

Nothing is more amazing than the highly improbable fact that we exist. We often ignore this fact, oblivious to the reality that instead of something there *could* be nothing at all, i.e. why is there a universe (poignantly aware of itself through us) and not some void completely unconscious of itself?

Consider that from light, air, water, basic minerals within the crust of the earth, and the at least 3 billion year old information contained within the nucleus of one diploid zygote cell, the human body is formed, and within that body a soul capable of at least trying to comprehend its bodily and spiritual origins.

Given the sheer insanity of our existential condition, and bodily incarnation as a whole, and considering that our earthly existence is partially formed from sunlight and requires the continual consumption of condensed sunlight in the form of food, it may not sound so farfetched **that our body emits light.**

Indeed, the human body emits [**biophotons**](http://www.greenmedinfo.com/keyword/biophotons), also known as ultraweak photon emissions (UPE), with a visibility 1,000 times lower than the sensitivity of our naked eye. While not visible to us, these particles of light (or waves, depending on how you are measuring them) are part of the visible electromagnetic spectrum (380-780 nm) and are detectable via sophisticated modern instrumentation.[[1]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn1%22%20%5Co%20%22),[[2]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn2%22%20%5Co%20%22)

**The Physical and “Mental” Eye Emits Light**

The eye itself, which is continually exposed to ambient powerful photons that pass through various ocular tissues, emit spontaneous and visible light-induced ultraweak photon emissions.[[3]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn3%22%20%5Co%20%22) It has even been hypothesized that visible light induces delayed bioluminescence within the exposed eye tissue, providing an explanation for the origin of the negative afterimage.[[4]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn4%22%20%5Co%20%22)

These light emissions have also been correlated with cerebral energy metabolism and oxidative stress within the mammalian brain.[[5]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn5%22%20%5Co%20%22) [[6]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn6%22%20%5Co%20%22) And yet, biophoton emissions are not necessarily epiphenomenal. Bókkon’s hypothesis suggests that photons released from chemical processes within the brain produce biophysical pictures during visual imagery, and a recent study found that when subjects actively imagined light in a very dark environment *their intention* produced significant increases in ultraweak photo emissions.[[7]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn7%22%20%5Co%20%22) This is consistent with an emerging view that biophotons are not solely cellular metabolic by-products, but rather, because biophoton intensity can be considerably higher inside cells than outside, it is possible for the mind to access this energy gradient to create intrinsic biophysical pictures during visual perception and imagery.[[8]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn8%22%20%5Co%20%22)



**Our Cells and DNA Use Biophotons To Store and Communicate Information**

Apparently biophotons are used by the cells of many living organisms to communicate, which facilitates energy/information transfer that is several orders of magnitude faster than chemical diffusion. According to a 2010 study, “Cell to cell communication by biophotons have been demonstrated in plants, bacteria, animal neutriophil granulocytes and kidney cells.”[[9]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn9%22%20%5Co%20%22) Researchers were able to demonstrate that “…different spectral light stimulation (infrared, red, yellow, blue, green and white) at one end of the spinal sensory or motor nerve roots resulted in a significant increase in the biophotonic activity at the other end.” Researchers interpreted their finding to suggest that “…light stimulation can generate biophotons that conduct along the neural fibers, probably as neural communication signals.”

Even when we go down to the molecular level of our genome, DNA can be identified to be a source of biophoton emissions as well. One author proposes that DNA is so biophoton dependent that is has [excimer laser-like properties](http://en.wikipedia.org/wiki/Excimer_laser), enabling it to exist in a stable state far from thermal equilibrium at threshold.[[10]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn10%22%20%5Co%20%22)

Technically speaking a biophoton is an elementary particle or quantum of light of non-thermal origin in the visible and ultraviolet spectrum emitted from a biological system. They are generally believed to be produced as a result of energy metabolism within our cells, or more formally as a “…by-product of biochemical reactions in which excited molecules are produced from bioenergetic processes that involves active oxygen species,” [[11]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn11%22%20%5Co%20%22)

**The Body’s Circadian Biophoton Output**

Because the metabolism of the body changes in a circadian fashion, biophoton emissions also variate along the axis of diurnal time. [[12]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn12%22%20%5Co%20%22) Research has mapped out distinct anatomical locations within the body where biophoton emissions are stronger and weaker, depending on the time of the day:

Generally, the fluctuation in photon counts over the body was lower in the morning than in the afternoon. The thorax-abdomen region emitted lowest and most constantly. The upper extremities and the head region emitted most and increasingly over the day. Spectral analysis of low, intermediate and high emission from the superior frontal part of the right leg, the forehead and the palms in the sensitivity range of the photomultiplier showed the major spontaneous emission at 470-570 nm. The central palm area of hand emission showed a larger contribution of the 420-470 nm range in the spectrum of spontaneous emission from the hand in autumn/winter. The spectrum of delayed luminescence from the hand showed major emission in the same range as spontaneous emission.

The researchers concluded that “The spectral data suggest that measurements might well provide quantitative data on the individual pattern of peroxidative and anti-oxidative processes in vivo.”

**Meditation and Herbs Affect Biophoton Output**

Research has found an oxidative stress-mediated difference in biophoton emission among mediators versus non-meditators. Those who meditate regularly tend to have lower ultra-weak photon emission (UPE, biophoton emission), which is believed to result from the lower level of free radical reactions occurring in their bodies. In one clinical study involving practitioners of transcendental meditation (TM) researchers found:

The lowest UPE intensities were observed in two subjects who regularly meditate. Spectral analysis of human UPE has suggested that ultra-weak emission is probably, at least in part, a reflection of free radical reactions in a living system. It has been documented that various physiologic and biochemical shifts follow the long-term practice of meditation and it is inferred that meditation may impact free radical activity.[[13]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn13%22%20%5Co%20%22)

