Watermill Center

> > Paul Thek's sculptural practice prominently features bodily motifs: wax sculptures made to resemble raw meat and human limbs encased in plexiglass vitrines. In an interview in 1966, Thek said of this work: "We accept our thingness intellectually but the emotional acceptance of it can be a joy." Here, Thek's work is framed in a prehistory of technical transformations, placing it within a larger history of modeling in the twentieth century.

Ferocious shows an exploded cross section of a reptilian head rendered in plasticine. Like a mold without an original, the work carries references to cinematic practical effects and the fictive, popular image of dinosaurs in visual culture. In this way, it models what is impossible to see otherwise.

Thek's *Meat Cables* consist of wads of wax on slender steel chains. Grotesque and absurd, the meat cables play on the clinicality of traditional sculpture. The bright-red lumps of flesh emphasize their own perverse artificiality. Few other practices of visual culture acknowledge this stark break between the final product and the time spent making it.

Yet another cartoon short, Wile E. Covote and Roadrunner (1949), narrativizes the self-reflexive quality of animation. Chuck Jones, the creator of the Loonev Tunes franchise from which these cartoons emerged, implemented a strict set of rules to govern the animated space of his universe. Much of the success of these cartoons was based on the capacity to make the cartoon characters feel free-wheeling and sovereign in spite of the cartoon physics and the carefully constructed universe they were subject to. When Wile E. Covote launches off a cliff as a result of the conniving designs of his nemesis, his body melts into a gestural stroke before snapping back into place. The Roadrunner disappears into a trompe *l'oeil* image of a tunnel, which the viewer comes to realize is two-dimensional through Wile E.'s subsequent encounter with it. Thus, the central gag for the Roadrunner cartoons is precisely this instability of the rules that govern the characters' animated space. Storytelling has long been a push and pullbetween fact and fiction, but, as these early cartoons demonstrate, realism was historically seen as either too costly to model—or no fun.

The origins of animation are thus rooted in illustrations of profoundly unachievable relations to the world. To be destroyed and remain intact is the fundamental credo of the phantasmatic cartoon universe. The assumptions of an eminently rational mind—that Wile E. Coyote will enter the *trompe l'oeil* tunnel, that the anvil won't bounce back after being thrown off a cliff—begin with trust in the natural laws governing our world. But the cartoon is neither wholly artificial nor entirely accurate: it's both. From these beginnings, generations of viewers ingested cartoons as a vector for the idea that no wound is mortal—and so began a culture-wide reimagining of the body and its relation to the world.

At stake here is a fundamental belief in the tactile, haptic effects of images and their psychic transfer. The bodies in cartoons demonstrate a plasticity, persistence of character, ability to proliferate, and capacity to self-determine that all run counter to how the act of animation itself is conceived as a slowly unfolding process. Furthermore, the limitless potential of the undying body that cartoons

Chameleon Glass, Phoenix, AZ

Lobster Claw Hand Pipe Glass, rubber band

> Made by Arizona-based glassware company Chameleon Glass, this glass piece is a hand pipe that simulates a fresh-caught lobster's claw. A rubber band is wrapped around the surface of the claw, which is rounded out by a bowl and a side carb for airflow. The mouthpiece is at the tip of the lobster claw. The company claims the pipe was inspired by the recent practice of providing lobsters with cannabis prior to boiling them.

(Fig. 2)

depict—and their nonorganic-ness—make apparent the strange contradiction between cartoons' ability to change forms and a viewer's own incapacity to experience this infinite pliability. One wonders if the increasing frequency of plastic, aesthetic strategies in movies has stretched the seemingly immutable laws of dominant cultural modes, such as live-action cinema, toward the impossible—fueled by a desire to see a version of an ageless space. Are we tantalized by what cartoon bodies undergo, knowing full well that ourscould never? Does the infinitude of Wile E. Coyote's body come as a relief? By cartoon logic, what doesn't die is, after all, forced to keep expressing itself.

Leatt, Cape Town, South Africa C-Frame Pro Knee Brace Medically certified knee protection (size $\mbox{L/XL})$

The Leatt C-Frame Pro Carbon Knee Brace is a pro-level knee brace that provides additional structural support to the knee. Medically certified, this brace is worn by a variety of users for various applications, including rehabilitative and prophylactic (preventative) ones in relation to contact sports. The brace is included here as an object that both models the body and is modeled by the body. That is, it offers a carefully attended to, subjective account of anatomy.

(Fig. 1)

The Tail Company, London, United Kingdom Scary Alien Tail PLA Plastic, Servomotor (XL size)

> Scary Alien Tail is handmade and 3D printed by a small, London-based company called The Tail Company. Popular among cosplay subcultures, the tail is a gesture to the impossible correspondence between one's subjective bodily imagination and its objective image, and the irreducibility of the one to the other. A visible add-on to the body, the tail reportedly transmits tactile sensations to users despite being a prosthetic attachment.

(Fig. 4)

Yamano, Tokyo, Japan Contour Gauge CG200MM Stainless steel pins

> A contour gauge is used to record the profile of a shape. With broad application in woodworking and tile installation, the contour gauge duplicates cross sections of the desired object and helps create exact replicas of the copied shapes. This contour gauge is composed of stainless steel pins that mark the graduations of a curve with precision up to a 3.5-inch depth.

(Fig. 3)















Inbetweener Summer 2020

Rosa Aiello Cosima von Bonin Gaylen Gerber Robert Lazzarini Giulio Paolini Andrew Ross Susan Rothenberg Rio Roye Pascual Sisto Paul Thek

Published in an edition of 150

Design: Alec Mapes-Frances

With special thanks to Rio Roye and Evan Calder Williams for their continued insight

Inbetweener is curated by **Elizaveta Shneyderman** as part of the requirements for the master of arts degree at the Center for Curatorial Studies, Bard College.

Figures:

- 1 Leatt C-Frame Pro Knee Brace
- 2 Chameleon Glass Lobster Claw Hand Pipe
- 3 Yamano Contour Gauge CG200MM
- 4 The Tail Company Scary Alien Tail
- 5 Rio Roye Gandiva Ray Cast
- 6 Andrew Ross Moonman

- 7 Gaylen Gerber *Support*, n.d.
- 8 Paul Thek Untitled (Meat cable)
- 9 Giulio Paiolini Ante Litteram
- 10 Paul Thek Untitled (Ferocious)
- 11 Robert Lazzarini *Teacup*
- 12 Cosima von Bonin Quiet Lads – No Shouts, No Calls