

# How the New York Game Scene Gave Birth to Everyone's Favorite Garbage Game

When LEGO® Builder's Journey hit Apple Arcade in 2019, it was seen as a new sort of LEGO video game, one that eschewed the artful action mashups of so many of popular LEGO titles.

Instead of putting you in the blocky legs of a minifig and retelling the story of a beloved franchise like *Star Wars*™, *Indiana Jones*™, or *Harry Potter*™, LEGO Builder's Journey had you embody the LEGO brick and in so doing explore the nature of the toy's deep creative soul.

While Builder's Journey's entirely original tale of a father and son connecting was embraced by gamers around the world, Lightbrick Studio's first game was also accidentally retracing the roots of a far less poetic and emotive story: Junkbot.



In 2001's *Junkbot*, as with *Builder's Journey*, players don't control the eponymous hero. Rather they use LEGO bricks to build his path and set him on a journey. It just so happens

that Junkbot's journey is more about eating trash and slyly looking at the player than bonding.

Both games, nearly two decades part, come from a deep exploration of what it means to be a LEGO video game and how to capture the essence of LEGO play digitally.

With Junkbot, that journey started back in 1995 at Word Magazine, a website that pushed hard on the edges of interactive experiences by mixing together stories, interviews, games, music, and the like to deliver experimental content.

"We published a lot of literary nonfiction and autobiographical nonfiction, but we also had a lot of interactive experiments like motion comics and flash animations and sort of audio experiences and things like that," said Naomi Clark, who was an editor on the website back in the late '90s. "Because we were in the experimental early days of the web, we were trying to figure out the best ways to use this this new medium."

One of those experiments was an idea Clark had to create an online game for the site, a multi-user dungeon – a precursor to games like World of Warcraft. As producer, Naomi Clark brought on lead programmer Ranjit Bhatnagar, art director Yoshi Sodeoka, and game designer Eric Zimmerman to create the game.

This collection of creators developed Sissyfight 2000, a cute online social game that had players taking on the role of little girls in a playground and striving to maintain their self-esteem while lowering the self-esteem of their playmates. And it was a surprisingly massive hit for Word.com.

And when Word.Com closed, it was Sissyfight 2000 that helped Clark land a job at LEGO.com, supporting the expansion of the official LEGO Group website, which had launched in 1996.

Thanks to the tremendous response to BIONICLE's Mata Nui Online game, Clark was able to convince the company to invest more in games for the website, and her first step was to dive back into the New York game development scene.

Two of the people she had worked with on Sissyfight 2000 – Eric Zimmerman and Ranjit Bhatnagar – along with Peter Lee and Frank Lantz had teamed up in a studio called Gamelab. The studio would go on to develop dozens of games for brands as diverse as HBO, PlayFirst, Nickleodeon, and – of course -- the LEGO Group. They are probably best known for creating Diner Dash in 2003, which at one point was one of the most downloaded games of all time.

That connection between Clark, Zimmerman and the rest of the Gamelab crew would eventually lead to a lasting relationship between Gamelab and the LEGO Group, with the studio creating a dozen games for the website. But the first was, perhaps, the most memorable: Junkbot.

When Clark approached Gamelab about making a game, the studio came up with a two-part pitch document that explored the play values of the LEGO Group and offered up a number of ideas.

"The concept that the LEGO Group selected was about a character that walked on its own in a sort of a 2D platformer kind of world that you were building staircases and moving LEGO bricks around to kind of help them get around," Zimmerman said.

Lantz said the core mechanic was based around the notion that players would be tasked with building the level instead of controlling the character.

"What kind of game can you make that really embodies the fun of playing with LEGO bricks?" Lantz said. "Well, let's do a platformer where instead of controlling the character, you construct the level, and everything else just flows from that core mechanic. Once you have that idea, then you spend a lot of time on the basic controls of how you manipulate brick."

Zimmerman notes that, of the many games he has worked on during his long career in the video game industry, Junkbot remains one that came with an important design lesson.

In the case of most games, you have to nail the core mechanic first and make it fun on its own. Everything else is just frosting on that cake. But in the case of Junkbot, the opposite was true.

"The main challenge that we faced was getting stuff into the game," he said. "And that goes against this deeply ingrained common sense wisdom for how you make a good game, which is that you find a core mechanic, and the core mechanic is fun. In this case, the core mechanic was conceptually interesting but experientially lacking.

"Sometimes you make a cake and it's so good you don't need the frosting, and other times the frosting makes the cake. So in the case of Junkbot, it was the frosting."

While not a massive hit when Junkbot arrived on LEGO.com in 2001, it quickly grew a following, and that following remains today despite not being able to play the game on the website, or without considerable effort.