Interestingly, an herb well-known for its use in stress reduction (including inducing measurable declines in cortisol), and associated heightened oxidative stress, has been tested clinically in reducing the level of biophotons emitted in human subjects. Known as [**rhodiola**](http://www.greenmedinfo.com/substance/rhodiola-tibetan-ginseng), a study published in 2009 in the journal *Phytotherapeutic Research* found that those who took the herb for 1 week has a significant decrease in photon emission in comparison with the placebo group.[[14]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn14%22%20%5Co%20%22)

**Human Skin May Capture Energy and Information from Sunlight**

Perhaps most extraordinary of all is the possibility that our bodily surface contains cells capable of efficiently trapping the energy and information from ultraviolet radiation. A study published in the *Journal of Photochemistry and Photobiology* in 1993, titled, “Artificial sunlight irradiation induces ultraweak photon emission in human skin fibroblasts,” discovered that when light from an artificial sunlight source was applied to fibroblasts from either normal subjects or with the condition xeroderma pigmentosum, characterized by deficient DNA repair mechanisms, it induced far higher emissions of ultraweak photons (10-20 times) in the xeroderma pigmentosum group. The researchers concluded from this experiment that “These data suggest that xeroderma pigmentosum cells tend to lose the capacity of efficient storage of ultraweak photons, **indicating the existence of an efficient intracellular photon trapping system within human cells.**“[[15]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn15%22%20%5Co%20%22) More recent research has also identified measurable differences in biophoton emission between normal and melanoma cells.[[16]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn16%22%20%5Co%20%22)



In a previous article, [**Does Skin Pigment Act Like A Natural Solar-Pane**l](http://www.greenmedinfo.com/blog/does-skin-pigment-act-natural-solar-panel), we explored the role of melanin in converting ultraviolet light into metabolic energy:

Melanin is capable of transforming ultraviolet light energy into heat in a process known as “ultrafast internal conversion”; more than 99.9% of the absorbed UV radiation is transformed from potentially genotoxic (DNA-damaging) ultraviolet light into harmless heat.

If melanin can convert light into heat, could it not also transform UV radiation into other biologically/metabolically useful forms of energy? This may not seem so farfetched when one considers that even gamma radiation, which is highly toxic to most forms of life, is a source of sustenance for certain types of fungi and bacteria. Research is now emerging indicating that melanin may function in a manner analogous to energy harvesting pigments such as chlorophyll, and [**may have even have driven our evolution into the uniquely hairless**](http://www.ncbi.nlm.nih.gov/pubmed/25703782), brain-dominant hominins we are today. While melanin's proposed ability to convert sunlight into metabolic energy has amazing implications (one of which is the [**taxonomical reclassification of our species from heterotrophic to photoheterotrophic**](http://www.greenmedinfo.com/blog/chlorophyll-enables-your-cells-captureuse-sunlight-energy-copernican-revolution)), what may have even more spectacular implications is the prospect that melanin may actually both protect us against ionizing radiation and transform some of it into metabolically useful energy. Melanin is, indeed, one of the most interesting biomolecules yet identified. [**The first known organic semiconductor**](https://www.uq.edu.au/news/article/2012/06/melanin-considered-bio-friendly-electronics), it is capable of absorbing a wide range of the electromagnetic spectrum (which is why it appears black), most notably, converting and dissipating potentially harmful ultraviolet radiation into heat. It serves a wide range of physiological roles, including free radical scavenging, toxicant chelation, DNA protection, to name but a few. It is also believed to have been one of the original [**ingredients essential for life on this planet**](http://www.medical-hypotheses.com/article/0306-9877%2883%2990122-6/abstract).

"The observed mitigative effects of melanin in the present study gain a lot of significance especially in nuclear emergencies but need to be validated in humans by more detailed experiments. Prior to these confirmations and based on current investigations, it can be concluded that during such emergencies, **diets rich in melanin may be beneficial to overcome radiation toxicity in humans**."

The authors fed mice a mushroom used in East Asian cuisine, called Judas' ear, tree, or jelly ear (Auricularia auricula-judae) an hour before giving them a powerful 9 Gy dose with the beta emitter Cesium137. For perspective, anything over ~0.1 Gy is considered a dangerously high dose for humans. All the control mice died in 13 days while ~90% of the mushroom-fed ones survived. Mice fed a white mushroom (porcini) died almost as fast as the controls, but those fed white mushrooms supplemented with melanin also survived."

ionizing radiation was found to alter melanin's oxidation-reduction potential. Instead of most other biomolecules which experience a destructive form of oxidative damage as a result of radiation exposure, melanin remained structurally and functionally intact, appearing capable of producing a continuous electric current. This current, theoretically, could be used to produce chemical/metabolic energy in living systems. This would explain the increased growth rate, even under low nutrient conditions, in certain kinds of gamma irradiated fungi.



So, you may be wondering, what is a good source of supplemental melanin for those interested in its radioprotective and radiotrophic ("radiation eating") properties? I believe Chaga is one of the most promising candidates. Not only is it one of the nutritionally dense mushrooms, containing an immense amount of melanin, but it was known by the Siberians as the "Gift from God" and the "Mushroom of Immortality," the Japanese as  "The Diamond of the Forest," and Chinese as the "King of Plants."  There is also an increasingly compelling body of scientific information demonstrating its health benefits for conditions as serious as cancer.

