

# Wirehead Gods On Lotus Thrones

*Posted on January 28, 2014 by Scott Alexander*



One vision of the far future is a “wirehead society”. Our posthuman descendants achieve technological omnipotence, making every activity so easy as to be boring and meaningless.

The pursuit of material goods becomes a waste. A nanofactory or a quick edit to a virtual world can already give you a mansion the size of a planet. Although economic activity may still exist in competition for computing resources, all beings in these competitions will be smart enough to behave perfectly optimally (and therefore in a way that makes even the illusion of free will impossible) and so first-mover advantages will be insurmountable. Economic differences will compound on the sub-second scale until different classes are so far apart that competition becomes impossible.

When sports risk becoming contests of who can enter the higher integer in the \$athletic\_ability variable of the computer that determines the universe, the World Anti-Doping Agency says everyone must compete using their original human bodies – assuming such things even exist at that point. But neither spectators nor athletes care about the result, since everyone is smart enough to simulate the game in their minds on a molecule-by-molecule basis long be-

fore it happens and determine the outcome with perfect accuracy – turning the actual competition into a meaningless formality.

Works of art become gradually less interesting; everyone can extrapolate back from the appearance of a painting to exactly what the mental state of the artist must have been at the time it was painted. Nor does the art enlighten, since the conceptual organization of everyone's mind is already optimal and the only intellectual differences between entities are insurmountable ones of available computing resources.

As for Science, everything was discovered long ago. If it hasn't been, discovering it is a brute-force application of the best-known Bayesian reasoning algorithms.

(And developing better algorithms is also a brute-force application of the best-known algorithm-discovery algorithms.)

Even in the most utopian such world – one where the dominant minds are concerned with maximizing the happiness of everyone else – it sounds pretty boring.

One approach is the imposition of artificial limits. Entities can deliberately refuse to use their full cognitive capacity and so experience uncertainty, choice, and feelings other than that of algorithmically choosing purpose-appropriate algorithms. Maybe some entities will deliberately take on human brains and bodies, and interact with other such entities in a human-level world in order to operate at the level with which their value system is most comfortable.

Maybe in order to avoid the temptation to call on their full omnipotence every time they experience a little pain or hardship, they will deliberately “forget” their posthuman status, living regular human lives utterly convinced that they are in fact regular humans.

(I assign moderate probability that this has already happened)

Other entities may have no time for such games. They may cope with the ennui of posthuman existence by reprogramming away their capacity for ennui, with the absence of aesthetic or scientific outlets by programming away their desires for such. Instead, they just reprogram their brains to be deliriously happy all the time no matter what, and spend their time sitting around enjoying this happiness.

The futurist community calls this “wireheading”, after an experiment in which rats had an electrode hooked up to the reward system of their brain which could be stimulated by pressing a lever. The rats frantically tried to stimulate the lever as much as possible in preference to doing anything else including eat or sleep (they eventually died). Stimulating the reward center directly was much more attractive than other activities which might result in some indirect neural reward only after work. [The same pattern](#) occurred in humans, specifically chronic pain patients who had similar wiring installed in their heads in the hopes that it might alleviate their problem:

At its most frequent, the patient self-stimulated throughout the day, neglecting personal hygiene and family commit-

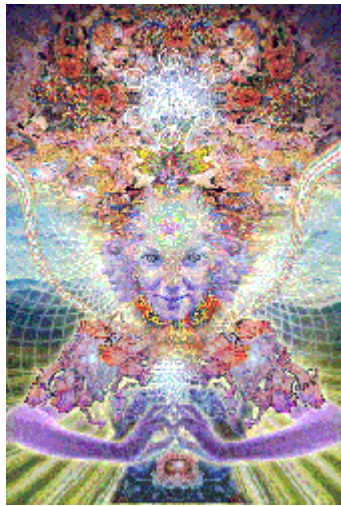
ments. A chronic ulceration developed at the tip of the finger used to adjust the amplitude dial and she frequently tampered with the device in an effort to increase the stimulation amplitude. At times, she implored her to limit her access to the stimulator, each time demanding its return after a short hiatus. During the past two years, compulsive use has become associated with frequent attacks of anxiety, depersonalization, periods of psychogenic polydipsia and virtually complete inactivity.

It's unclear to what degree these wires are making the subject so stupendously happy that she desires to maintain her bliss, or whether they're instilling compulsive behavior. Likely there are some elements of both – just as in wireheading's more prosaic younger sister, everyday drug use. But drug use is messy, and wireheading is perfect.

Wireheading is commonly considered an ignoble end for the human race – our posthuman descendants reduced to sitting in dingy rooms, taking never-ending hits of some ultra-super-drug, all their knowledge and power lying fallow except the tiny fraction necessary to retain delivery of the ultra-drug and pump nutrients into their veins.

On the one hand, it probably beats desperately trying to figure out something to do more interesting than setting your \$athletic\_ability statistic to  $3^{3^3}$  and playing sports. On the other, it's hard not to feel contempt for beings that choose such a pathetic existence.

But I recently realized how unstable my contemptuous feelings are. Imagine instead our posthuman descendants taking the form of Buddhas sitting on vast lotus thrones in a state of blissful tranquility. Their minds contain perfect awareness of everything that goes on in the Universe and the reasons why it happens, yet to each happening, from the fall of a sparrow to the self-immolation of a galaxy, they react only with acceptance and equanimity. Suffering and death long since having been optimized away, they have no moral obligation beyond sitting and reflecting on their own perfection, omnipotence, and omniscience – at which they feel boundless joy.



*Pictured: ultimate reality*