

From Minecraft™ to LEGO® Worlds

In many ways, Minecraft is the LEGO Group's ideal of the LEGO brick reimaged as a digital plaything.

So when the LEGO Group's efforts to create a digital LEGO brick experience with Minecraft creator Mojang broke down, it didn't spell the end of that idea.

Ultimately, the chase for that experience led to TT Games' sandbox creation LEGO Worlds.

There were a lot of threads that lead up to the development of LEGO Worlds. Chief among them was the one started back in 2006 by Cephas Howard, who for a time was the director of innovation in digital at the LEGO Group.

"For me, it started way back," Howard said. "I had some ideas about what a digital world LEGO game could be."



But the LEGO Group was focusing its attention on LEGO Universe, which included an element of open, sandbox building with digital bricks. LEGO Universe also kicked off a lot of experimentation in this space.

The LEGO Group and Minecraft developer Mojang worked on a prototype sandbox game for about a year in 2011, before that relationship fell apart.

Life of George, which hit in 2011, led to some experimentation by developer Funcom. One concept, LEGO Elements, was meant to be a LEGO brick take on Minecraft, designed for tablets and with the ability to scan real-world LEGO brick structures into the game.

Around 2013, in the wake of those Minecraft and LEGO Universe missteps, Howard said that ideas for creating something with Microsoft and the notion of TT Games creating a sequel to LEGO City Undercover were bouncing around inside the LEGO Group.

Howard surprised the LEGO Group by coming to a pitch meeting with his own idea for a sandbox game. The company loved it and settled on having TT Games create it.

John Hodskinson, who worked at TT Games since there was a TT Games, was the director on LEGO Worlds. He said that early work with the LEGO Group on projects like LEGO Fusion were part of an organic conversation that eventually led to LEGO Worlds.

Initially, he said, LEGO Worlds was just a series of concepts built around so broad a notion – being able to build and play with digital LEGO bricks – that nothing was left off the table.

Among the many issues the TT Games team faced while boiling down this broad idea into a playable game was the issue of resolution. Mark Engley, lead game mechanics programmer on the title, explained that a Minecraft block could hold a hundred of the smallest LEGO Worlds bricks. On top of that massive resolution difference, the bricks in LEGO Worlds have multiple ways to attach to one another. It's not just simple stacking.

So, initially, the LEGO Worlds team looked at using just two-by-two bricks, but eventually they realized they needed to offer players the full scope of the LEGO brick library.

Once the team got the resolution nailed down, they tackled the next big challenge: LEGO Worlds presented players with a massive play space, but making it completely editable would require some programming tricks.

The decision to release the game in early access was key component in the development of LEGO Worlds was. Specifically, TT Games and the LEGO Group wanted to release the core concept of the game and then build it out after people started playing with it and reacting to it.

The first release of LEGO Worlds hit on June 1, 2015. Hodskinson said it was a very stripped-down version of the title that included procedurally generated worlds, terraforming and building worlds, rideable creatures and vehicles, and a day and night cycle.

A month later, the team released the first major update, which included everything from technical tweaks like being able to run the game in a window on your desktop or delete a world, to game-changing additions like cave systems, new biomes, items, creatures, vehicles, characters, and props.

One could argue that the initial early access release wasn't even really a game. It was simply a virtual place in which to build. What it would become beyond that, John said, was a big point of discussion within the team and the community playing the early access version.

It wasn't until March 2017 – almost two years after its early access debut – that LEGO Worlds officially launched. In that time, the game saw three major content updates – including a final one that overhauled the game's quest system.

The team continued its work, releasing regular updates, including paid and free content packs that added things like items from the classic Space playsets, showcase models, and monsters.

The game was nominated for Family Game of the year at the British Academy Video Games Awards and received middle-of-the-road reviews from critics.

On Steam, where the game is still available, more than 11,000 people have given LEGO Worlds a mostly positive rating. LEGO Worlds also made its way to the PlayStation 4, Xbox One, and Nintendo Switch.

While LEGO Worlds remains available for purchase and has seen some level of success, it certainly doesn't approach the impact Minecraft had not just on gaming but pop culture.

Hodkinson said the idea of LEGO Worlds rivaling Minecraft was more a hope than an expectation.

"We would have liked to have impacted a bit of culture, and maybe we did, but it was relatively short-lived compared to Minecraft," he said. "The games industry is littered with Minecraft-alikes that have done quite well but then disappeared. And, you know, I don't feel bad that Worlds is one of those.

"I do think it sits alone in TT's library because, when you see that box on the shelf, you know that it's a creative experience, that it's pure LEGO bricks. It's kind of a love letter to the LEGO brick."

Explore more ...