Junkbot's lasting appeal is evident in several ways, including that every so often it pops up in other LEGO Group products. More immediately, though, the game's success helped to prove that games on the LEGO.com website were a good idea.

The game's enduring popularity was in some ways also fueled by the sequel, Junkbot Undercover.

Eric Zimmerman said that all of the work the team put into trying to boil down the experience of playing with physical LEGO bricks contributed to the game's success.

"I think we just did a really good job of translating certain aspects of the kind of modular construction-based play, and we went farther afield, and explored other aspects of building with LEGO bricks," he said.

Explore more...

In order of appearance:

[LEGO Builder's Journey](#) - Official website

[Junkbot](#) - Eric Zimmerman's website

[Word Magazine](#) - Wikipedia

[LEGO.com](#) - Official website

[Sissyfight 2000](#) - Official website

# Transcript

Bits N' Bricks Season 3, Episode 29 • Junkbot: The Lovable  
LEGO® Garbage Game  
August 18, 2021 • 00:40:40



## Introduction – 00:00:00

### 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.

## Prologue – 00:00:39

(Child's voice announcing Bits N' Bricks)

### 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.

(Season 3 Bits N' Bricks theme music)

**Ethan Vincent**

Hey, Brian.

**Brian Crecente**

Hey, Ethan. I hope you had a nice summer break and got up to some fun things.

Ethan Vincent

Yes. Man, it was so great spending time with family and just hanging out. But I did miss our little chats a little bit.

**Brian Crecente**

Yeah, you know, I did, too. There's still so much to talk about in the world of LEGO video games. We've really just sort of scratched the surface. And fortunately for us, and hopefully for you, listeners, our Season 3 kickoff this week is a great example of all the stuff out there that we haven't talked about before.

**Ethan Vincent**

Yes, and we are super excited because we're talking about Junkbot, the early days of the LEGO.com website where it lived, and how the New York game dev scene so deeply impacted the look and feel of both the website and those really neat web games.

(Sounds from the game Junkbot)

**Brian Crecente**

Yeah, Junkbot was such a cool game when it hit LEGO.com back in 2001. It combined the inherent creativity and core building nature of LEGO bricks with the distinct New York dev scene aesthetic.

**Ethan Vincent**

Instead of putting you in control of the eponymous Junkbot, a sly-looking, trash-eating robot who always seems to be giving you the side eye, players have to build the safe path for the machine, so it can eat up all of the trash cans on that level.

(Sounds from the game Junkbot)

**Brian Crecente**

Basically, you spend your time picking up LEGO bricks and then plopping them down to form platforms for Junkbot. In many ways, the gameplay is very similar to that stunningly beautiful Builder's Journey, you know the game that, Ethan, you and I've talked a lot about, which has you plucking up LEGO bricks and moving them around to empower the journey of a father and son, who are made up of LEGO elements.

## Chapter 1: The New York City Dev Scene – 00:02:58

(Short musical interlude)

### Ethan Vincent

2001's Junkbot was so popular that fans have found ways to keep playing it even though it dropped from the site more than a decade ago, and the software used to play the game is no longer officially supported anywhere. Junkbot even has some super fans within the LEGO Group. The little bot Junkbot, or references to it, have popped up in a Ninjago theme set and the Haunted House set as well. But before we dive into the game's creation it would help to have a better sense of where it came from, to explore the roots of the New York City game dev scene and the years leading up to Junkbot's release, and how that led to not just Junkbot, but also many of the creations on LEGO.com.

### Brian Crecente

Yeah, you know, it's really fascinating, Ethan, despite being a hub for media, art and finance, New York City still doesn't have a major AAA game development scene, at least not like you'd find on the other coast in places like San Francisco and Los Angeles. Now, that doesn't mean that there isn't a thriving community of game makers in the Big Apple, just that development in the city has taken on a different form than on the West Coast. So, New York City is home to the headquarters or offices of some major publishers like Avalanche and Take-Two and Rockstar Games. There's also a thriving mobile game development community, and of course, when major media companies like Viacom or the New York Times start looking into game development, they usually start in New York City. For purposes of our story though, the most relevant elements of the New York game scene are tied to the universities, art scenes, and advertising. Back in 1995, Word Magazine went live online. It was this amazing website that pushed hard on the edges of interactive experiences mixing together stories, interviews, games, music and the like, to deliver this experimental content.

(Musical interlude)

### Naomi Clark

We published a lot of literary nonfiction and autobiographical nonfiction, but we also had a lot of interactive experiments, yeah, like motion comics and flash animations and sort of audio experiences and things like that, because we were in this experimental early days of the web trying to figure out what's the best way to use this new medium.