Gerald Pollack, PhD, who wrote [**The 4th Phase of Water**](http://tv.greenmedinfo.com/fourth-phase-of-water/) has identified water molecules, which constitute 99% of the molecules in our body by number, as capable of storing the energy of sunlight like batteries and driving the majority of processes within our body as a primary, non-ATP-based source of energy. Dr. Pollack wrote a guest article for us on the topic here, [**Can Humans Harvest The Sun’s Energy Directly Like Plants?**](http://www.greenmedinfo.com/blog/can-humans-photosynthesize-1)

**The Body’s Biophoton Outputs Are Governed by Solar and Lunar Forces**

It appears that modern science is only now coming to recognize the ability of the human body to receive and emit energy and information directly from the light given off from the Sun. [[17]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn17%22%20%5Co%20%22)

There is also a growing realization that the Sun and Moon affect biophoton emissions through gravitational influences. Recently, biophoton emissions from wheat seedlings in Germany and Brazil were found to be synchronized transcontinentally according to rhythms associated with the lunisolar tide.[[18]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn18%22%20%5Co%20%22) In fact, the lunisolar tidal force, to which the Sun contributes 30 % and the Moon 60 % of the combined gravitational acceleration, has been found to regulate a number of features of plant growth upon Earth.[[19]](http://www.greenmedinfo.com/blog/biophotons-human-body-emits-communicates-and-made-light%22%20%5Cl%20%22_ftn19%22%20%5Co%20%22)

**Intention Is a Living Force of Physiology**

Even human intention itself, the so-called ghost in the machine, may have an empirical basis in biophotons.

A recent commentary published in the journal *Investigacion clinica* titled “Evidence about the power of intention” addressed this connection:

Intention is defined as a directed thought to perform a determined action. Thoughts targeted to an end can affect inanimate objects and practically all living things from unicellular organisms to human beings. The emission of light particles (biophotons) seems to be the mechanism through which an intention produces its effects. All living organisms emit a constant current of photons as a mean to direct instantaneous nonlocal signals from one part of the body to another and to the outside world. Biophotons are stored in the intracellular DNA. When the organism is sick changes in biophotons emissions are produced. Direct intention manifests itself as an electric and magnetic energy producing an ordered flux of photons. Our intentions seem to operate as highly coherent frequencies capable of changing the molecular structure of matter. For the intention to be effective it is necessary to choose the appropriate time. In fact, living beings are mutually synchronized and to the earth and its constant changes of magnetic energy. It has been shown that the energy of thought can also alter the environment. Hypnosis, stigmata phenomena and the placebo effect can also be considered as types of intention, as instructions to the brain during a particular state of consciousness. Cases of spontaneous cures or of remote healing of extremely ill patients represent instances of an exceedingly great intention to control diseases menacing our lives. The intention to heal as well as the beliefs of the sick person on the efficacy of the healing influences promote his healing. In conclusion, studies on thought and consciousness are emerging as fundamental aspects and not as mere epiphenomena that are rapidly leading to a profound change in the paradigms of Biology and Medicine.

**The Serotonin Myth**

The following is not intended to provide medical advice, diagnosis or treatment. Herein lies the serotonin myth.

As one of only two countries in the world that permits direct to consumer advertising, you have undoubtedly been subjected to promotion of the "cause of depression." A cause that is not your fault, but rather; a matter of too few little bubbles passing between the hubs in your brain! Don't add that to your list of worries, though, because there is a convenient solution awaiting you at your doctor's office...

What if I told you that, in 6 decades of research, the serotonin (or norepinephrine, or dopamine) theory of depression and anxiety has not achieved scientific credibility?

You'd want some supporting arguments for this shocking claim.

So, here you go:

**The Science of Psychiatry is Myth**

Rather than some embarrassingly reductionist, one-deficiency-one-illness-one-pill model of mental illness, contemporary exploration of human behavior has demonstrated that we may know less than we ever thought we did.  And that what we do know about root causes of mental illness seems to have more to do with the concept of [**evolutionary mismatch**](http://kellybroganmd.com/video/ancestral-health-symposium-presentation-2014/) than with genes and chemical deficiencies.

In fact, a [**meta-analysis**](http://jama.jamanetwork.com/article.aspx?articleid=184107)of over 14,000 patients and Dr. Insel, head of the NIMH, had this to say:

*"Despite high expectations, neither genomics nor imaging has yet impacted the diagnosis or treatment of the 45 million Americans with serious or moderate mental illness each year."*

To understand what *imbalance* is, we must know what *balance* looks like, and neuroscience, to date, has not characterized the optimal brain state, nor how to even assess for it.

A *New England Journal of Medicine* [**review**](http://www.ncbi.nlm.nih.gov/pubmed/15738959) on Major Depression, stated:

*" ... numerous studies of norepinephrine and serotonin metabolites in plasma, urine, and cerebrospinal fluid as well as postmortem studies of the brains of patients with depression, have yet to identify the purported deficiency reliably."*

The data has poked holes in the theory and even the field of psychiatry itself is putting down the knife with which it has been so demagogic in claiming it can fix a broken mind.

**Humble Origins of a Powerful Meme**

In the 1950s, reserpine, initially introduced to the US market as an anti-seizure medication, was noted to deplete brain serotonin stores in subjects, with resultant lethargy and sedation. These observations colluded with the clinical note that an anti-tuberculosis medication, iproniazid, invoked mood changes after five months of treatment in 70% of a 17 patient cohort. Finally, Dr. Joseph Schildkraut threw fairy dust on these mumbles and grumbles in 1965 with his hypothetical manifesto entitled "The Catecholamine Hypothesis of Affective Disorders" stating:

"At best, drug-induced affective disturbances can only be considered models of the natural disorders, while it remains to be demonstrated that the behavioral changes produced by these drugs have any relation to naturally occurring biochemical abnormalities which might be associated with the illness."

Contextualized by the ripeness of a field struggling to establish biomedical legitimacy (beyond the therapeutic lobotomy!), psychiatry was ready for a rebranding, and the pharmaceutical industry was all too happy to partner in the effort.

Of course, the risk inherent in "working backwards" in this way (noting effects and presuming mechanisms) is that we tell ourselves that we have learned something about the body, when in fact, all we have learned is that patented synthesized chemicals have effects on our behavior. This is referred to as the *drug-based* model by [**Dr. Joanna Moncrieff**](http://joannamoncrieff.com/2014/05/01/the-chemical-imbalance-theory-of-depression-still-promoted-but-still-unfounded/). In this model, we acknowledge that antidepressants have effects, but that these effects in no way are curative or reparative.