In order of appearance:

[Minecraft](#) – Official website

[Brickcraft](#) – The LEGO Minecraft That Almost Was

[Mojang](#) – Official website

[LEGO Universe](#) – The Rise and Fall of LEGO Universe: Inception

[LEGO City Undercover](#) – How LEGO City Undercover Changed the Face of LEGO Games

[Life of George](#) – The Life (and Death) of George

[TT Games](#) – Official website

Transcript

Bits N' Bricks Season 4, Episode 44: Creating Worlds with LEGO® Bricks
December 15, 2021 • 44:16



Prologue – 00:00

Announcer

Please note that this episode of Bits N' Bricks contains instances of misuse of the LEGO trademark, which must always be used as an adjective and never a noun. As a reminder, it is never appropriate to refer to the company that designs and produces LEGO brand products as LEGO. Rather, the correct name for the company overall is the LEGO Group.

Announcer

I hope that was severe enough. Was it severe enough?

Studio Engineer

Yeah, that was great, Ben. We got it.

Announcer

Alright. On with the show.

(Child's voice announcing Bits N' Bricks)

Bits N' Bricks: Introduction – 00:39

Ethan Vincent

Welcome to Bits N' Bricks, a podcast about all things LEGO Games. I'm Ethan Vincent.

Brian Crecente

And I'm Brian Crecente. Together, we look back at the rich 25-year history of LEGO Games, chat with early developers and seasoned studios, who have all tackled the creation of video games for one of the most popular and respected toy companies in the world – the LEGO Group.

(Bits N' Bricks Season 4 theme music)

Brian Crecente

As we start to wrap up this year-long journey celebrating the 25th anniversary of LEGO video games, it's only fitting that we return to a central idea, a core conceit that the LEGO Group has been circling around for a quarter of a century: recreating the experience of playing with a box of LEGO bricks in digital form.

Ethan Vincent

The sandbox LEGO video game is a dream that the LEGO Group has been trying to perfect, essentially, since it started working on LEGO video games.

Brian Crecente

In fact, the very first episode of LEGO Bits N' Bricks dove into the fleeting partnership between the LEGO Group and Mojang when the teams were in deep discussion about creating a Minecraft™ game using LEGO bricks and elements.

Ethan Vincent

In that episode, we talked about how the deal came together and eventually fell apart. And we also talked about how the deal falling apart led to the LEGO Group talking to Microsoft about its open world, user-created game, Project Spark. All of this eventually led to what would become TT Games' biggest open-world game: LEGO Worlds.

Chapter 1: A New LEGO Brick Sandbox Game – 02:13

Brian Crecente

As we've already sort of noted, there are a lot of threads that lead up to the development of LEGO Worlds. Chief among those is the one carried back in 2006 by Cephas Howard, who for a time was the director of innovation in digital at the LEGO Group.

Cephas Howard

For me, it started way back when I was joining the LEGO Group. I kind of was pitching, as part of my 2006, part of my recruitment, I was saying to, then Søren Holm, head of Play Lab, I had some ideas about kind of what a digital world a LEGO game could be. And he was like, "Oh, it's really interesting to hear and fantastic, and I totally like a lot what you talk about." And then later, when I was then recruited, he was like, "Oh, now I can finally tell you what I was talking about. We're doing this thing called LEGO Universe." And, I looked at LEGO Universe and went through stuff and I said, "Oh, that looks really awesome." However, that was not what I was imagining or kind of, you know, pitching. It was a different online digital play experience.

(Main Theme from Soundtrack of LEGO Universe by Brian Tyler)

Ethan Vincent

As we've discussed at great length in earlier episodes – a two-part series, even – LEGO Universe was the LEGO Group's single biggest video game investment. It cost more than \$125 million and involved more than 450 contributors and stakeholders over the course of its roughly five-year development. Although it was shut down 15 months after going live in 2010, the game gave the LEGO Group important insights into myriad of things, including creating an online sandbox experience packed with LEGO bricks. In LEGO Universe, players have personal properties, which act as a sandbox where they can build whatever they want. They even had something called behaviors, which allowed players to add a light form of programming to their models to make them interactive.

Brian Crecente

LEGO Universe also kicked off a lot of experimentation in this particular sandbox space. The LEGO Group and Minecraft developers Mojang worked on a prototype sandbox game for about a year in 2011 before that relationship fell apart. Life of George, which hit in 2011, led to some experimentation by Funcom with a number of concepts, including LEGO elements, which was meant to be a LEGO brick take a Minecraft design for a tablet. It also added the idea of scanning real brick structures into the game. Cephas calls Elements a fun experiment and noted there were also other ideas around that time.

Cephas Howard

At the same time, we were looking at Spark from Microsoft and talking with Microsoft and saying could there be something there with Microsoft and LEGO collaboration to do something built on the Spark engine? And also an idea that TT had to take LEGO City Undercover and turn that into a bigger, kind of more open-world adventure. And at the time, I just saw an opportunity to do something a bit different. And I took the LEGO Elements – which was now closed down – code engine and got a small team of a couple people together and started prototyping what would become, we called it Sandbox at the time, and it would later become LEGO Worlds.

Ethan Vincent

Cephas said the idea for creating something with Microsoft and the notion of TT Games creating a sequel to LEGO City Undercover, were bouncing around inside the LEGO Group around 2013 in the wake of those Minecraft and LEGO Universe missteps. But those two also weren't the only ideas being considered.