### Ethan Vincent

This is Naomi Clark, who was an editor on the website back in the late '90s. She said she eventually convinced the editor-in-chief at the time to have the website try its hand at publishing an online game. Initially, the idea was to create a multi-user dungeon or MUD,

which was basically a text-based precursor to today's massively multiplayer online games like World of Warcraft. But as more people came onto the project, the idea began to shift. As producer, Naomi Clark brought on lead programmer Ranjit Bhatnagar, art director Yoshi Sodeoka, and game designer Eric Zimmerman to create the game. Bhatnagar was making a name for himself at Word with his technology experiments at the time and pushed the team to create the title on Macromedia Shockwave. The group also started looking at card games for inspiration. It was out of this collection of creators that Sissyfight 2000 was born, a cute online social game that had players taking on the role of little girls in a playground striving to maintain their self esteem, while lowering the self esteem of their playmates. The game was a surprisingly massive hit for word.com.

(Music plays)

**Naomi Clark**

It got quite a lot of traffic, it has several hundred thousand players, which was a lot for the time, you know, comparable to some of the MMOs of the time, maybe because it was a free game, unlike those games. That was a big part of my resume when eventually Word.com closed down.

## **Chapter 2: Online Games on LEGO.com – 00:06:55**

**Brian Crecente**

When Word.com closed down, Naomi found herself looking for a job and discovered an ad from the LEGO Group for a new office they were forming to, among other things, support the expansion of the official LEGO.com website.

**Naomi Clark**

Sissyfight was a huge part of my portfolio saying, like, I did this pretty groundbreaking thing. Nobody had really made a game that you could play with other people on the web before that. There were maybe a few small experiments, but it was definitely the biggest one that had ever been made at that point. So, you know, if I had to guess, one reason that the LEGO Group hired me, it was probably because of that game. I went to work for the LEGO Group, and Ranjit and Eric, along with another collaborator of theirs, Peter Lee, started Gamelab to make more small games.

(Tune)

**Brian Crecente**

LEGO.com launched on March 22, 1996. But it was a very different sort of website than what you find online today.

### **Naomi Clark**

Well, the very early versions of LEGO.com were, I think, just a little bit like, almost like seeing a scan of the catalog, right? Just showing a bunch of products, mostly static images of products, of various LEGO sets. And at some point, I think a little bit before I started, the LEGO.com shop opened up, so they opened shop.LEGO.com, and it was a pretty early e-commerce website, you know, in the '90s. By the late '90s, those kinds of e-commerce projects had started to get a little bit more sophisticated. But it wasn't anywhere near as smooth as today's online shopping experiences are. So it was a, yeah, an early experiment, but when I started, which I guess was probably around 2000. We started working on a new type of website underneath the umbrella of LEGO.com. I think the first big project I worked on was BIONICLE, which was also kind of a shift in how the LEGO Group was marketing products. There were a lot of people across multiple continents working on the storyline and the animation, sort of displaying the characters in BIONICLE. And the group that was working on LEGO.com, we put together a pretty complex website that had multimedia and animation of the characters and lots of deep information about the story world.

### **Brian Crecente**

The tremendous response to BIONICLE's Mata Nui Online Game, which was developed by Templar Studios for the website, helped to convince the LEGO Group that it should invest in more games for its website, Naomi said.

### **Naomi Clark**

So we were excited about it, but we had no idea how big it was going to get. So I think the thing that really helps make more game projects on LEGO.com was just the high quality of the first couple chapters of the Mata Nui Online Game, because you could see it even without BIONICLE growing to be the enormous toy and transmedia craze that it became, everyone could kind of see, oh, there's some real potential here. And the, you know, the budget was not enormous. It was larger than, a larger budget than the LEGO Group had spent on online games in the past, but it justified itself very clearly in the storytelling and the production and the visuals. So I think that that, it really did spark another era.

### **Ethan Vincent**

The first step in that era of bringing more web games to LEGO.com had Naomi diving back into the New York game development scene.

### **Naomi Clark**

Yeah, so the New York game development scene, I think it was just starting to grow and get bigger around that time. I guess these were studios that were making, what are, what later came to be called advergames. They were small Flash and Shockwave games that were usually part of an ad campaign, and all sorts of different products were making games back in those days. Like I'm not sure if the same, if it exists in quite the same way now, right, but you know, Colgate toothpaste was putting out a new line of toothpaste and they

