In this portrait image, a woman stares down the lens. She is striking, with high cheekbones, full lips, and eyes so dark they're almost black. The light catches her forehead and the bridge of her nose, and the right side of her face is in shadow.

She wears an elaborate head-dress. Either side of her head, next to her eyes, there are round devices that look like cameras, with circular red lights in the middle, trained on the viewer. Connecting the devices are what appear to be wires that almost look like the stems of plants. On top of her head, pale, mossy oval shapes are clustered. They look like they could be the buds of flowers, or even mushrooms.

She wears a light-coloured blouse with a high neckline. It looks as though green moss and grass are growing from the fabric itself. This arresting and unusual figure, a symbiotic blend of the technological and the natural, is set against a black background.

My name is Heidi Rondak, and I am a fashion photographer. And although this image may look like a photograph – it even looks a little like some of my own work – it is not. There was no camera, no studio, and the model at its centre doesn't exist.

That's because I generated this image with artificial intelligence – or AI – in January 2024.

Using generative AI software, you can create pictures like this one by using written prompts. To create a picture in one of these programmes, you simply start your prompt with the word "Imagine".

As the word suggests, it's an invitation to create an image that depicts a world or future that doesn't yet exist. I try to use it in a way that conjures images of a future with all its technical, environmental, and social hopes and dreams, coming together in one frame.

Generative AI learns from what is already there. And these programmes are inspired by a large collection of content and information that already exists – from science fiction, to movies, books, and more. As a result, the potential for what they can already produce is near limitless.

The creation of images like this one shows how powerful and compelling AI is. But the advent of this technology also brings questions and challenges.

One of them is that it forces us to reconsider creativity, what it means, and how we use it to express ourselves.

The essence of creativity lies in our ability to combine existing concepts in different ways. This is how we imagine something new – by piecing together ideas and elements we already know to create something visionary, something different.

Depending on how you see it, AI could be a threat to human creativity; or it could enhance it.

And even though the programme I used is focused on creating visuals, generative AI also makes us question the words we use.

That's because we're using our written language to bring a visual into existence. This is fascinating, because it challenges our understanding and application of words – especially when the AI-generated visual doesn't produce the image we had envisioned.

The meanings of words can vary strongly; they depend on individual definitions, the context they're in, and countless other factors. All programmes often understand words very literally, forcing us to change perspectives and adapt to the machine's learning.

The rate at which AI has been developed and rolled out across all walks of life and work has worried some people about its future, but I'm optimistic about it.

This image is an example of that positive view. It shows how nature will always be part of the human identity, even as technology plays even more of a role in our lives. The technology in this image is not intrusive, it is interwoven into the fabric of who she is, and the natural elements happily coexist.

Perhaps the most unusual part of the image are the devices she wears on the side of her head. They look like eye-shaped cameras, watchful on either side of her symmetrical face. Yet her confident and empowered expression suggest they aren't an obstruction, but part of her.

The futuristic lenses are staring back at the viewer, suggesting an unknown intention behind them. It may feel as though technology is watching us, not necessarily in an ominous way, perhaps to learn from us, perhaps to improve our lives.

The image is an interplay of perspectives – something that photographers love to do. Maybe one day, cameras will be worn as accessories or attached to the body to help improve our limited abilities of sight.

Whatever the future holds, as a photographer, I can't imagine it without my camera. And no matter how far AI goes, it will never replace them. The camera doesn't ask us to imagine because it doesn't need to. It captures what is already there, that which is real and tangible.

In my work, I like to experiment with the potential of AI because I believe that it can improve it. I can use the technology as a building block, or to enhance existing imagery.

And while photography won't be replaced by AI-generated images, it can still inspire us to push the boundaries of imagery even further.

Like most tools, it's about what we do with it. Al can ease the creative process of concept making, as well as reassure creative intentions, if not improve them through early on visualisation.

Sometimes, I dream of the photoshoots I haven't done. It's then when I turn to AI to create a vision of them anyway. It helps me picture a reality that hasn't happened yet. It helps me imagine the future.