The most applicable analogy is that of the woman with social phobia who finds that drinking two cocktails eases her symptoms. One could imagine how, in a 6 week randomized trial, this "treatment" could be found efficacious and recommended for daily use and even prevention of symptoms. How her withdrawal symptoms after 10 years of daily compliance could lead those around her to believe that she "needed" the alcohol to correct an imbalance. This analogy is all too close to the truth.

**Running With Broken Legs**

Psychiatrist Dr. Daniel Carlat has said:

*"And where there is a scientific vacuum, drug companies are happy to insert a marketing message and call it science. As a result, psychiatry has become a proving ground for outrageous manipulations of science in the service of profit."*

So, what happens when we let drug companies tell doctors what science is? We have an industry and a profession working together to maintain a house of cards theory in the face of contradictory evidence.

We have a[**global situation**](http://www.pophealthmetrics.com/content/2/1/9#sec3) in which increases in prescribing are resulting in increases in severity of illness (including numbers and length of episodes) relative to those who have never been treated with medication.

To truly appreciate the breadth of evidence that states antidepressants are ineffective and unsafe, we have to get behind the walls that the pharmaceutical companies erect. We have to unearth unpublished data, data that they were hoping to keep in the dusty catacombs.

A now famous [**2008 study**](http://www.nejm.org/doi/full/10.1056/NEJMsa065779) in the *New England Journal of Medicine* by Turner et al sought to expose the extent of this data manipulation. They demonstrated that, from 1987 to 2004, 12 antidepressants were approved based on 74 studies. Thirty-eight were positive, and *37 of these* were published.  Thirty-six were negative (showing no benefit), and *3 of these* were published as such while 11 were published with a *positive spin* (always read the data not the author's conclusion!), and 22 were unpublished.

In 1998 tour de force, Dr. Irving Kirsch, an expert on the placebo effect, published a [**meta**](http://psycnet.apa.org/index.cfm?fa=buy.optionToBuy&id=1999-11094-001)**-**[**analysis**](http://psycnet.apa.org/index.cfm?fa=buy.optionToBuy&id=1999-11094-001)of 3,000 patients who were treated with antidepressants, psychotherapy, placebo, or no treatment and found that only 27% of the therapeutic response was attributable to the drug's action.

This was followed up by a 2008 [**review**](http://www.plosmedicine.org/article/info%3Adoi/10.1371/journal.pmed.0050045), which invoked the Freedom of Information Act to obtain access to unpublished studies, finding that, when these were included, antidepressants outperformed placebo in only 20 of 46 trials (less than half!), and that the overall difference between drugs and placebos was 1.7 points on the 52 point Hamilton Scale.  This small increment is clinically insignificant, and likely accounted for by medication side effects strategically employed (sedation or activation).

When active placebos were used, the[**Cochrane**](http://www.ncbi.nlm.nih.gov/pubmed/14974002) database found that differences between drugs and placebos disappeared, given credence to the assertion that inert placebos inflate perceived drug effects.

The finding of tremendous placebo effect in the treatment groups was also echoed in two different meta-analyses by [**Khan**](http://www.ncbi.nlm.nih.gov/pubmed/10768687) et al who found a 10% difference between placebo and antidepressant efficacy, and comparable suicide rates. The most [**recent trial**](http://kellybroganmd.com/snippet/power-belief-new-placebo-data/) examining the role of "expectancy" or belief in antidepressant effect, found that patients lost their perceived benefit if they believed that they might be getting a sugar pill even if they were continued on their formerly effective treatment dose of Prozac.

The largest, non-industry funded [**study**](http://www.edc.gsph.pitt.edu/stard/), costing the public $35 million dollars, followed 4000 patients treated with Celexa (not blinded, so they knew what they were getting), and found that half of them improved at 8 weeks. Those that didn't were switched to Wellbutrin, Effexor, or Zoloft OR "augmented" with Buspar or Wellbutrin.

Guess what? It didn't matter what was done, because they remitted at the same unimpressive rate of 18-30% regardless with only 3% of patients in remission at 12 months.

How could it be that medications like Wellbutrin, which purportedly primarily disrupt dopamine signaling, and medications like Stablon which theoretically enhances the reuptake of serotonin, both work to resolve this underlying imbalance? Why would thyroid, benzodiazepines, beta blockers, and opiates also "work"? And what does depression have in common with panic disorder, phobias, OCD, eating disorders, and social anxiety that all of these diagnoses would warrant the same exact chemical fix?

The foundational "data" for the modern serotonin theory of mood utilizes tryptophan depletion methods which involve feeding volunteers amino acid mixtures without tryptophan and are rife with complicated interpretations.

Simply put, there has never been a study that demonstrates that this intervention causes mood changes in any patients who have *not* been treated with antidepressants.

In an important paper entitled [**Mechanism of acute tryptophan depletion**:**Is it only serotonin?**](http://www.ncbi.nlm.nih.gov/pubmed/21339754), van Donkelaar et al caution clinicians and researchers about the interpretation of tryptophan research. They clarify that there are many potential effects of this methodology, stating:

"In general, several findings support the fact that depression may not be caused solely by an abnormality of 5-HT function, but more likely by a dysfunction of other systems or brain regions modulated by 5-HT or interacting with its dietary precursor. Similarly, the ATD method does not seem to challenge the 5-HT system per se, but rather triggers 5HT-mediated adverse events."

So if we cannot confirm the role of serotonin in mood and we have good reason to believe that antidepressant effect is largely based on belief, then why are we trying to "boost serotonin"?

**Causing imbalances**

All you have to do is spend a few minutes on [**http://survivingantidepressants.org/**](http://survivingantidepressants.org/) or [**http://beyondmeds.com/**](http://beyondmeds.com/) to appreciate that we have created a monster. Millions of men, women, and children the world over are suffering, without clinical guidance (because this is NOT a part of medical training) to discontinue psychiatric meds. I have been humbled, as a clinician who seeks to help these patients, by what these medications are capable of. Psychotropic withdrawal can make alcohol and heroin detox look like a breeze.