had like, you know, ads that were showing up on cartoon shows on primetime about, I don't know, their new berry blast toothpaste or something, right, I'm just making this up, they would have a game that was like a berry blast toothpaste game on Colgate.com. It was kind of a new trend, a new way of, like I've been saying, creating engagement online. So the game studios in New York area, New York is such an interesting, odd place for the game industry because we don't have very many large studios. I think like Avalanche Studios is maybe one of the only really big game production and development studios that has development right in New York City. But we've had a lot of smaller studios, in part because you need less real estate in order to support a small team of developers of, you know, between 10 and 20. And it was really, because of this type of client work that game studios were able to do, that companies like Gamelab that made Junkbot and Electric Funstuff, and then companies like Large Animal and Templar Studios, you know, all of them worked for the LEGO Group at one point or another were able to sort of spring up and support themselves and also work on their own independent projects. It was a really fascinating confluence, right, because it wasn't like working with an advertising agency, where they were only doing work for hire. These were teams of people that had come together with a dream of making games and saying like, "OK, we have our own ideas for games we want to make, and also, we'll work with a variety of other people to realize their ideas for games." So there was a bit of a creative explosion, or like, you know, a Cambrian stew of people with interesting ideas, who came from a bunch of different backgrounds, you know, some of whom had worked on other kids, or educational websites, some who were coming from other parts of advertising, all mixing together. And we were aware of these other companies, right? There were all of these people who happened to be in New York, because that's where all of these experiments were happening, and we all rub shoulders with each other and work with each other, and then the LEGO Group started up a new office for LEGO Direct in New York, and Brad Justice's idea was, "Hey, there are just tons of really creative people in New York," this is the heart of of marketing. It's the content capital of the internet, at least in the United States back then. And so he's like, "We should have a base of operations here and really harness this creative power." And yeah, and I think that, you know, that's where all of the, you know, this era of games really got its start.

## Chapter 3: Gamelab – 00:13:42

(Short musical interlude)

### Brian Crecente

Back in 2000 when Word Magazine shut down and Naomi Clark found her way to the LEGO Group's LEGO.com, Eric Zimmerman teamed up with Peter Lee to form a new independent game studio called Gamelab. Ranjit Bhatnagar, fresh off his work on Sissyfight 2000, joined the studio as the technical director, and Frank Lantz came on board as a designer. The studio would go on to develop dozens of games for brands as diverse as HBO, PlayFirst,

Nickelodeon, and, of course, the LEGO Group. They are probably best known for creating Diner Dash in 2003, which at one point was one of the most downloaded games of all time.

### **Eric Zimmerman**

Gamelab was an independent game studio –

### **Brian Crecente**

This is Eric Zimmerman speaking.

### **Eric Zimmerman**

– based in New York City that focused on online games, and specifically, games for a mass market. We were sort of an indie studio, but before indie games was a thing.

### **Brian Crecente**

The studio's first game BLiX, ended up winning an award at the 2000 Independent Game Festival, which helped bankroll Gamelab's new Manhattan office. The studio was just getting off the ground in 2001, when Naomi Clark reached out to Eric and his team at Gamelab.

### **Naomi Clark**

I saw this relationship that LEGO Direct and the LEGO Group had with Templar Studios making the Mata Nui Online Game, and I thought, "Oh, you know, I should really talk to my friends at Gamelab and see whether, you know, they could also work on some games." Because, honestly, Templar Studios had its hands full working on the Mata Nui Online Game and other projects, and so we actually, it was to the benefit of the folks working at LEGO.com, that there were more than one game studio in the New York area. So we started talking about doing games for LEGO.com and looking for interesting opportunities, and that's really how the conversation started for LEGO Junkbot, which was part of the first, the first project that I got to run on my own that I was in charge of at LEGO.com, was called the build section of the website.

### **Ethan Vincent**

That connection between Naomi, Eric and the rest of the Gamelab crew would eventually lead to a lasting relationship between Gamelab and the LEGO Group, with the studio creating a dozen games for the website. But the first was perhaps the most memorable: Junkbot.

## Chapter 4: Development of Junkbot – 00:16:04

### Ethan Vincent

The first step for Gamelab was to brainstorm ideas around both the brand and any particular direction they were looking for in a game, Eric said. Eventually, the studio came up with a two-part pitch document.

### Eric Zimmerman

One part is what we called the play values. These are sort of like the design pillars or principles that were behind the concepts that are in the second part of the document. But for the LEGO Group, those design values usually ended up being things like modularity, imagination-based play, open-ended problem solving, construction and engineering. So, those abstract values we would then, in the second part of the document, translate into a handful of concepts, usually three to five different concepts. But we brought to the LEGO Group a handful of concepts based on those play values, and then they would basically pick one, and from there we would start prototyping. So we were very much a rapid prototyping design process. We often were proposing not genre-based games, but games with innovative play mechanics. That was kind of our signature approach as a design studio: We always wanted to invent new ways for people to play. In the case of Junkbot, the concept that the LEGO Group selected was about a character that walked on its own, in a sort of a 2D platformer kind of world, and that you were building staircases and moving LEGO bricks around to kind of help them get around. So that core idea I'm pretty sure was the basis of what we proposed to the LEGO Group.