Cephas Howard

I kind of felt that there was a third way to go that was closer to Minecraft, while still having its own LEGO quirkiness and playfulness and openness. And so that's what I kind of both built that prototype with Morton and Philip and (inaudible), but also created with Dan and Martin this concept, and actually with Lani Pixels in the end here in Billund helped me make the video. And we created like a really fun selling-in video, which had a real, fantastic

kicker. The thought was, if we did this the way it would really work, because traditionally, wasn't always big budgets for advertising these types of things. So often, we might make a really great digital game, but nobody knew it existed. So I felt that YouTube was the way to solve this. If you made a game, which inherently allowed people to create engaging, fun content with, they would then want to share it on YouTube. And so therefore, that's how we would actually reach the kids. And actually, most kids would discover the game, not through our advertising, but by discovering a video on YouTube. And to that extent, I basically pitched the game as a YouTube video. So I created this fake YouTube video where there was a child reviewing the game on YouTube, and he explained in his, like, YouTube video way, what this game was and what it did and why it was so cool.

(Excerpt from Concept Video from December 2013 Sandbox pitch trailer

Jake

Hey, guys, it's Jake, here with a brand new game for you guys. You ready? It's called LEGO Sandbox. It's a game where you bring all your LEGO sets to life and have fun with them in a world you get to create yourself. I actually got a demo version of the game, and I want to show you guys one of the worlds I've been working on. Let's show off the mountain tool. I just touch where I want my mountain to be, hold and drag, and I can make it whatever shape or as high as I want. The cool part is that it's all built out of LEGO. This game is so cool. I can pretty much build anything I want.)

Brian Crecente

Cephas decided not to loop any of the official channels in on this idea of his, and instead sprung it during an executive meeting reviewing the other two ideas for a sandbox game.

Cephas Howard

The point of the meeting was, really basically I suppose, what are we going to do about Minecraft, and what are our options? Also, the main driver was this Microsoft Project Dakota update, which they had kind of greenlit and had been going on with a team from LEGO Concept Lab and from Microsoft. And then of course, TT wanted the option to show what they felt should be happening instead. And that then gave me a window to say, "And I wanted to give you just another option that you could look at or dismiss." And, um, in the end, it was a very fun meeting because when I showed the YouTube video, I got a few, 15, 20 seconds into the video, and then I was told, "Stop!" "What?" and they said like, "How has this leaked already? It's already on YouTube." And I was like, "No it hasn't." And it was like, "Look, we can just see right there, it's on YouTube." And I was like, "No, it's all fake. It's not really on YouTube it's just pretending to be on YouTube" and stuff, and so it was like the illusion was too good (chuckles) so it nearly derailed the whole presentation, but then we got to kind of continue and play it through, and it was about two, two-and-a-half-minute video, and again, before we got to two minutes it had to be stopped again, and I had to convince management very sternly that this was really, really, really not on YouTube right now, and that it was all faked.

(Excerpt from Concept Video from December 2013 Sandbox pitch trailer

Jake

But I'll show you all this and more of the incredible LEGO Sandbox in my next video. Alright guys, that's all for now.)

Cephas Howard

So, yeah, we'd made a pretty compelling, convincing video in that sense. And so yeah, and then we got to finish it and in the end, they really loved it. And then the challenge then came out of that was like, "Well, we would totally love to see that game made. However, we are not really sure that we want to build it after LEGO Universe" if that made sense. So there wasn't this interest yet to kind of level up and start building things ourselves again. And the challenge was then that what I had presented was, effectively our thinking, right? Rather than Microsoft's thinking or TT's thinking. So the question was, if we wanted to build that game, who would build it?

Chapter 2: Defining an Infinite World – 10:22

Ethan Vincent

While the LEGO Group quickly settled on TT Games working on the title, who would build this new game wasn't the only question that came up in the meeting. There were much larger questions looming around the notion of a game that could deliver an endless supply of digital bricks to a player.

Cephas Howard

The company was still worried at that time about the whole nature of, you know, an infinite world of infinite LEGO bricks, where you can make your own play and do anything for \$19.99, right? What did that mean to plastic sales? And there was still a concern there. But one of the counter points I raised when they raised that concern, because they were talking kind of amongst themselves, but I raised the point I said, "That already exists. It's called Minecraft. And at the moment, millions of kids are buying it and playing it. The question is not what will happen when such a thing exists. The question now is, how many of those kids do you want to lose to Minecraft? Or how many of those do you want to try and retain within a LEGO branded product?"

(Tune break)

Brian Crecente

Cephas said he had to win over not just the LEGO Group to the idea, but TT Games, which seemed happy with the action-adventure approach they were using to such great success with the likes of Indiana Jones™, *Star Wars*™, and Batman™. Both TT and the LEGO Group were convinced by the success of Minecraft and the size of the market it was tapping into.

To complicate matters, all of these discussions were occurring while LEGO Dimensions, a massive effort by TT Games and the LEGO Group packed with myriad intellectual properties, was preparing to launch.

