

PHILOSOPHY, VIDEO

# CONTROLLED PERCEPTION BY PREDICTIVE PROCESSING

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is probably a better title of a very interesting essay over at [edge.org](https://www.edge.org) with 3 examples of a vibrating phone, a hollow mask and a melody.

In the perceptual domain, the idea, familiar I'm sure to everybody, is that our perceptual world is a construct that emerges at the intersection between sensory information and priors, which here act as top-down predictions about how the sensory information is likely to be. For example, I imagine that most people have experienced phantom phone vibrations, where you suddenly feel your phone is vibrating in your pocket. It turns out that it may not even be in your pocket. Even if it is in your pocket, maybe it's not vibrating. ... It would work very much like, say, the hollow mask illusion: When people are shown a hollow face mask lit from behind, they see the concave side of the face as having a nose pointing outwards. ... People were told that they would hear the faint onset of Bing Crosby singing White Christmas in a sound file that they were going to be played. They would listen to the sound file and a substantial number of participants detected the faint onset of Bing Crosby singing White Christmas, but in fact there was no faint onset of White Christmas. There was no Bing Crosby signal there at all.

which is close to distraction (or selective attention).