### Brian Crecente

A big part of that initial pitch for what would become Junkbot was working to boil down the core conceit of LEGO bricks and LEGO play, Frank Lantz said.

### Frank Lantz

The idea of Junkbot comes from the core mechanic of you're going to build the level. So you're not going to control the character. So the idea is what kind of game can you make that really embodies the fun of playing with LEGO bricks? And so, well, let's do a platformer where instead of controlling the character, you construct the level, and everything else just flows from that, that core mechanic, right? That's the whole idea. It's like, OK, so once you have that idea, then, you know, you spend a lot of time on the basic controls of how you manipulate bricks, which is really non-trivial, like that's the, like a big part of Junkbot was figuring out how in this kind of 2D way, can you make an intuitive and satisfying construction mechanic? So you're grabbing bricks, and how do they respond? And how do you pull a brick apart? And how do you snap a brick in? And then kind of once we had that working it was all a matter of level design. Now, how do you make levels around that that are really interesting? And how do you explore kind of all the dimensions and figure out all the things that are interesting and cool to do with that central idea?

**Ethan Vincent**

One of the central issues the group had to solve was figuring out how to manipulate LEGO bricks in a digital 2D environment, said Ranjit Bhatnagar.

**Ranjit Bhatnagar**

The LEGO Group wanted a game that really felt like playing with LEGO bricks. So it was super important to us to have a game where there was a very satisfying feeling of taking apart and putting together models made out of LEGO bricks. But of course, it also had to be a good game. And this is exactly the kind of thinking that Eric Zimmerman is really good at, and Gamelab as a whole, was really good at. So I'm sure I can't say, after all these years, but I'm sure we had tons of brainstorming meetings, talking about possibilities for, how do you make something that feels like pulling apart and sticking together these LEGO bricks, but also then becomes a really challenging and interesting and fun game? And we also worked with a wonderful composer and sound designer Michael Sweet. And I imagine he probably sent us dozens of different prototypes for the sounds of bricks clicking together and the sound of bricks being pried apart. And we picked our favorites of those with a lot of testing on the screen to see how it was.

**Frank Lantz**

Yeah we just, it was the central issue and I think we spent a lot of time on it.

**Ethan Vincent**

This is Frank Lantz speaking.

**Frank Lantz**

It was a matter of brainstorming different possible approaches, and then a lot of prototyping. You know, Ranjit Bhatnagar was the main engineer on that project, and Eric Zimmerman and Peter Lee, and I just, we just spent a lot of time prototyping different ways of having the cursor interact with the objects and having kind of interpreting gestures of what happens when you, you know, what happens if you grab an attached LEGO brick and pull it, you know, left and right? You know, if it's, nothing should happen really. What you want is to grab a LEGO brick, and when you pull it up, it should kind of like pop off. And then there's the kind of underlying physics of which LEGO bricks are free to grab at any time. So you have this kind of recursive logic of trying to interpret what the real world does kind of automatically by the limitations of physical properties of the bricks, you had to kind of embody in the behavior of the system. So yeah, we just prototyped it a lot. And then, I think once we had something that felt right, we just kind of tuned it until, you know, we had the core system.

**Ethan Vincent**

The team also worked closely with Naomi Clark. Here's Frank Lantz, again.

## Frank Lantz

She had a kind of vision for the kinds of games that they wanted to make, and, you know, I think the basic idea was just it was kind of still early days of the web, and people were kind of figuring out what the web was good for, and what were the kinds of things that your website should have on it. And the idea of like, just having free games on your website was the idea. And so we worked really closely with Naomi who was kind of really interested in making games that were genuine expressions of the fun of LEGO bricks as a toy. Not just game experiences that were thematically related to LEGO bricks, but really game experiences that explored the same kinds of play patterns, and so, that was the idea, like it was genuinely like a chance to kind of do some design thinking around what would be a video game that really kind of felt like the fun you had when you played with LEGO bricks.

## Ethan Vincent

Eric Zimmerman said the challenge of perfecting the LEGO brick interaction remains one he recalls clearly, mostly because it came with a big lesson in game design in general.