Cephas Howard

Because they were still on the fence, we agreed to greenlight basically six months of R&D from their side to put some people on it to take this forward. Because of Dimensions and stuff, they said they just wanted to focus on Dimensions and come back to this. And so in order to keep it alive and get some traction, we negotiated and struck a deal for some R&D to happen with a couple of people just working on, basically, the procedural world building side of it. And that was the initial agreement and that's as far as we initially got, but once they were a few months into that, and they started to see what could be done with these procedural worlds, and then dropping a character into them, they started to come alive. So they really started to go like, "Oh, this could be like really – this is pretty cool!" And they started to have fun with it then. And once that happened, that was a complete mind shift.

(Tune break)

Chapter 3: TT Games and World Building – 12:52

Ethan Vincent

John Hodgkinson had worked at TT Games since there was a TT Games, and he's had a hand in much of what the studio has produced. Among his many credits is game director on LEGO Worlds. But when early discussions were started on LEGO Worlds, he was busy doing prototype work on LEGO Dimensions. He said his earlier work with the LEGO Group on projects like Fusion were part of an organic conversation that eventually lead to Worlds. Initially, he said, the game was really just a series of concepts.

John Hodgkinson

We wanted to explore the sandbox space and, you know, we talked about developing it with a community doing everything completely different to what we normally do. So normally, we'd kind of blackbox ourselves away and, you know, squirt out a game at the end of it and hopefully everybody likes it. But this time, because it was new to us, it wasn't IP-driven, it wasn't necessarily objective-driven, we wanted to just explore that space really, and we thought if we were going to do that we might as well develop it in a different way. Minecraft was, not so much the elephant in the room, but it kind of hung over as like the sword of Damocles, you know, how much do you take inspiration from a game like that? And how much can you translate it to using LEGO elements? And how do you do that? At the time, Minecraft wasn't as rich as it is now. I mean, this is going back nearly eight years now. And of course, even then Minecraft had organically grown this culture around itself that we didn't think we'd be able to manufacture, and so it proved,

but it was more about what Minecraft represents in terms of sandbox gameplay and, you know, player expression, so that's what we wanted to tap into. It wasn't really about, you know, stealing market share. It was more about carving a niche for ourselves if we could.

Brian Crecente

John said creating a game around so broad notion, being able to build and play with digital LEGO bricks, starting with nothing left off the table.

John Hodskinson

We had all sorts of crazy schemes and, you know, the LEGO Group and its themes are really quite wide ranging, so how do you turn a game that could be anything to all players into something that everybody can run on their devices and get something out of? So I remember working with some designers, some excellent designers from the LEGO Group – Cephas Howard springs to mind – and we had all sorts of designs of a literal cube with a different biome on each side, lovely concept sketches of that, you know, slices of landscape, discussions of how you might dig, or terraform, or build, but we didn't know where to start. So in the end, we just started with a really, really small team just working on the landscaping engine. We knew from day one that we weren't going to author any landscapes. It was going to be generated. It was going to be deterministic, which means if you do the same thing in the same order, it will create the same thing. And that was the initial thrust of that first phase of development, just having something – a landscape that could be recreated from a seed code, essentially, just early experiments with that. And once you've got somewhere for the minifigures to be, you need to figure out how those characters can move through the world. And it wasn't the primary focus, but this is something that kind of escalated slowly during development was we just improved the way the character moves through the world, and you'll find in the final game, that it lets you free climb up any LEGO brick structure.

(Tune break)

Brian Crecente

Mark Engley started out as a programmer on the LEGO TT Games and eventually transitioned over to lead game mechanics programmer on the titles.

Mark Engley

So I've written like a lot of the code. Just play a LEGO game from that era, and just run around, and like using the stick and stuff and jumping: A lot of that code was kind of written by me, and the code that kind of handled the way that character mechanics were plugged into the game, kind of thing. But then we got set this as like a kind of a really different challenge, you know, on the team. And I got dragged in as someone who was kind of interested in this kind of procedural stuff we wanted to do with that game, and all the things that were unique about it. And so I, the first thing we kind of did was we took

some of the existing player movement code and stuff from the other LEGO games, and then we kind of started to create this procedural world around that that you could run around in. And it had these, you know, like infinite undulating hills and stuff that were all created out of LEGO bricks. And it was like something really unique at the time, we – I get into it very much been like story-driven, and heavily authored like action-adventure games. And this was really something where we were going off in quite a different direction, even though that shared a lot of that core LEGO game DNA of the way the character moves, and the way the combat works and stuff like that.

Ethan Vincent

One of the early big challenges Mark and the other programmers on the game faced, was the added complexity that comes with creating a sandbox game that is built out of many shapes and designs of LEGO elements and bricks.

