But Why: A Podcast for Curious Kids

Who invented emoji?

November 18, 2022

Jane 00:21
This is But Why: A Podcast for Curious Kids, from Vermont Public. I'm Jane Lindholm. On this show, we take questions from curious kids just like you and we find answers. We love your questions because often one simple question can inspire us to explore so many different topics: science, history, art and culture...all wrapped into one question. Today's is kind of like that.

Leila 00:48
My name is Leila. I'm from Melbourne, New Jersey. I'm nine years old. And my question is: how were emojis invented?

Jane 00:59
Before we can answer how emoji were invented, we need to make sure we all know what they are. If you've ever watched a parent or an older sibling or a caregiver sending a message to someone else on their phone—or maybe you've even grab their phone yourself—you might have noticed that, in addition to typing words, you can type in pictures to get your message across. You might add a heart symbol or a smiley face to end a message with a kind of note of affection, kind of like, "I love you" or "I like you." Or you could use the face of someone laughing instead of typing out, "That's so funny," when somebody sends you a joke. Maybe you want to know what's for dinner. Well, instead of writing, "What's for dinner tonight?" you could punch in a picture of sushi, a chicken, drumstick and a bowl of salad, followed by a question mark. There are lots of pictures to choose from. And all of those symbols are called emoji, small images, symbols or icons used in electronic communication.

Paul Galloway 01:58
The emoji developed over a long period. But in particular, in Japan and the 1990s the word is actually a Japanese word. It's a two-part word. So "eh" means picture, and "moji" means character. So emoji means "picture character." My name is Paul Galloway. I'm a collection specialist at the architecture and design department in the Museum of Modern Art. And that's a very long way of saying I take care of art and design at the museum.

Jane 02:27
The museum Paul works for is sometimes called MoMA, because that's what the initial spell: Museum of Modern Art. It's in New York City. As part of his job, Paul is actually working on a book about emoji. And by the way, you say emoji, whether you're talking about a single picture, or lots of them. Kind of like how one moose is called a moose and many of those animals altogether are still called...moose. Let's get to Leila's question about how emoji were invented back in the 1990s.
Paul Galloway 03:00
They were developed in people trying to make cell phones and pagers. Before there were cell phones, if you wanted to catch your friend or your parents, and they were away from a home phone that had a cord connecting it to the line, you would call a pager and leave a little callback number. And then that person would then go find a public payphone and call back at that number. And the youth in Japan, the young people, didn't like doing it this way. So they immediately started using pagers in a way that nobody anticipated. They would use little number codes to mean things to each other like 01069 meant "I love you." Or 049 meant "Thank you." And they use these kinds of codes. And then along came one of the Japanese companies that was selling these pagers and said, "You know what people might really like is a heart. And then they can send a symbol instead of just numbers and letters." So this company was called NTT DOCOMO, which is very much like a big Verizon Wireless or AT&T, it's a huge company. And their pager with a heart on it was extremely popular. And a few years later, they released a cell phone that also had the emoji capability, but this time with 176. So you could say that emoji were made in Japan and made for Japanese pagers and cell phones. But they even go a little further back from that. Some of you, some of your listeners might know that kind of emoticons, the smiley faces you can make with a colon and a parenthesis. In Japan they have more keys and characters on their keyboard. So there's even more complicated faces that they can make including the shrug face. We've all seen the kind of funny shrug face.

Jane 04:39
Right. You make it out of lines and it looks like somebody with their hands raised like they're going "I don't know."

Paul Galloway 04:43
Yeah. it's it's a wonderful kind of...I use it all the time. People ask me where do emoji come from and I respond with a shrug.

Jane 04:51
Which technically is not an emoji, right? Emoji are actual pictures, and emoticons are the ones that are made with the letters and numbers and that are more sort of symbols that represent a picture.

Paul Galloway 05:03
Right, and they're sideways. That's another key thing. Emoticons, in the West, you have sideways faces, happy faces, angry faces, and kaomoji, which is the Japanese equivalent. They're horizontal, but they're not characters we have on our keyboard, you can't type out the shrug emoji. We don't have the right characters on your keyboard here in the west. So that's only something that can be done in Japan. So there's emoticons, there's kaomoji, and then emoji become the kind of actual faces that you see on cell phones. And they were used on cell phones in Japan for quite a long time. But they were really stuck in Japan for a while because if you were on a DOCOMO phone, you couldn't send an emoji to somebody on a different company's phone. So each company had their own kind of locked thing. So it didn't work all that well. And it wasn't until 2006, when Google added emoji to Gmail, and then in 2010, when Apple added emoji to the iPhone that suddenly the world took notice and started using them. And now emoji are used in crazy numbers. I think, on Facebook messenger apps alone, there's 5 billion emoji sent every day, every single day.
Jane 06:10
The emoji that you are talking about that were built in the 90s, they looked pretty different than what we see on cell phones today. What did they look like?