An important [**analysis**](http://www.ncbi.nlm.nih.gov/pubmed/8561194) by the former director of the NIMH makes claims that antidepressants "create perturbations in neurotransmitter functions" causing the body to compensate through a series of adaptations which occur after "chronic administration" leading to brains that function, after a few weeks, in a way that is "qualitatively as well as quantitatively different from the normal state."

Changes in beta-adrenergic receptor density, serotonin autoreceptor sensitivity, and serotonin turnover all struggle to compensate for the assault of the medication.

[**Andrews**](http://www.ncbi.nlm.nih.gov/pubmed/21779273)**,** et al., calls this "oppositional tolerance," and demonstrate through a careful meta-analysis of 46 studies demonstrating that patient's risk of relapse is directly proportionate to how "perturbing" the medication is, and is always higher than placebo (44.6% vs 24.7%). They challenge the notion that findings of decreased relapse on continued medication represent anything other than drug-induced response to discontinuation of a substance to which the body has developed tolerance. They go a step further to add:

*"For instance, in naturalistic studies, unmedicated patients have much shorter episodes, and better long-term prospects, than medicated patients. Several of these studies have found that the average duration of an untreated episode of major depression is 12–13 weeks."*

[**Harvard**](http://www.madinamerica.com/wp-content/uploads/2011/12/Discontinuing%2520antidepressant%2520treatment%2520in%2520major%2520depression.PDF)[**researchers**](http://www.madinamerica.com/wp-content/uploads/2011/12/Discontinuing%2520antidepressant%2520treatment%2520in%2520major%2520depression.PDF) also concluded that at least fifty percent of drug-withdrawn patients relapsed within 14 months. In fact:

*"Long-term antidepressant use may be* depressogenic *. . . it is possible that antidepressant agents modify the hardwiring of neuronal synapses (which) not only render antidepressants ineffective but also induce a resident, refractory depressive state."*

So, when your doctor says, "You see, look how sick you are, you shouldn't have stopped that medication," you should know that the data suggests that your symptoms are withdrawal, not relapse.

Longitudinal[**studies**](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1313290/) demonstrate poor functional outcomes for those treated with 60% of patients still meeting diagnostic criteria at one year (despite transient improvement within the first 3 months). When baseline severity is controlled for, two prospective studies support a worse outcome in those prescribed medication:

[**One**](http://www.madinamerica.com/wp-content/uploads/2011/12/Outcome%2520of%2520anxiety%2520and%2520depressive%2520disorders%2520in%2520primary%2520care.PDF) in which the never-medicated group experienced a 62% improvement by six months, whereas the drug-treated patients experienced only a 33% reduction in symptoms, and [**another**](http://www.madinamerica.com/wp-content/uploads/2011/12/The%2520effects%2520of%2520detection%2520and%2520treatment%2520on%2520the%2520outcome%2520of%2520major%2520depressoin%2520in%2520primary%2520care.PDF) WHO study of depressed patients in 15 cities which found that, at the end of one year, those who weren't exposed to psychotropic medications enjoyed much better "general health"; that their depressive symptoms were much milder"; and that they were less likely to still be "mentally ill."

I'm not done yet. In a [**retrospective 10-year study**](http://www.ncbi.nlm.nih.gov/pubmed/10771465) in the Netherlands, 76% of those with unmedicated depression recovered without relapse relative to 50% of those treated.

Unlike the mess of contradictory studies around short-term effects, there are no comparable studies that show a better outcome in those prescribed antidepressants long term.

**First Do No Harm**

So, we have a half-baked theory in a vacuum of science that that pharmaceutical industry raced to fill. We have the illusion of short-term efficacy and assumptions about long-term safety. But are these medications actually killing people?

The answer is yes.

Unequivocally, antidepressants cause suicidal and homicidal behavior. The Russian Roulette of patients vulnerable to these "side effects" is only [**beginning to be elucidated**](http://www.dovepress.com/antidepressant-induced-akathisia-related-homicides-associated-with-dim-peer-reviewed-article-PGPM) and may have something to do with genetic variants around metabolism of these chemicals.  Dr. David Healy has [**worked tirelessly**](http://davidhealy.org/articles/#journalpublications) to expose the data that implicates antidepressants in suicidality and violence, maintaining a database for reporting, writing, and [**lecturing**](http://www.madinamerica.com/2013/02/prescription-only-homicide-and-violence/) about cases of medication-induced death that could make your soul wince.

What about our most vulnerable?

I have countless patients in my practice who report new onset of suicidal ideation within weeks of starting an antidepressant. In a population where there are only 2 randomized trials, I have grave concerns about postpartum women who are treated with antidepressants before more benign and [**effective interventions**](http://kellybroganmd.com/article/causes-postpartum-depression/) such as dietary modification and thyroid treatment. Hold your heart as you read through [**these**](http://www.ssristories.org/category/altered-mental-state/postpartum-reaction/)[**reports**](http://www.ssristories.org/category/altered-mental-state/postpartum-reaction/) of women who took their own and their childrens' lives while treated with medications.

Then there is the use of these medications in children as young as 2 years old. How did we ever get the idea that this was a safe and effective treatment for this demographic? Look no further than data like [**Study 329**](http://www.justice.gov/sites/default/files/opa/legacy/2012/07/02/us-complaint.pdf), which cost Glaxo Smith Klein 3 billion dollars for their efforts to promote antidepressants to children. These efforts required ghost-written and manipulated data that suppressed a signal of suicidality, falsely represented Paxil as outperforming placebo, and contributes to an irrepressible[**mountain**](http://fearlessparent.org/school-violence-psych-meds-and-our-children/)[**of**](http://fearlessparent.org/school-violence-psych-meds-and-our-children/)[**harm**](http://fearlessparent.org/school-violence-psych-meds-and-our-children/)done to our children by the field of psychiatry.

