



— Neil Harbisson is the first person in the world with an antenna mounted to his skull.

Neil Harbisson can “see” in UV thanks to an antenna-like implant that boosts his perception of light and gives him super-senses.

From prosthetics¹ to pharmaceuticals, humans have been using technology to alter² their physical and mental capabilities for thousands of years. Now, with our rapid advances in technology, some people are embracing human augmentation as a means of expressing themselves and experiencing the world in a totally different way.

Neil Harbisson, 33, is one of these people. The artist was born with achromatopsia, or complete color-blindness. Far from a disability, Harbisson considers his natural world-view to be an asset³, though he did want to be able to understand different dimensions to sight.

Over the last 13 years, he has been able to “hear” visible and invisible wavelengths of light. An antenna-like sensor implanted in his head translates different wavelengths into vibrations on his skull, which he then perceives as sound.

Often called the world’s first official cyborg, after the British government permitted him to wear his headgear⁴ in his passport photo, Harbisson says that such technological augmentation is a natural, and maybe even necessary, strategy for humans to adapt to an uncertain future.

Harbisson spoke about the benefits of extra senses via telephone from a café in Spain.

How do you describe what it’s like to be a cyborg? There is no difference between the software and

my brain, or my antenna and any other body part. Being united to cybernetics makes me feel that I am technology.

The definition that [scientist] Manfred Clynes gave for “cyborg” in 1960 was that in order to explore and survive in new environments, we had to change ourselves instead of changing our environment. Now, we do have the tools to change ourselves. We can add new senses, new organs. (...)

Should there be restrictions on how people can modify themselves?

I think we should all have the freedom to design ourselves as much as we want. Each sense depends on the individual. In the same way we all have eyes or ears, we all use them in different ways, and people use them in good and bad ways.

Michelle Z. Donahue, *National Geographic*, April 3, 2017

1. prosthetics (n.): *prothèses*

2. alter (v.) = modify

3. asset (n.) = useful or desirable quality

4. headgear (n.) = something worn on the head