Paul Galloway 06:19
Well they look, for kids today, they might be like something they would see in Minecraft, everything's very blocky and pixelated. And that's because computers back then were very, very weak. They were not very good computers. And in particular, cell phones were very, very primitive. They did not have very strong computers. Their screens were tiny, and only had one color and it was very, very simple graphics. So the emoji from the 90s in Japan are extremely simple and blocky.

Jane 06:51
Emoji today are much more detailed. They look like full little pictures. But how do they get on people’s phones? Who chooses which pictures get included and how?

Jane Solomon 07:01
My name is Jane Solomon. I am a emoji expert. And I’m also a dictionary editor.

Jane 07:11
Jane is an editor for emojipedia, an online encyclopedia for all things emoji.

Jane Solomon 07:18
If you go to emojipedia and you want to look up, okay, what are different meanings for this kind of hand gesture or this flower, whatever, you might be able to find some information there. You might be able to find what flower specifically it is. And you’d also be able to find how it looks across different platforms.

Jane 07:37
By different platforms, she means things like different phones made by different companies. So a picture of a cactus might look different on a phone made by Apple than on an Android phone. Here’s something that might be tough to wrap your head around. When you send an emoji, what is actually being sent from one phone to another isn't the picture itself. It's a code. The code gets sent from your phone to your friend's phone. So okay, I'm going to send Melody a picture of a cactus. First I find the picture I want. And then I hit send. And now Melody’s phone is going to read, or interpret, the code from my phone. And what she'll see on her screen is a picture of a cactus. She sent me back a bison and a sloth, so I'm going to send her a heart. Now, something simple, like a heart, is pretty easy to make from one phone to the next. But as the emoji pictures got more complicated, as more and more of them have been created, and they looked different, like I mean, you can get a bowl of spaghetti with sauce, or you could send a picture of a person getting a haircut. Well, not all the phones and devices were making the pictures from those codes in exactly the same way on every kind of phone.

Jane Solomon 08:59
Well, for example, there were emoji that were of different facial expressions. And they could have completely different meanings or--based on who was sending it and what device they had, and who
was receiving it and what device they had. For example, one of them is the grimacing face, which is basically a yellow face emoji with two eyes, and then a mouth that's kind of in an oval shape, with teeth showing. And in the past, it appeared differently on different phones, it was a completely different expression.

Jane 09:38
If you think you’re sending your friend one kind of face, but your friend is actually seeing something totally different, that doesn’t make communication go very smoothly. So a group that deals with computer language got involved to create some emoji rules.

Jane Solomon 09:54
Unicode is this organization and their goal is not related to emoji, specifically. It's related to communication and getting all the languages that people use, all the written languages, able to be sent from one device to another across platforms, any language you want to do. And these big tech companies don't necessarily prioritize making communication accessible in those languages. So Unicode makes these code points for these different characters that might not have existed if there weren't an organization looking out for that. Now, emoji got added on to this mission, around 2008, 2009, 2010. They started working on making emoji accessible in this way. Because before you could only really use them if you had specific phones and were in Japan, basically. So emoji got pulled into that because they were viewed as this important mode of communication.

Jane 11:09
And so now when you send an emoji to a friend, you can be pretty sure your friend is going to see the same picture on their phone that you have on yours. But Unicode, the organization in charge of this, also has a lot of control over which new emoji get added. And Jane is part of the group that makes those decisions. Coming up are emoji art? And how can you get a new emoji added?

BREAK 11:34

Jane 11:37
This is But Why a podcast for curious kids. I'm Jane Lindholm. Today we're learning about emoji, those little pictures you can send in text messages and emails. at MoMA, the Museum of Modern Art in New York City, you can see the original emoji created in Japan in the 1990s. They're projected up on a huge white wall so they're bigger than your head. There's like a weird little umbrella, a boxy little car. There's a sun, which looks like a circle with little lines around it. I mean, remember, these were the olden days of emojis, so they look blocky and pixelated, not like the pictures of today. But still you can tell what they are. They're definitely real pictures of things. So if you send that boxy umbrella, the other person is probably going to know it's an umbrella. But what are these boxy images doing in one of the most impressive art museums in the whole world? Are emoji art. We asked Paul Galloway. He's the guy who says he takes care of art and design at MoMA,

Paul Galloway 12:41
Emoji, we felt, were a really important moment in communication design, and how we could tell the story of where we are right now. We love taking design objects that everybody uses everyday: chairs, cars, trains that you’re on and environments that you’re in, and helping people see them in a new way. And most people are completely unfamiliar with where emoji come from, how they started, the fact that emoji is a Japanese word. I can’t tell you how many people think it has emotion as part of the word. And it’s like, no, no, no, it’s completely got nothing about emotion in the word, it’s a Japanese word. So we love that idea of sharing with people the genesis of the story, and then helping them to kind of think about why we use emoji and why that becomes so important to us. An important thing to remember is that art is a form of communication. It's a way of taking an idea from me, the artist, and giving it to you, the viewer. And that's done visually. And we can communicate ideas visually, we can communicate ideas verbally, by speaking them out loud. We can communicate ideas by sending messages to each other. And so art and language are, have been linked forever. In fact, art is much older than the written word. And an art museum, as our job, is to tell the world about visual culture. So we feel it very important to help educate our public of the importance of the art that is in their lives every day. We like to think of architecture and design as the art that goes home with you, right? You go to MoMA and you see Van Gogh, and you see Picasso, and you go home and you do live with the art that's on your iPhone, or on the video game that you're playing. And you are part of that artistic story.