Mark Engley

Yeah, that's right. Yeah. So, one of the really interesting things about it, especially at the time, was that it was using similar kind of like editable world and procedural world technology to other games that had gone before it. But we were trying to do it at the LEGO brick scale, right? And when we first started working on it, we made it as like a two-by-two kind of world grid of bricks. And the designers and the artists went, "No, no, we want it to be like full LEGO brick," you know, and we were like, "But a LEGO brick is – like, the smallest LEGO brick is so small." And if you look at it compared to like the the one-by-one meter kind of blocks compared to your character you get in some of these games, then it was like 100 times the resolution or something like that. And we were just like, "This is going to be impossible. Like, we don't even know if this is actually going to work." But we tried it out and it all run like OK, that's not to say it had some very interesting problems that we had to solve to get it to work. So, but we kind of came up with this really small world grid that you could go in and completely edit. And then we also came up with a technology to kind of turn that grid into bricks to lay those on top of the environment so that you could have bricks that could span, like, multiple points on the grid. And that was what really made you have the sense of being able to build with LEGO bricks.

(Excerpt from Concept video from December 2013 sandbox pitch trailer:

Jake

If I wanted to, I could build a castle or a wall around my house to protect myself from the bad guys. I'll just speed things up a little. There. All right, done! Cool. You can have a lot of fun just exploring throughout the world. Here's me in the haunted forest. And here's me exploring a cave.)

Mark Engley

There was, you know, quite a lot of challenges to kind of solve to get to that point, you know? So, it was not just the editability, but also, yeah, the procedural world where it had

to generate these worlds from scratch based on data that the designers would input about what shape your land would be and what kind of objects it would place in the world. And also, those objects were then also built out of LEGO brick and all completely editable, and they all would have to be laid on top. So, it presented like a really interesting set of challenges.

Brian Crecente

Mark explained that a Minecraft block could hold 100 of the smallest LEGO Worlds bricks. On top of that massive resolution difference, the bricks in LEGO Worlds have multiple ways to attach to one another. It's not just simply stacking them. Initially, the LEGO Worlds team looked at using just two-by-two bricks.

Mark Engley

We kind of thought that that might fly and all the artists and designers looked at it. We did it right and we were like, "Oh, yeah, this is fine. We can do this resolution. It's not that it's more than Minecraft." And all the artists and designers looked at it and we're like, "No, we want more." And we were like, "Oh, no, we don't even know if this is going to work right," but we tried it out, you know, and we think we came up with like a pretty good set of algorithms that solved a lot of the problems with it, and ultimately, we tried it and it did work. Well I was so happy that we'd been pushed to do it that way because ultimately, the resolution of the the world and how rich it was in the detail that you've got inside the LEGO buildings and the LEGO environments and trees and stuff was really what made that game like look so special. You know, I think if you just did it all out of two-by-two blocks, it would have felt very much more like LEGO minecraft and not so much like LEGO Worlds.

Ethan Vincent

Mark said that once the team got the resolution nailed down, they tackled the next big challenge. LEGO Worlds presented players with a massive play space, but making it completely editable was going to require some programming tricks.

Mark Engley

It's thousands of bricks deep, right? And it's thousands of bricks wide. But we don't store every single one of those bricks because it would be, like, it would be billions of bricks to store in memory. Your computer would just run out of memory straightaway. And so we used like, kind of, in-memory compressed representations of how it looks that basically make it take up less space, and then we had to work it out to edit those representations. And you had these things where you're like splitting links, and you're splitting bricks in between, so that you can place two LEGO bricks, such that they don't fit in the same space, right? Like if you put one overlaps another, and you have to make it so that they – one can destroy the other effectively, and it can decompose down to some kind of different LEGO brick representation. So we had all those kind of problems. And then, yeah, we had to make it all work in real-time. It had to be able to regenerate all the random

meshes and everything in real-time. And it definitely did cause a lot of problems. There's some really interesting problems around, like when you look at water in the game, that it's transparent, right? And if you really were to build a sea out of LEGO bricks that were all transparent and you looked into it, you'd actually be able to see it, but one moment, like 10s of millions of LEGO bricks, and there's just no way that any console or computer can render all of that. And so we had to have some tricks about like, strategically choosing, like which bricks to render, and when you look at the bottom of the sea which bricks to render, and when to treat it as air space and stuff like this, so yeah, there was loads and loads of problems around it. And also just the sheer size of the worlds, you know, presented a challenge because the worlds are, they're like many kilometers wide, and that the tech goes up to probably even bigger than that.

Ethan Vincent

On top of the technical challenges surrounding creating a world of LEGO bricks that could be edited by players on the fly, the team also had to figure out how to make the experience fun for all sorts of players.

John Hodskinson

The other thing we knew, just intuitively, just instinctively really, was that not everybody wants to terraform a landscape, not everybody wants to build with individual bricks. I think everybody wants to get fantastic results, but you need a lot of patience and spatial awareness to go from some amazing build in your head to physically making it in a game. And I think what you'll find is, if someone has that mindset, then usually the tools don't get in the way, you know, in as much as they will learn how to do what they already know they want to do. I think you can see that in Minecraft, as an example. But it's relatively easy to realize your vision in Minecraft because of the size of the blocks. So I think we knew fairly early that that would be much harder in LEGO Worlds. We made models that players could place down, and of course, those pre-made models looks good, and were easy to place and they covered a larger area. But there was two levels to that. There was prefabricated objects that we authored that players could place down and usually had a function, even if that function was just to smash apart and yield studs. And we had larger objects that were constructed from landscape bricks that were entirely compatible with the landscape. They essentially were landscape. So if you placed a house on the landscape, it would merge with the terrain, and you could then edit every individual brick of that house, if you wanted to. So, it was a much better starting point for people, or at least that's what we thought would be the case.

