Galvanic Vestibular Stimulation

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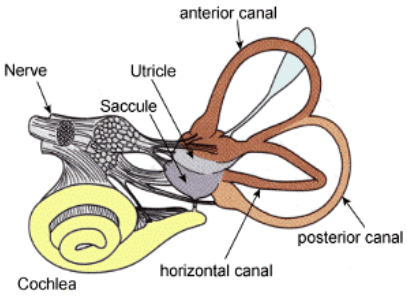
The world of science fiction has speculated about mind control of humans since its birth as a genre. Now, with the re-emergence of a nearly 200 year old method of neural stimulation, science fiction is becoming somewhat of a (please forgive the cliché) science fact.

This method is called Galvanic Vestibular Stimulation (GVS), and it is literally what its name implies. Electrodes are stuck behind the participants ears and a low voltage current , about 1.0mV, is used to stimulate the mechanisms of the Vestibulum (inner ear components that provide control over eye movement and balance in humans and many animals).



Originally discovered and experimented with by Alessandro Volta (the inventor of the battery), its has its roots in the curiousity of an inventor who wanted to investigate what would happen if he were to attatch electrodes to his own head. The results were nausea, dizziness, discomfort, and mostly just puzzle rather than intrigue.

Basically ignored as a useful practice since Volta's original curiosity, GVS did not re emerge until the 1970's when researchers realized its value as a scientific tool. Those concentrating on the Occulo-Motor system realized conventional methods of vestibular stimulation (such as physically spinning or accelerating the patient) were ineffective when trying to study the whole body-motor system; too many other sensory systems were affected at the same time. GVS however can effectively isolate the Vestibular system without any other outside systems sensing it. Thus the intrest in GVS was reborn.

Presently GVS research is still in its infancy and there is much speculation about its possible uses. Ideas ranging from medical rehabilitation to inventing the ultimate video game have been thrown around, and even more sinister uses such as a method of mind control have surfaced. The social and ethical implications will prove to be the governing factors of both its public availability and private development regulations.

-Here is an example of a GVS device hooked up to a patient to enhance a virtual reality simulation.

Sources:

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