**RIP Monoamine Theory**

As [**Moncrieff and Cohen**](http://www.plosmedicine.org/article/info%253Adoi%252F10.1371%252Fjournal.pmed.0030240)so succinctly state:

"Our analysis indicates that there are no specific antidepressant drugs, that most of the short-term effects of antidepressants are shared by many other drugs, and that long-term drug treatment with antidepressants or any other drugs has not been shown to lead to long-term elevation of mood. We suggest that the term "antidepressant" should be abandoned."

So, where do we turn?

The field of [**psychoneuroimmunology**](http://kellybroganmd.com/article/new-psychiatry-psychoneuroimmunology/) dominates the research as an iconic example of how medicine must surpass its own simplistic boundaries if we are going to begin to chip away at the some 50% of Americans who will struggle with mood symptoms, 11% of whom will be medicated for it.

There are times in our evolution as a cultural species when we need to unlearn what we think we know. We have to move out of the comfort of certainty and into the freeing light of uncertainty. It is from this space of acknowledged unknowing that we can truly grow. From my vantage point, this growth will encompass a sense of wonder – both a curiosity about what symptoms of mental illness may be telling us about our physiology and spirit, as well as a sense of humbled awe at all that we do not yet have the tools to appreciate. For this reason, honoring our co-evolution with the natural world, and sending the body a [**signal of safety**](http://www.mindbodygreen.com/0-11688/want-to-stop-your-antidepressant-heres-how.html) through movement, diet, meditation, and environmental detoxification represents our most primal and most powerful tool for healing.

**Obama Flees Cocaine Seizure by US Coast Guard**

An intriguing Foreign Intelligence Service (SVR) report circulating in the Kremlin today states that former President Barack Obama fled Washington D.C. this past Friday (10 March) traveling to New York City, Omaha (Nebraska), San Jose (California) and ending up in Hawaii—all occurring within 36 hours while he sought elite allies to defend him, and keeping him ahead of investigators from the Financial Crimes Enforcement Network (FinCEN) of the US Department of the Treasury (DoT) seeking to interview him about one of the largest drug busts in American history occurring in the Caribbean aboard a fishing vessel named the Lady Michelle.

According to this report, nearly immediately upon taking office as President Donald Trump’s Attorney General on 9 February, Jeff Sessions, as head of the US Department of Justice (DOJ), was handed a top secret file by Federal Bureau of Investigation (FBI) Director James Comey detailing the nearly two-decade long crimes of 12 current and former security and intelligence officers belonging to the Transportation Safety Administration (TSA) who for at least 18 years under both the Bush and Obama regimes had smuggled into the United States at least $100 million worth of cocaine.

Four days after Attorney General Sessions received this top secret file on these Bush-Obama regime drug criminals from Director Comey, on 13 February, this report continues, he ordered their immediate arrest—and that was meant to coincide with former President Obama being out of the United States as he was vacationing in the Virgin Islands.

Upon their learning that Attorney General Sessions had ordered the arrest of this Bush-Obama regime TSA criminal drug ring, this report details, “surrogates/accomplices” of former President Obama vacationing with him in the Virgin Islands attempted to contact a Guyana national named Mohamed Nazim Hoseain—whom the SVR had previously identified as being an organizational member of the Islamic terror group known as the Muslim Brotherhood—and that President Trump is now preparing to name as a terror organization too.

Mohamed Nazim Hoseain, this report explains, was unable, however, to be contacted by former President Obama’s “surrogates/accomplices” as the fishing vessel he was the captain of, named the Lady Michelle, was dead in the water about 70 nautical miles off Paramaribo, Suriname, in international waters after all of its electronics had been disabled by a US Navy EA-6B Prowler electronic warfare aircraft—and that shortly afterwards, on 16 February, it was boarded by the US Coast Guard whom discovered over 4 tonnes of cocaine valued at $125 million—and was the largest US drug bust in the Caribbean since 1999.

Arrested with Mohamed Nazim Hoseain aboard the Lady Michelle drug ship, this report continues, were Richard La Cruz, 49; Neville Jeffrey, 68; and 30-year old Mark Anthony Williams—all of whom were remanded to US custody in the Virgin Islands just hours after former President Obama’s “surrogates/accomplices” flew out from there on a private aircraft.

As to the Lady Michelle fishing vessel used by these cocaine smugglers, this report says, its Saint Vincent registration showed it being owned by the Argyle International Airport Development Company (IADCL)—and whom the US Coast Guard returned custody to under existing international treaties between these two nations.

Critical to note about the Argyle International Airport Development Company, though, this report says, is that its sole business is the Argyle International Airport on Saint Vincent whose first ever flight into was on 14 February by a private charter aircraft from Mexico—and that upon this charter planes arrival, the Lady Michelle was in port awaiting departure—and whose “true/real” purpose has long been suspected to be for smuggling purposes:

“Forget the tourists, there is something much more lucrative afoot. It is whispered that recently cocaine barons have injected US$400 million into a group within the Vincentian government for help with setting up an improved link into the US of South American cocaine. There are five areas of concern for the South American investors.

1. for the SVG ruling regime to be kept in power at any cost

2. the completion of Argyle Airport

3. the control of the abandoned fishery units at Bequia and Owia

4. tight control and implication of the police and coast guard

5. control of a working shipyard for the secret alteration of internal structures of vessels

6. building of a new shipping container port and facility

The whole operation is compartmentalized so as no group or individual within the grouping knows everything. Those involved are high ranking Vincentian government officials, Venezuelans, Panamanians and, most importantly, Colombians.

According to fishermen, Venezuelans have already inspected the fishery installations with the view of acquiring them. It is alleged that Venezuelans are involved in the new lease of the Ottley Hall shipyard complex. Venezuela is involved with building our airport at Argyle.”

Further raising fears that the Argyle International Airport is being used by drug smugglers linked to former President Obama, this report continues, was that barely a month a prior to his leaving office, in December, 2016, he quietly signed a new law called the United States-Caribbean Strategic Engagement Act that, in essence, would allow the Central Intelligence Agency (CIA) to secretly lease this entire airport and fishing boat facility—and who is the largest illegal drug smuggler the world has ever known.