## Eric Zimmerman

There were, there's always challenges but there was one really, really big challenge with LEGO Junkbot that I still remember to this day because I learned so much from working on that game. So we initially prototyped the core interaction, which is what it is now: You click on a brick, you can move it around. It was actually very tricky the logic of like, if I click on this brick which bricks does it attach with? What was intuitive? What was not intuitive? Because now, you know, you can you can take a whole stack of bricks like a – build a staircase and then move the staircase if you click on the bottom brick, so you don't have to go one-by-one-by-one. We initially had it just brick by brick and we realized that's really tedious. We want to move more bricks around. So we knew that it was going to be about getting an autonomously moving character around, so we liked that idea that Junkbot has really has life in it. You don't control Junkbot directly. You just manipulate the environment Junkbot is in, and Junkbot kind of bounces back and forth like a happy-go-lucky robot that he is, and he just wants to take out all the trash in each room at the factory. So we had checkpoints, I think maybe they were just flags at the beginning not really garbage. And we had some levels that we started designing with places you had to go up, places you had to go down. And the big challenge was that the game was boring. It was kind of like, "Oh, we get it. Like, we can move Junkbot around," and we started trying different levels, more intricate places, things where you had to be really clever. And it was just boring. And we were actually terrified because we said, "Hey, we've exactly made the game that we said we were going to make, which is that there's an autonomous character walking back and forth going up and down stairs. And you're building ramps and staircases to get over chasms. And we realize it's fun for like three minutes, and that's it." And we had a hard time making levels. We just had to add stuff to the game. We had to add obstacles, hazards, enemies, power-ups, and then the game started getting fun. But that really goes against a lot of common sense game design wisdom, which is that you need a fun core mechanic.

Your game should be fun, the vanilla level of your game should be engaging, and rich and replayable, and then you add special sauce, and that's the frosting on the cake. But in the case of Junkbot, and this is just that games are weird and any rule of good game design you can always find exceptions to, in Junkbot, the frosting became the cake. So the special stuff that we were adding that was like the decoration we'll add, that's what really made the game. And then we realized we actually don't need all of this in a level we have, OK, let's add fans, well then, let's add add fans and then the flying enemy. And so you usually just needed two or three elements in different combinations. And then those combinations started to bubble out into interesting combinations that provided new challenges. So, that was the big lesson of Junkbot, and I know that that was in our thinking because we just thought, "Oh, LEGO Junkbot is not good. But LEGO Junkbot with stuff is great." And so once we had that, at least in terms of the game design, things took off. What I love about that little lesson is that, yeah, it still goes against this deeply ingrained, common sense wisdom for how you make a good game, right, which is that you find a core mechanic and the core mechanic is fun. In this case, the core mechanic was conceptually interesting, but experientially lacking. I guess it's just like cooking, right? Sometimes you make a cake and it's so good you don't need the frosting, and other times the frosting makes the cake. So in the case of Junkbot it was the frosting.

## Chapter 5: Release, Reception and Aftermath – 00:26:48

**Brian Crecente**

Junkbot hit LEGO.com in 2001 after less than half a year of development. And while it didn't land as a massive hit, it quietly built up steadfast popularity among site visitors.

**Naomi Clark**

Well, I think not a whole lot of people were paying attention to it –

**Brian Crecente**

This is Naomi Clark.

**Naomi Clark**

– internal to the LEGO Group, right? Because the Junkbot's performance wasn't part of a marketing report that was part of somebody's bottom line trying to show how sales or marketing we're doing for a product line, right? It was just a little educational experience. I would almost say it's, you know, it was a little bit like having a nonprofit or like it was as PBS is to the commercial television stations here in the U.S that we were doing it for its own sake. And so, there wasn't really anybody who was bothered by it and nobody who was super excited by it. It had kind of an enduring popularity. It wasn't the biggest, most heavily promoted thing on the website, by any means, because it was tucked off in its corner, but it had this very enthusiastic following because, I think primarily, it was a very

high-quality game, and it was a challenging puzzle game that you had to think about that also had a cute cartoon aesthetic. So it had this mix of things that gave it staying power.

**Brian Crecente**

Certainly one of the reasons for its success has to be the cheeky design of the Junkbot itself. Eric said Gamelab co-founder, Peter Lee deserves credit for that original design.

**Eric Zimmerman**

We ended up with a robot because we thought, "OK, this character just walks back and forth."

**Brian Crecente**

This is Eric speaking.

**Eric Zimmerman**

"So we don't want it to be, I don't know, an animal or a person that might have complicated thoughts, like it seems like it's just going on a program, right?" But we ended up adding flourishes to the character and, you know, a lot through Peter and his influence on the game, for example, when Junkbot gets to a trash can, Junkbot eats the entire trash can, opens up and just swallows it whole, and like there's just funny little things like that that it starts feeling absurd, it's like Junkbot's almost trying too hard in his job (laughs) "Don't eat the trash can too! Oh, well." And there's little sounds that Junkbot makes. There's cutscenes, especially in the sequel to Junkbot there's even more cutscenes, but we tried to add those little flourishes of content around the game for the character, but there's a kind of mischievous, playfulness to Junkbot. Yeah, I don't know what it is, it's a, I guess there's a sort of R2-D2, like cute robot pet appeal to Junkbot.

