

REINVENTING LARA

Developing and refining the appearance of a central protagonist is a challenge in any game viewed from a third-person perspective. Working with Lara, however, the Tomb Raider Legend team had the delicate and demanding task of updating one of the most recognizable videogame characters ever created. “That was a tough one for us, because there were so many different ideas floating around on what to do with Lara, and there were so many people that wanted to chime in at any given point,” says art director **Jacob “Jake” Wendler**. “We knew we needed to modernize her, and we were looking at her to see what we could do. We used the Angel of Darkness model at the very beginning as a base model, and then we started adjusting her from that. We slimmed her down, tried to tweak her face, tried to take the harsh lines off her eyes (Fig. 1 and Fig. 2). It wasn’t really until Toby Gard got on the project that he wanted to mix things up, which I was all for. Toby’s a pretty outspoken guy in terms of what he wants.”

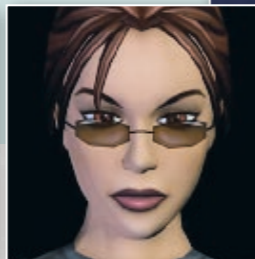
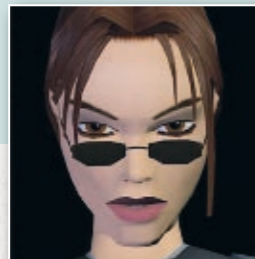


Jacob Wendler,
Art Director

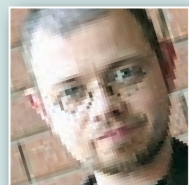


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Early Lara model a few months after project start



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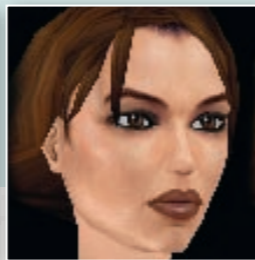
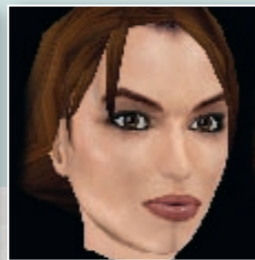
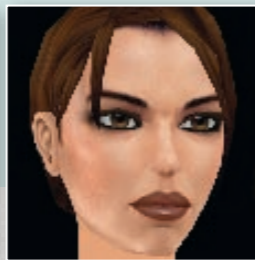


Toby Gard,
Creative Consultant

Toby Gard, Lara’s original creator, was brought over from England to work on the project, and would play a pivotal role in her redevelopment. “His coming on board helped a huge amount because, as he actually created Lara in the first place, he wasn’t afraid of her,” says Jason Bell. “He said ‘She’s my character, I’ll do what I want’. He could just do it, and that helped a lot, because before he came along we were a bit confused about what we should be doing, and it was hard to get any decisions made about Lara. We could see that Lara is athletic, but we didn’t have any real details: we were asking things like ‘How does she walk?’ which was kind of tricky. When Toby joined, he would say, ‘She walks this way’, and things would happen. That was probably one of the turning points of the project, I think. We would have got a game done without him, but I’m not sure how different Lara would be right now – and whether she’d be quite as good.”

“He really helped me make decisions,” says Jake Wendler on Toby. “At first we were kind of nitpicky in terms of ‘Well, let’s not change her that much’. When Toby came on board, we looked at the model that we were thinking about – and that’s when all hell broke loose in terms of trying to figure out a different costume for her, doing something different with her hair, getting away from the braid, getting rid of the sunglasses, putting things on her. We sat down and he wanted to totally get a new costume (Fig. 3); he was very good at designing stuff as well. He wanted to radically change her figure. We just sat down and did a lot of crazy things to her. Sometimes, we went too far. I remember when we finally sat down and saw the costume that is on Lara today, though. It took eight months to really finalize the look of Lara, and then we had everybody sitting down and saying, ‘this is it’. It was cool to see.”

Redesigning Lara wasn’t merely a question of choosing a new costume and performing minor cosmetic surgery. As these images show, the team also considered a number of very different faces.



Matthew Guzenda,
Senior Producer

Redesigning Lara wasn’t simply a matter of performing an aesthetic overhaul: there was the not inconsiderable matter of how she would move and interact with environments. “A lot of work was already done on the engines,” says senior producer **Matthew Guzenda**. “She goes into pretty big environments. We had never really done very wide-open spaces, so we did some tests on that. But the main thing was that we had to go over the control system. We were concerned about the previous games: she looked very smooth, she looked very realistic, but she just wasn’t very easy to move around.”