Chapter 4: Early Access – 24:34

Brian Crecente

One of the key components behind the development of LEGO Worlds was the decision to release the game in early access. Specifically, the team at TT Games and the LEGO Group wanted to release the core concept of the game and then build it out after people started playing with it and reacting to what they saw.

(Excerpt from LEGO Worlds game trailer)

Narrator

Welcome to a new kind of LEGO game where anything is possible.)

Brian Crecente

The first release of LEGO Worlds hit on June 1, 2015. John said it was a very stripped-down version of the title.

John Hodskinson

As I recall, you could do relatively little. The interface was completely different to the launch game. And there were several biomes, but there was no concept of small, medium and large worlds. There were just large worlds – theoretically infinite, but not (chuckles). In fact, I remember some of the community didn't appreciate, you know, when we launched the game that the game starts in adventure mode with you only having access to smaller worlds, because they had this impression that entering early access they were all infinite, but they were very large, but as you moved away from the origin of the world, the matter is accumulated, and things could go terribly wrong. But anyway, every world could have every biome in it during early access, and it was just rolling landscapes with relatively little variation.

(Tune plays)

Brian Crecente

Cephas said that, while he thought the first version of LEGO Worlds was pretty good, it was also not a fully realized version of what he and others had in mind.

Cephas Howard

There was definitely that concept pitch, obviously included, like the full dream, if that makes sense, which we were always working towards, but we didn't fully realize with LEGO Worlds. So, there were some features and things that we definitely wanted to have in the game that were in the concept video that didn't make it in. But a lot of the approach and the kind of freedom and the focus on building your own experience, as opposed to kind of just consuming one, stayed. So I think it still looks like, and I often play like the

concept video and then the launch trailer from LEGO Worlds, and they definitely, you can tell definitely this is the same project, it's the same product. But there were some really fun things that we envisioned or started to design as features for LEGO Worlds that never, unfortunately, made it into the game. But then there were also some fun things that TT came up with and that we ideated and stuff with them that made it into the game that were never part of the concept video. So it's not like it was just, you know, it only became 70% of the game. It could be it was just different in a few ways.

Ethan Vincent

Cephas said when the game initially hit, it saw a lot of success on the Steam game store.

Cephas Howard

We were like top 10 and top ranking in early access when we were first out there, which was a new thing for both TT and – who actually hadn't, I don't believe, done an early access game at that point. So in that sense, we had a lot of success early days on Steam, and that was a new approach and also a new, again because of this involvement, both in the testing but also by having an early access in Steam, like involving the community in a very live way. LEGO Universe did lots of testing and involved the community too, but not on a kind of more public platform like Steam. So that was very interesting and different different to see. And then of course, all of the YouTube videos, which of course, as I said, had been kind of designed in or thought in from the start. And that really worked. So we saw a huge amount of YouTubers picking up on it and riffing with it and telling stories with it and people kind of building odd stuff and fun stuff, and so we saw a massive amount of YouTube videos being created compared to like other titles that we'd done.

Brian Crecente

Players enjoyed what they saw when LEGO Worlds first hit, but John said they also wanted much more.

John Hodskinson

They wanted to know what's next. What else is the game going to have? Where's it going to go next? And, you know, it was interesting learning how to interact with the community and not to make crazy promises and list firm dates, because at this point, we didn't know how long the game is going to take. We didn't necessarily know which direction it was going to go in terms of gameplay. We knew we wanted to iterate on terraforming and brick-building tools, and we knew we wanted to put vehicles in. That was a common request. I think we shipped with a few vehicles. There was plenty for people to play with. And even after we launched the game, people were asking for the old version back because of this perception that, you know, you had total freedom and you could do anything, but in hindsight, you know, the building tools were very immature.

(Tune from LEGO Worlds Trailer)

Ethan Vincent

The initial release included procedurally generated worlds, terraforming and building worlds, rideable creatures and vehicles, and a day and night cycle. A month later, the team released the first major update, which included everything from technical tweaks like being able to run the game in a window on your desktop or delete a world, to game-changing additions like cave systems, new biomes, items, creatures, vehicles, characters and props. It was a cornucopia of new content, and TT Games was excited to see how players would react to it.

Mark Engley

The early access launch was really interesting. It was the first one that TT Games had ever done.

Ethan Vincent

This is Mark Engley speaking.

