

Speculations about Parkinson's and the affective SEEKING system, and The Shellless Horenki

"An open mind." This phrase is easy to understand, but the principle which it embodies, so diametrically opposed to the ego...is very difficult to achieve in actuality. Science has set its heels firmly into the dirt, and refuses as many vital truths as it discovers. The scientific resistance to acknowledgement of the emotions and their primacy in the human organism, is a pair of black sunglasses which hides the fact. Please find below, a parable, and a few highly speculative neuroscientific postulations and questions gained from thinking about the mental system in a way akin to affective neuroscience. As those of you who read my articles regularly are aware, I believe affective neuroscience to be the single most right minded approach to the physiology of mental functioning: a new perspective which acknowledges the facts, that others protest are not available to examination, but are demonstrably...primary. Please enjoy this parable, and new speculation.

The Shellless Horenki

The Horenki were dying. Proud and lofty though they once were, kings of the sea no more...they were dying. Why? The teeming schools need only one thing, their splendid bright luminous shells and what were once thousands of tough supple muscles beneath, now become a single soft sheath of warmth, so well protected for all these millennia...but one thing sustained them: water, and there was no shortage of that! Oh why, why were they dying? Gulping in the precious draught, and no...it could not be, their eyes were blurring, their shells becoming rough and broken, falling into shreds of brittle splinters, and how their children did wither, slowly softly...they did die. Oh Why?

The years had found the Horenki swimming in a sea of plenty, and they did cherish it all, and never did cause harm, but sipping life from the waves...so well protected by their shells. Nothing could harm them, and they did often spar and attack each other, simply because they were Horenki! Sure and proud! The kings of sea and life, but soon to shed that to which they were most entitled...life itself!

Achmedem was strange. All knew him, and knew he was all at once to be avoided and respected, his ideas so odd and yet, almost as sure as he would advance some strange new notion, it seemed it was proven by the next coincidence...a sort of odd gift—knowledge born of something hidden and unknown...a strange Horenki...respected, and, avoided. Achmedem had an idea, a strange idea. He would renege his shell, and for a strange reason. He saw something he could not resist, here, before him, pressed into the sandy bottom, its neck protruded... and so he dug, and found it...how incredible it seemed to him, a clear glass bottle, twisted and distended as a convex convolution made of clear light. Yes he would renege his shell, and slip his soft unprotected body within this new form...for he knew...somehow, this was important...perhaps, even vital.

It was not easy. His shell was his form! How he struggled to no avail to rid himself of its

protective restriction, tearing soft tissue from moorings so long cast! And his fellows did joust with him, "Ah, Achmedem, you will soon beat us all to the grave, as a mad animal do you appear! How foolish you are, to remove the solid frame which is the very foundation of what we are! How foolish you are!" And they did laugh, and tease him, with pointed words, most unkind and false.

And Achmedem did sting under their words, but did persist nonetheless, wriggling himself free at last, now a soft spot of unprotected flesh adrift in a cold salty world of teeth and bone, drifting...toward the twisted bottle. "Achmedem, you fool, how soft and silly you are, the most foolish Horenki who has ever lived! How will this serve to but ruin you?" And with these words haunting him, he did pour his soft gelatinous self, into the new form...slowly, he did find himself gathered within the bottle, and did cast his eye out into the void, to see with new eyes.

The sea was not the sea, no! The bottle was a lens, and now Achmedem could see...the minute creatures which filled the water, unknown and invisible, now a multitudinous profusion of strange microscopic life did reveal itself to Achmedem, and soon he understood. Here, where the Horenki lived, the water was nearly bare, only a small cloud of tiny creatures was left, but out and above, where the Horenki were want never to go, their legends so clear and forbidding...oh yes...there, the profusion of bounty did persist! He must tell them!

And so he did leave the bottle and did speak: "My brothers and sisters, the water is not what gives us life, it is the tiny creatures too small to see which provide us our sustenance! Here, our traditions are foolish, our preconceptions deadly, here...I will show you!"