Jane 14:24
One of the things I've been thinking about is how people use emoji today, often, instead of using words. But what if your idea of what a face with star eyes means is different from what I think it means? If I send that picture to you, and I mean one thing and you think I mean something else, how are we really effectively communicating? Are pictures going to give enough information for someone to know what you’re trying to tell them? Paul says there are lots of ways we get our meaning across that don’t just involve words, and there's lots of ways to be confused by things, even when we use the same words.

Paul Galloway 15:04
We talk about tone and intention, and written speech, but it's very much a part of spoken speech as well. If I'm talking to you, and I am your boss, and I say, good job, there's a million ways that can be heard, I can say, "good job," or "good job" or "good job," right? All of them are the exact same words, but they're delivered with completely different meanings. And we call it we can call that gesture, we can call that intonation. But there's also my face, what kind of expression was on my face when I was saying "good job"? All of those are the kind of important context and further clarification of the word "good job." And emoji can do that as well, right? You can say "good job" and a thumbs up emoji. That can be read as actually affirming you did a good job, or it can be read as sarcastic. But that same danger can be had in person, right? We are always at risk of miscommunicating. And in a way, I think emoji, by allowing more interpretation on the message, actually makes the speech much more human. Because if we're just typing "good job," like a robot, we're just left wondering like, what could they mean? I have no idea, am I actually talking to a person or is this a an artificial intelligence chatbot on the other end? Whereas when you start using emoji, you're bringing the human into the conversation, you're bringing the chance of misinterpretation, or a richer understanding of what somebody is intending. It allows for a little bit more chaos, which conversation is chaotic.

Jane 16:36
Jane Solomon agrees.

**Jane Solomon 16:38**
There's no right or wrong way to use an emoji. You want to make sure that the person that you're sending emoji to understands what you're saying. And it's very hard to express that sometimes with just emoji. But if we use words alongside emoji, our points can get across. Or if we have an established connection with someone and they have the same understanding of an emoji as we do, we can send them back and forth. And it can be very meaningful. But you know, use them however you want. They're really just this form of expression that's out there and available to play with.

**Jane 17:17**
While emoji have come a long way from those pixelated images of 30 years ago, Jane says she actually kind of like those better.

17:25
At this point, like in modern times, emoji have a lot more detail. They have shadows, they have really subtle expressions and differences in the line quality. So yeah, they look a lot different now. I actually prefer the less detailed emoji designs because when something is less detailed it could represent more things. When something is more detailed, it shuts off some of these interpretations or it makes it a little bit more of a stretch to think about it in a different way.

**Jane 18:08**
Okay, so what if you want to create a new emoji and get it in everybody's phone, or at least want to suggest one that you think should be there?

18:18
Anyone from the public can submit an emoji proposal at this point. And then a group of people called the Unicode emoji subcommittee (and I'm actually part of that group) reads the proposal, and discusses the merits of the proposal and then recommends or doesn't recommend it to become encoded into the emoji set so it can be used by people all over the world, across devices.

**Jane 18:48**
As we are making this episode, there are 3664 emoji. That sounds like a lot to choose from. But Jane says the committee has approved a lot fewer emoji in recent years than they did in the past. Either way, it's definitely grown beyond the handful of original emoji created for pagers in Japan back in the 1990s. Now, in terms of favorite emojis, what's your favorite? Jane says one of hers is actually a relatively new one.

19:20
The melting face emoji, so it's a smiley face, and it's and the bottom of the smiley face looks as if it's melting. And I think that's a really good and fun emoji because it it can express a lot of feelings at once. It can express that maybe you're trying to look happy, but things are kind of falling apart, which I'm sure everyone can relate to. And it can also express sarcasm. So it's it's just a really funny emoji to send to people. I like that one.
Jane 20:00
Thanks so much to Jane Solomon with emojipedia and to Paul Galloway at the Museum of Modern Art for teaching us all about emoji. What kind of emoji would you propose if you were going to create a new one? Draw a picture of the emoji you think should be there and have your adult send us a photo of it. We want to see what you would create. That's it for this episode. If you have a question about anything, have an adult record you asking it. It's easy to do on a smartphone using a voice recording app. Don't forget to include your first name, where you live and how old you are. Then your adult can email the file to questions@ButWhykids.org. We can't answer every question but we listen to them all and we love hearing what's on your mind. But Why is produced by Melody Bodette and me, Jane Lindholm, at Vermont Public and we're distributed by PRX. Our theme music is by Luke Reynolds. We'll be back in two weeks with an all new episode. Until then, stay curious!