As to why the CIA would need the Argyle International Airport as a drug smuggling operation, this report explains, is due to the calamity that ensued in 2007 when their Gulf Stream II jet (aircraft #N987SA) that was used to transport rendition prisoners from Europe to America to Guantanamo Bay, Cuba, crash-landed in Mexico carrying over 4 tons of cocaine—and that to this very day, no one has been prosecuted for.

The CIA’s involvement with drug smuggling has long been known, this report says, and as the Huffington Post noted in their 2014 article titled “Key Figures In CIA-Crack Cocaine Scandal Begin To Come Forward” that, in part, said:

“With the public in the U.S. and Latin America becoming increasingly skeptical of the war on drugs, key figures in a scandal that once rocked the Central Intelligence Agency are coming forward to tell their stories in a new documentary and in a series of interviews with The Huffington Post.

More than 18 years have passed since Pulitzer Prize-winning journalist Gary Webb stunned the world with his “Dark Alliance” newspaper series investigating the connections between the CIA, a crack cocaine explosion in the predominantly African-American neighborhoods of South Los Angeles, and the Nicaraguan Contra fighters — scandalous implications that outraged LA’s black community, severely damaged the intelligence agency’s reputation and launched a number of federal investigations.

It did not end well for Webb, however. Major media, led by The New York Times, Washington Post and Los Angeles Times, worked to discredit his story. Under intense pressure, Webb’s top editor abandoned him. Webb was drummed out of journalism. One LA Times reporter recently apologized for his leading role in the assault on Webb, but it came too late. Webb died in 2004 from an apparent suicide.”

Also in 2014, this report continues, The American New Service shockingly revealed how grave these crimes had actually become in their article titled “U.S. Government and Top Mexican Drug Cartel Exposed as Partners” that, again in part, said:

“For over a decade, under multiple administrations, the U.S. government had a secret agreement with the ruthless Mexican Sinaloa drug cartel that allowed it to operate with impunity, an in-depth investigation by a leading Mexican newspaper confirmed this week.

In exchange for information and assistance in quashing competing criminal syndicates, the Bush and Obama administrations let the Sinaloa cartel import tons of drugs into the United States while wiping out Sinaloa competitors and ensuring that its leaders would not be prosecuted for their long list of major crimes.

Other revelations also point strongly to massive but clandestine U.S. government involvement in drug trafficking.

Relying on over 100 interviews with current and former government functionaries on both sides of the border, as well as official documents from the U.S. and Mexican governments, Mexico’s El Universal concluded that the U.S. Drug Enforcement Administration (DEA), Immigration and Customs Enforcement (ICE), and the U.S. Justice Department had secretly worked with Mexican drug lords.

The controversial conspiring led to increased violence across Mexico, where many tens of thousands have been murdered in recent years, the newspaper found after its year-long probe.

The U.S. agents and their shady deals with Mexican drug lords even sparked what the paper called a “secret war” inside Mexico.”

To the exact scheme being perpetrated upon the American people by the CIA, this report concludes, is their paying off by the hundreds-of-millions of dollars the former Clinton, Bush and now Obama regimes from their massive illegal drug smuggling profits—but that President Trump doesn’t care about as he’s already worth billions-of-dollars, has never drank, done drugs, or smoked, and whose actions in the past fortnight alone have cost these evil monster over $200 million—leading no one in the Kremlin wondering why he is so hated by these elite criminals and their mainstream propaganda media allies alike.

**Drone Wars Update**

### President Trump is widening the CIA’s remit on targeted killing.

Last November, [Motherboard asked](https://motherboard.vice.com/en_us/article/how-will-trump-use-drone-warfare) how President Trump would handle the legacy of his predecessor’s drone program. Much was unclear, but four months later, we have our answer: America’s remote killing strategy is only intensifying.

Trump has given unprecedented power to the CIA to expand its killing program and launch drone strikes against targets, drone strikes that have no legal obligation for public disclosure and do not require the the approval of the Pentagon.

Dan Gettinger, co-director at the Center for the Study of the Drone at Bard College, told Motherboard in an email that Trump’s decision repeals a central restriction placed on the targeted killing program by the Obama administration.

In a distinct change to Obama’s policies, which allowed the CIA to hunt and surveil suspected terror targets but required the permission of the military to physically launch a missile strike, [*The Wall Street Journal*](https://www.wsj.com/articles/trump-gave-cia-power-to-launch-drone-strikes-1489444374) reports that Trump has given the CIA authority to pull the trigger on its own strikes. This decision came shortly after his inauguration, and has already been used in a strike against al Qaeda deputy [Abu al-Khayr al-Masri](http://www.telegraph.co.uk/news/2017/02/27/al-qaedas-deputy-leader-reportedly-killed-us-drone-strike-syria/) in February, the newspaper reports.

“Although the CIA never abandoned its role in drone strikes, the agency will now have greater freedom to carry out strikes on its own,” Gettinger said. “In the coming months, we are likely to see a further redefinition of the targeted killing program by the Trump administration.”

The unnamed US officials speaking to the *Journal* said that the new authority the CIA possesses can only be used for operations in Syria, but there are fears the CIA could easily expand its remit to outside of the country.

Obama’s decision to allow the military to preside over the final call on drone strikes, rather than the CIA, promoted [heightened transparency and public disclosure](https://www.theguardian.com/commentisfree/2015/nov/04/obama-claims-he-wants-drone-strike-transparency-but-hes-said-that-before) on America’s drone operations. The CIA can now kill at will, unaffected by the need for public disclosure.

The revelation comes as US officials admit the Trump administration has almost put the finishing touches on a drone strike review that lowers the threshold on acceptable civilian casualties injured or killed in a drone strike, according to [*The Washington Post*](https://www.washingtonpost.com/world/national-security/trump-administration-reviewing-ways-to-make-it-easier-to-launch-drone-strikes/2017/03/13/ac39ced0-07f8-11e7-b77c-0047d15a24e0_story.html?utm_term=.6812bd797fcd). The review goes back on policies Obama introduced, and could give the Pentagon permission to launch its own strikes without the approval from the White House.