And he did gather two children, so sick and wan and did place them beneath his arm, and lift them into the rich waters above...so they could see, know, live and flourish...nourished upon a truth, found more real than any, yet impossible to see.

These ideas arrived over the last few days...new speculative thoughts about Parkinson's (there are several): I hypothesize from a-priori experimentation and observation that there is a correlation of positive value between excessive repressive dynamism as exhibited in the noradrenergic over dopaminergic balance between Schore's parasympathetic and sympathetic tegmental limbic circuits, and Parkinsonian onset and development [Limbic connectivity and sympathetic neural balance: the primary psychophysiological locus of affect http://media.wix.com/ugd/cf8614_243ef24742a84c69b64e998280ac34b8.pdf also available on this site]. Please read the short paper just referenced. This explains outside of contributive environmental and lifestyle factors why some of the population with the LRRK2 mutation on the 12th chromosome do, and others do not, develop Parkinson's. Affective neuroscience is by far the best model of psychologically grounded physiology (Panksepp, 1998, Affective Neuroscience, Oxford Press). The

sympathetic/parasympathetic binding and release of libidinal discharge (Solms, 2002, Clinical Studied in Neuropsychanalysis, p.233-239) is akin to the activity and quelling of the dopaminergically modulated SEEKING system (Panksepp, 1998). This presents a proper physiological systemic context under the question, which alongside of my inferences, posits the following: the mysterious fact that (bilateral) deep brain stimulation (DBS) of the subthalamic nucleus, thalamus, or globus pallidus, which by the reasoning of cognitive neuroscience (Gazzaniga, 2009, Cognitive neuroscience: the biology of the mind, p. 305), should increase symptoms by way of thalamo-cortical inhibition... but does not...may be a product of activating the SEEKING system itself. This first conclusion is a stretch for me...so...I ask the group, will bilateral thalamic and other activations by DBS to these areas activate the expansive system, which can typically be stimulated anywhere from the medial forebrain bundle-lateral hypothalamic circuitry, up to the nucleus accumbens to the medial prefrontal cortex via the mesolimbic and mesocortical dopamine pathways? [Panksepp, 2012, Archaeology of Mind, p.104].

The implication is, that there is a homeostatic factor...and that feedback in the system has been a contributing dynamic element, and has all but requested the condition to emerge. So, if the SEEKING system is stimulated with intense electrical high frequency activity as it is now used, then the system once aided, will re-balance to decay further. Instead, the progression of disease and degeneration may hypothetically be aided to resuscitation, or at least to end further degeneration, by another more subtle approach. I suggest several possibilities: The SEEKING (A-10) dopaminergic neurons project from the ventral tegmental area. If the system were stimulated here, or along the usual MFB-LH circuitry as in animal studies, and the stimulation were slight, not excessive, perhaps, over time without interfering with homeostasis, the demand placed upon the system, and hence demand placed upon the substantia nigra via efferent projections stemming from the nucleus accumbens-septi, would create a new systemic balance conducive to functional maintenance, or improvement. Do you know, has SEEKING stimulation of a low level been attempted in these cases?

Next, I wonder if naturally occurring systemic intervention might be simulated with DBS. SEEKING activation is associated with heightened activity in the nucleus accumbens. Sexual excitation is a sure bet to engage the system. So, has low level septal stimulation been tried? Not too much! Just enough to create a constant demand...the lowest amount to gain response in the nucleus accumbens. Do you know?

Next, I wonder, has a neuropeptide been tried which activates the system...neurotensin for example? Or along the same lines...a dynorphin blocking agent? Is there such an agent? Do these peptides need be delivered by surgical implantation of a pipette, or can they be injected? I do not know. Do you?

If you have answers or comments of specific and technical value, please do send email through the staff page at Mind magazine: www.mindmagazine.net

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