**Ethan Vincent**

Junkbot's lasting appeal is evident in a number of ways, including the fact that ever so often, it pops up in other LEGO Group products. More immediately though, the game's success help to prove that games on the LEGO.com website were a good idea.

**Naomi Clark**

It's certainly a part of why we kept doing more games with Gamelab.

**Ethan Vincent**

This is Naomi Clark speaking.

**Naomi Clark**

But as far as the aesthetic of Junkbot and the face of LEGO.com, I think Junkbot was definitely an attempt to make a character and a little digital experience that captured the

web aesthetic of the time. So it's pixelated, it has a lot of pixel art. And that's something we certainly used in more games going forward. In part because I think it makes a very nice marriage with LEGO bricks and LEGO products in general.

### **Ethan Vincent**

The game's enduring popularity was in some ways fueled by the sequel, *Junkbot Undercover*, which hit in 2002, but also can be found in the fact that it was a fun and funny play experience.

### **Naomi Clark**

I think part of the secret is that we set out to make a game that was not just for kids, not talking down to kids, right? We were making a game that would be genuinely fun and challenging and interesting for adults. But we were making a game that was all about putting bricks together and figuring out what you can do with those bricks. And then there were just a bunch of other design touches that, you know, we took really seriously every aspect of the game. One of the designers, Frank Lantz, likes to talk about how *Junkbot* has great failure states. That was really important. We spent a lot of time on *Junkbot* dying, and I think that's something that maybe kids did not get to see that often in games that were presented to them, right? Like, there are all sorts of hilarious ways that *Junkbot* dies, and it's OK because he's a robot and he gets back up and goes on. But he gets electrocuted, he gets fried into little bits, like all sorts of bad things happen to *Junkbot*, and he gets up and keeps going. But that kind of Looney Tunes-like – it's not really violent, right? Because games from the LEGO Group are not violent, but they're funny, they're comical, and they give you this idea of like, oh, OK, there are some cartoony stakes here. And they're challenging, you know, so we were really pushing hard on kids having to figure out how to solve these levels themselves. And I don't know, I just think the character design, which is largely the work of Peter Lee, ended up being so charming. I fell in love with *Junkbot*, yeah, early on in production because he's a spunky little robot who can't, you know, he can't really do all that much. He's not super-powered. He just likes to eat trash, and that's something that kids find funny too, right, that adults can appreciate. He's a robot whose goal in life is to eat trash.

### **Ethan Vincent**

Eric Zimmerman said that all of the work that team put in trying to boil down the experiences of playing with physical LEGO bricks contributed to the game's success.

### **Eric Zimmerman**

There's something when you are starting a new design problem, and you're really having to figure out how are we going to do this? How are we going to translate playing with LEGO bricks into a video game? And I think that we actually spent a lot of time on *Junkbot* iterating on that idea and trying to figure it out. And we sort of nailed it. Like I think we just did a really good job of translating certain aspects of the the kind of modular, construction-

based play to Junkbot, and we, maybe on some of our other games we went farther afield and explored other aspects of building with LEGO bricks.

(Sounds from Junkbots)

**Eric Zimmerman**

Junkbot was not tied to a particular property, and so we had sort of creative license and we ended up making this fun character Junkbot, which, you know, wasn't tied to the LEGO universe in a way, and I'm not saying that that's better or worse, but maybe that actually helped the game stick out in people's memories, because it felt more like it had its own identity. And this is kind of the interesting paradox of advergaming, right? That you can make a game that you think this game is promoting this particular product line, but it turns out maybe, with Junkbot as an example, that try to do something a little bit more inventive in terms of the intellectual property, inventing a new intellectual property but within the brand of the LEGO Group, sticks in people's minds more.

(Sounds from Junkbot)

**Brian Crecente**

Of all the games he worked on Ranjit Bhatnagar said that Junkbot remains his favorite.

**Ranjit Bhatnagar**

I think we did a really good job of making the feel very LEGO brick-like with the ability to take things apart, put them together in a fairly freeform way, but still have goals to play the game. And the game as a whole was both cute and fun. Something I actually wanted to bring up was we had a leaderboard on the site, where the basic idea of the game is that in each level of the game, you have Junkbot, our protagonist, who is a little robot who walks around autonomously, you don't control him directly, but he turns around if he runs into an obstacle that he can't handle, or he will walk upstairs if you build stairs for him. So there's Junkbot and there's a goal, and you have to take apart his environment, which is made entirely out of LEGO bricks and put it back together in a way that he can reach his goal. And the way the scoring works is, the fewer moves you can do, the less change you make to the environment, the better your score. So it's kind of like golf, a low score is better. And we had an online leaderboard on the site where if you are able to solve a level in fewer moves than anyone else ever has before, you can put in your name and it'll show up on the leaderboard. And that was actually a really fun part of the game for me.