Mark Engley

We were all just sat in the office and watching people, like, basically discover it on Steam. And people were just like, "What is this game?" Like, people were just looking at it. And we were watching people play live streams and stuff like this. And it was really exciting just to see people get their hands on it, and, like, see what they could do with it, and it was so different to the other LEGO games we'd done. So from that point of view, it was really exciting. But then we had this situation where, you know, we've got this game, and it had like a completely new set of mechanics, you know, and the world and stuff was really new. We were trying to work out, like, how to how to deal with it. And also the early access version, in particular, had given players a lot of freedom. It hadn't really done any of the gating stuff that I talked about, so it gave you all of these tools, and all of the characters and all of the crazy items you could have like right from the start. And then we have this situation where we were like, "Oh, we actually – we maybe want to let players unlock this and discover it as they play through the game." And then we had to basically take those things off the players for one release. And they were like, "Oh no, we want our stuff back." And so we had this mad scramble to put in like a creative mode play so people could just kind of have their, you know, they can have their cake and eat it. So we definitely learned a few lessons like that along the way. You know, like, it's difficult, if you've given the player something, if you then want to go and gate it. It was difficult. And we had a lot of this very new kind of prototype technology that was running the game. You know, we were trying to fix this as it was live. And there were definitely, definitely some challenges around that. You know, the team kind of grew quite significantly just over the course of the early access release.

Brian Crecente

One could argue that the early access release, when it first hit, wasn't even really a game. It was simply a virtual place in which to build. What it would become beyond that, John said, was a big point of discussion within the team and the community playing the early access version of the title.

John Hodskinson

Yeah, I think we just kept track of what the community was saying. Even back then people were saying, "Is there a survival mode?" for example, and they would naturally compare it to Minecraft anyway. Originally, it was an absolute focus on the sandbox. Personally, I resisted for quite a while the idea that there would be any kind of story layer over the top, particularly during early access as well, because we just wanted to explore the things you could do in this sandbox, and we wanted to know what the community wanted to do in order to help drive the development. But later on, it was Tom and Jonathan and Dave Dootson. I think they'd been looking at the game and they thought, you know, we're so used to making objective-driven games. It's the most familiar thing to us. We know that it helps drive players through our games. So what if like Worlds had a light story layer over the sandbox? Which makes sense. We went away, and we came up with the idea of a space family. So you'd be playing a character, and this space family is essentially lost in the galaxy, and what drives you to progress through the game is to rescue the space family. That was the first version of the light story layer. And, you know, we pitched this to our execs, and, I don't know. I think they just came back and thought, it just needs to be something incredibly simple because this game is all about you, the player. It's not about iconic characters necessarily. You know, there will be minifigures featuring in this game that you interact with and have classic tropes and whatnot, but it just needs to be really simple. So how about keeping it as simple as becoming a master builder, and then it's very clearly that the call-to-action to the player is to learn how to be a master builder? And that was relatively late in the process. And that was well after the last update we did in early access. So that was probably 2016 when we settled on that.

(Excerpt from LEGO Worlds gameplay)

Narrator

In a LEGO world, anything is possible. And here you are, just starting out on a creative adventure. Infinite worlds ahead. Infinite possibility. And one goal: to become a master builder. See how these magicians of the brick use their creative tools, summoning creatures, conjuring houses, flattening mountains, and shaping the land itself. You, too, can wield that power.)

Ethan Vincent

There was quite a bit added to the game over nearly two years of early access, John said. As the updates kept rolling in, it built out the sparse initial early access release into a full-blown title.

John Hodskinson

I think we introduced things like networking during early access. And that gave us a lot of good feedback from the community. The final year was when we took all these disparate elements and essentially turned it into a game – or turned it into a LEGO game. You know, so we brought in the narration from Peter Serafinowicz and the progression layer for adventure mode that leads to becoming a master builder, and it's trying to balance the order in which the biomes were doled out to the player. We just spent a lot of time iterating on things like the interface. I mean, that was a particular sticking point, because we knew that the things you do in the game, if you're not just running around and interacting with enemies and just playing, climbing, building, and placing objects, it's not necessarily an easy thing when you've got hundreds, maybe even thousands of objects to select from in multiple categories. So we did go through a number of iterations of that. And we did user tests and collaborated with the LEGO Group as well, continually. And, you know, it's a hard thing to get right. And we – I think we made mistakes, and we did some things really well. Sometimes we took too long to iterate on ideas, and sometimes we, or I, changed our minds halfway through development of something, and then we had to go back to the drawing board. But, yeah, basically we tried to take the whole package and refine it and box it and turn it into a game. To use a Pinocchio analogy, we tried to turn it into a real boy.

Chapter 5: Launch – 36:31

(Excerpt from LEGO Worlds gameplay)

Narrator

Your first LEGO world. So much to discover, but your rocket took a beating. A few gold bricks should fix it right up.)

Brian Crecente

It wasn't until March 2017, almost two years after rolling out in early access, that LEGO Worlds officially launched. Over the course of early access, the game saw three major content updates, including a final one that overhauled the game's quest system. John said the game changed dramatically in those two years.

John Hodskinson

The core of the game – of exploring a landscape and being able to terraform it and edit the individual bricks to your liking – that remained from the very start, but everything around that did change. You know, we talked about adding optional objectives. So we wanted players to be able to express themselves freely in this game, so you could customize your character at any time. But we wanted them to have things to do, and be able to find those things to do, if that's what they wanted to do. So another thing we iterated on was how to signal those to the player. So as well as designing various quests that mapped onto the

different abilities in the game, like build quests or rescue quests or fight quests, you know, things like that, it was, "How do we show those to the player?" So we had various schemes for throwing beams into the air and allowing players to place waypoints and icons on the map – or even having a map at all. I don't think we had a map in the first release. And then iterating on those things and adding features like different zoom levels to the map.