Deciding to create a more maneuverable, athletic and responsive Lara was one thing, but actually putting such ideas into practice was arguably the biggest obstacle the Tomb Raider Legend team had to face. It wasn’t enough that players be able to control Lara with pinpoint precision: she also had to perform her moves with signature style and grace. “With the Soul Reaver games, we had guys that were sort of human, but they had a lot of abilities,” continues Guzenda. “They could do very high jumps, they could move really quickly... the characters were very responsive and could do all kinds of things. But when we put Lara in and had her move around with our system, it looked too jerky. It took almost a full project to finalize, but we needed to find a balance between appearance and control. And this is always something you fight with: the artist wants her to look really good and be really smooth, and the designer always wants her to react quickly and be really maneuverable.”

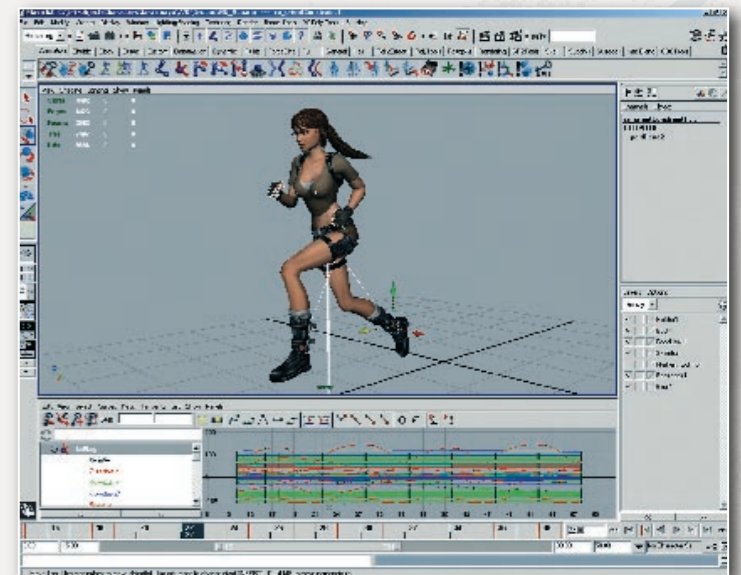
Lara is completely hand-animated (Fig. 4). The way that her animations blend together so seamlessly is the end result of many months of demanding labor; countless thousands of hours to ensure that, for example, a leap from point A to point B is suitably responsive and visually convincing. In truth, there is never one solitary animation in progress as Legend-issue Lara moves. Instead, there can often be several working together at once, each one dealing with a specific part of her anatomy. From pointing her guns in one direction while moving in another, to the direction her head faces as she passes a point of interactivity, there are many subtleties that many players will entirely fail to appreciate on a conscious level.

“The hardest thing we had to work on, which is something that I think people are going to take for granted, is her movement system,” explains Morgan Gray. “It took a good four to six engineers the better part of over a year to develop the technology that allows Lara to be controlled fluidly, and to perform all of her animations. These are many little things that some people won’t notice, but we wanted Lara to be as realistic as possible – and in motion as much as possible. Even the system where Lara jumps over something that’s knee-high, where she bends her leg as

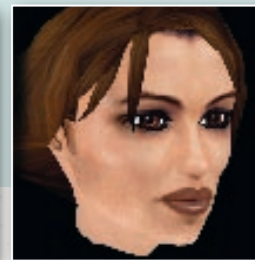
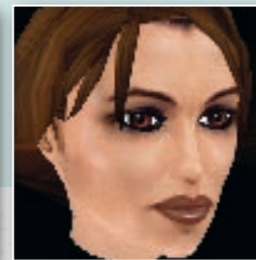
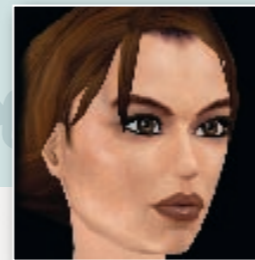
she gets on, took lot of work to implement. Pushing up on the controller and having Lara’s feet dangling, and having her do the look-over... there are so many small subtleties.”

“We had a significant portion of our engineering department devoted to getting Lara to look right, to move correctly and to work well with the world,” reveals Jason Bell. “Probably a good third of our engineering effort went into that because it was the thing that everyone would notice: the game was so much about Lara that she was the most important thing to get right. I think she accounts for about 15-20 percent of the overall code size, which is quite a lot, and it has been the most challenging part.”

Updating Lara and creating an entirely new control system wasn’t just a matter of imbuing her with greater flexibility and athletic prowess. The team also had to consider how their changes would affect how she would and could interact with environments. “We knew that Lara was going to have to move a lot better,” says Jake Wendler. “We just didn’t know the visual implications of it, especially early on in the project. We didn’t know how hard that was going to be. What does a ledge look like that you have to ledge-grab? Soul Reaver and Legacy of Kain had very specific mechanics. But with Lara, you can do pretty much anything in her environment: jump on things, ledge-grab, and swing on poles throughout eight very distinct environments. Thinking about the visual language of getting through the levels was a challenge that we had to constantly go back and forth with, in terms of design and focus testing. We had to get people into the game and figure out what made visual sense.”



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