## **Chapter 6: Conclusions – 00:35:19**

(Music plays)

**Brian Crecente**

So the studio Gamelab would go on to create dozens of games for LEGO.com, including a sequel to Junkbot called Junkbot Undercover, which features gold bricks, walking trash cans, and friggin' laser beams.

**Ethan Vincent**

Nice.

**Brian Crecente**

The studio shut down in 2009, but not before spinning off nonprofit Institute of Play, which worked to inject more games and play into education. These days, many of the people involved in Gamelab and Junkbot's creation can be found at New York University's Tisch School of the Arts, working in the prestigious art school's Game Center. Eric, Naomi and Frank all teach at NYU Game Center where they apply lessons learned working on games like Junkbot to developing tomorrow's game makers.

**Ethan Vincent**

Now you taught there as well briefly too, didn't you, Brian?

**Brian Crecente**

I did. I actually taught a game journalism class, and it was a ton of fun.

**Ethan Vincent**

That's cool. Well, I kind of would love to circle back to something you mentioned earlier at the top of the podcast here about LEGO Builder's Journey, and I think the obvious question we both had early on was if there was a connection between LEGO Junkbot and LEGO Builder's Journey, you know, that concept of incorporating creative digital building with these, you know, matching LEGO brick clutch sound effects, and using that as kind of the key feature in the gameplay experience. And it reminded both of us of the gameplay mechanics that are involved in LEGO Builder's Journey.

**Brian Crecente**

Yeah, you know, you're right. It's amazing how similar the mechanic is between those two games. And there are people even, that we spoke to, who think that Junkbot himself makes an appearance in the game. Unfortunately, that's not true. I actually spoke with Karsten Lund, the Creative Director of Builder's Journey about it, and he said, he actually hadn't heard about Junkbot until after Builder's Journey was designed and someone at the LEGO Group pointed out that this other much earlier web game existed.

## Ethan Vincent

That's crazy. I would have thought that Karsten would have known that, so to me that's also quite remarkable to hear that he wasn't aware. And, again, it kind of fascinates me this idea of just how intuitive the gameplay experience is with, you know, these digital bricks. And when you have Junkbot, you know, kind of walking back and forth and waiting for you to build this clear path with LEGO bricks for him, I think that is actually something that many game designers and early visionaries had in mind when they thought about building with LEGO bricks digitally – this idea of giving it some kind of function, some kind of gameplay experience, and Junkbot sure does that, and LEGO Builder's Journey does that. And to me, this is kind of the beginning of some really interesting play with LEGO bricks in this functional kind of game space of giving the LEGO bricks a clear purpose when it comes to playing. I really love that.

## Brian Crecente

Yeah, you know, I think if you look back – or listen back, in this case – to what Frank Lantz said and his discussion about how they came up with this concept for Junkbot and the fact that players actually don't really have agency – they're not controlling Junkbot, they are instead creating his path – and how similar that is to Builder's Journey, I can't help but think that, you know, two decades apart, you have these really thoughtful game designers sitting down and trying to figure out what is at the core of LEGO bricks and play and creation, and how can you translate that into something that's fun, and not just an interesting experience, but one that really does capture the feeling of playing with LEGO bricks. And I love that they essentially, again two decades apart, came to the same conclusion and created two very different sorts of games with the same sort of idea at its heart.

## Bits N' Bricks Credits – 00:39:22

(Postscript music)

## 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 Andreas Holzinger. Mixing and sound design by Dan Carlisle. Disclaimer voice is Ben Unguren. Opening's child's voice is Milo Vincent. Music by Peter Priemer, foundermusic.com, excerpts from LEGO Junkbot and LEGO Junkbot Undercover, and Henrik Lindstrand from the award-winning game LEGO Builder's Journey, which you can play on Apple Arcade, Windows PC and Nintendo Switch. We'd like to thank our participants: Ranjit Bhatnagar; Naomi Clark, Frank Lantz, and Eric Zimmerman. We'd also like to thank the entire LEGO

Games team. For questions and comments write us at [bitsnbricks@LEGO.com](mailto:bitsnbricks@LEGO.com). That's bits, the letter N, then [bricks@LEGO.com](mailto:bricks@LEGO.com). And as always, stay tuned for more episodes of Bits N' Bricks.

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