Ethan Vincent

Once out of early access, the team continued its work on the title, releasing regular updates, as well as a number of paid and free content packs that added things like items from the classic Space playsets, showcase models, and monsters. The game was nominated for Family Game of the Year at the British Academy Video Games Awards, and received middle-of-the-road reviews from most critics. On Steam, where the game is still available, more than 11,000 people have reviewed the game, giving it a mostly positive rating. The 50 or so recent reviews are all very positive on Steam. LEGO Worlds also made its way to the PlayStation 4, Xbox One, and Nintendo Switch.

(Excerpt from LEGO Worlds Nintendo Switch trailer

Narrator

Anywhere and everywhere with LEGO Worlds on Nintendo Switch.)

Chapter 6: Conclusion – 39:03

Brian Crecente

While LEGO Worlds has seen some level of success, it certainly doesn't approach the impact Minecraft had, not just on gaming but pop culture. Cephas said he didn't think that the LEGO Group expected this title would rival Minecraft, though.

Cephas Howard

The LEGO Group had kind of experienced kind of throwing the kitchen sink at something, you know what I mean? It really kind of really getting hard hit in every kind of conceivable way, and it not really panning out. So then there wasn't then this expectation that suddenly, this time, you know, spending a lot less time and a lot less money, that suddenly that would, you know, suddenly topple the top game in the world. But it kind of put us on the map in terms of saying that we can compete in this space, and we can offer this type of play. And at the same time, we were trying to integrate it much more into the portfolio. So you could actually unlock actual City sets or Ninjago sets or Nexo Knights. So some of these characters we could bring into the game, and so therefore, we could use it as a platform for marketing and for integration. And some of these other lines that wouldn't have like, for example, games of their own, could benefit from, you know, if we gave you the Nexo Knights characters and some vehicles, you could bring them into LEGO Worlds and play Nexo Knights like a sandbox. So that was basically the intention. And we did do a

certain amount of that. But I don't really necessarily think that we capitalized that onto the full – fullest degree. It's very difficult to integrate something like that when the usual procedure is that it's a Nexu Knights game, or a Ninjago game, and it's run by one department, one team, one focus, one marketing budget, one objective. Something that kind of goes across everything is both wonderful and wonderfully complex.

Ethan Vincent

John said the idea of LEGO Worlds rivaling Minecraft was more a hope than a real expectation.

John Hodgkinson

We would have liked to have carved a bit of culture. And maybe we did, but it was relatively short-lived compared to Minecraft. The games'industry is littered with Minecraft-alikes that have done quite well but then disappeared. And, you know, I don't feel bad that, you know, LEGO Worlds is one of those. I think it sits alone in, you know, TT's library, and, you know, I like what the game represents because, when you see that box on the shelf, you know that it's a creative experience, you know, from the name of the game, to the image on the box, to the screenshots. It's pure LEGO bricks. It's kind of a love letter to the LEGO brick. And if that's all it is, then that's still pretty cool. And, you know, I also appreciate the comments in some of the less favorable reviews that say, you know, some of them had bad experience with crashes in the early builds, I believe. Some of them just bemoaned the clunkiness of the controls, and that's understandable because it's complicated to do, or maybe the quirks of the interface just didn't jive with what they were used to. But that's the reality of trying something completely different.

Ethan Vincent

Mark said that LEGO Worlds was a game that did exactly what TT Games hoped it would do in terms of delivering this open-worlds, creative space to players and allowing for exploratory gameplay.

Mark Engley

I do think that there's stuff in there that could be done better, you know, if we could take another stab at it. But, yeah, overall, I think it did well. I can't speak for the higher-ups, right? But for me, like as someone who worked on it, I'm really proud of the work we did. And I think it's, in the LEGO Games catalog, I think it stands on its own. It's a very unique game that we did, and it's something that I think players are still discovering now, you know, as standing up on its own.

(Postscript music)

Bits N' Bricks: Credits – 43:03

Ethan Vincent

Bits N' Bricks is made possible by LEGO Games. Your hosts are Brian Crecente and Ethan Vincent. Producing by Dave Tach. Our executive producer is Ronny Scherer. Creative direction and editing by Ethan Vincent. Research and writing by Brian Crecente. Art Direction by Nannan Li. Graphics and animations by Manuel Lindinger and Manuel Holzinger. Mixing and sound design by Dan Carlisle. Disclaimer voice is Ben Unguren. Opening's child voice is Milo Vincent. Music by Peter Priemer, foundermusic.com, and excerpts from the game LEGO Worlds. We'd like to thank our participants: Mark Engley, John Hodkinson, and Cephas Howard. We'd also like to thank the entire LEGO Games team. For questions and comments write us at bitsnbricks@LEGO.com. That's bits, the letter N, then bricks@LEGO.com. And as always, stay tuned for more episodes of Bits N' Bricks.

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