It was previously unclear how Trump would wage his war against terror, but it is now obvious that the drone strike complex initiated by Bush, propelled by Obama, and now inherited by Trump continues to expand along the same trajectory.

**A Prelude to War**

Turkey’s Erdogan aim is longstanding. He wears the sash of a NATO partner with a huge American base in his country that contains between 20 and 60 nuclear warheads, depending on which news source you use. In December 2015, heavily armed Turkish forces invaded Iraq, an act of aggression, occupying territory near Mosul, on the phony pretext of combating ISIS he supports.

Last August, he invaded northern Syria, his aggression code-named Operation Euphrates Shield – aiding anti-government forces, combating Kurdish YPG fighters, not terrorists. Last November, he said his goal is gaining control over “5,000 square km (1,900 square miles) including al-Bab, Manbij. Remember we talked about the women of Manbij taking off the burqas they were forced to wear and burning them in the streets and dancing with joy. They invaded Tell Rifaat, creating a national structure and army for this expanded area to provide solid control and to allow the refugees to return home, and after these, focusing on IS’s de facto capital Raqqa and” YPG Kurdish fighters. On the surface, for the news media, he is fighting ISIS.

His real aim is seizing the area’s valued oil fields, a prize he’s long coveted.

In late November, he said he launched cross-border military operations “to end the rule of Syrian President Bashar al-Assad.” Days later, he retracted his statement. He can’t undo what he said.

America and other rogue states support his aggression, the Pentagon saying it supports YPG fighters. There are many American veterans who suited up and went back at their own expense to fight along their side to liberate them from ISIS, when our own government would not. Obama openly and blatantly lied when he said Turkey is a “strong NATO ally.”

US-installed NATO secretary-general Jens Stoltenberg “welcome(d) Turkey’s increasing efforts to fight against ISIL. Turkey has a right to defend itself,” he said, ignoring his naked aggression in two regional countries, along with his tyrannical homeland rule. He has already committed atrocities and been responsible for a war to expand the caliphate, a seat he has reserved for himself.

Assad calls Erdogan an “invader.” Putin expressed his concern by saying his actions didn’t surprise anyone. “There is excellent realtime intelligence so Putin faces few unexpected developments. We understood what was going on and where things would lead,” he explained.

Erdogan lied, calling his action an act of self-defense. “Our borders must be cleansed of Daesh,” he said – failing to explain he supports the terrorist group and others operating regionally. Former UN secretary-general Ban Ki-moon made similar comments, supporting aggression instead of denouncing  it. This is nothing sort of colonial invasion by Turkey, and everyone knows it.

Senior Kurdish Democratic Union party member Ewwas Eli said Erdogan seeks control over Syrian sovereign territory. That’s what his cross-border incursion is all about. His goals are political, using military means to achieve them. He wants a Kurdish federation in northern Syria prevented. He wants to be the caliph of the entire Muslim world.

He is fomenting the propaganda that the Christians in the region are terrorists and must be eliminated. The confusing thing for the world is that the Obama administration has long and publicly supported the expansion of the caliphate. Rex Tillerson has inherited this mess, and the world is holding its breath to see if he can act in time to stop Erdogan from leading NATO into war with the Christian world.

In the meantime, the world’s Christian community believes that the best way is by waging peace, not [war](http://www.thesleuthjournal.com/special-interests/war-propaganda). That is clearly an oxymoron, as the verb waging means to forcefully carry on.

**The SnowFlake Test**

## Kyle S. Reyes, CEO of The Silent Partner Marketing, claims he makes potential employees take a “snowflake test” before hiring them, in [a new article](http://newbostonpost.com/blogs/ceo-makes-employees-take-snowflake-test/) for the New Boston Post.

Here’s how his test works, and what questions it includes.

“I don’t want most people to work for my company. No, seriously. Most people suck,” [wrote Reyes](http://newbostonpost.com/blogs/ceo-makes-employees-take-snowflake-test/). “And I want people to work for me who don’t suck… So I’ve implemented something that is going to give HR managers and the PC Police night sweats. I lovingly refer to it as The Snowflake Test.”

“Anyone who may be a viable candidate for our agency has to take the test before they get an at-bat at an interview,” he continued. “It’s 30 short-answer and essay-style questions that help us to really get to know a candidate. We want to get in their heads. See how they apply logic and reason to different scenarios. See what makes them tick. See if they’d be a good fit for our culture.”

The test includes questions on how the applicant feels about guns, safe spaces, and trigger warnings, as well as some which are more personal and complex.

“When was the last time you cried and why?” is allegedly one, as well as “You see someone stepping on an American Flag. What happens next?”

“Since he launched the filtering process, he has vastly reduced the time it takes to find quality people. He has also received a tremendous amount of whining from the general public. He says he was “scolded by a woman on the phone yesterday who told me she wouldn’t take the test and ‘shame’ on me for making people take a test to come work for us.”

“She “demanded” I remove the test or risk losing out on ‘perfect employees’ like herself,” he claimed. As for my company, we are searching for the X-Factor employee. What is the X-Factor? Simply put, it is the inner will an employee has to use their skills to complete the task. And, if they do not have the skills, then they seek out a source for those skills, master those skills, and apply those skills to complete the task.

Here are two examples:

Employee 1 notices that the screw tip he is using is making it difficult for him to properly seat screws into the part he assembling. He stops forcing the screw gun to seat the screw, which rounds off the screw and damages the circuitboard he is assembling. He opens a drawer as his station and obtains a new screw driver tip that he began storing there when this happened once before, and replaces the tip in the screwgun the way the maintenance tech showed him when he asked how to do it. Quality production resumes without being told what to do. The Lean Manufacturing board is also updated by this employee with a suggestion that screwdriver tips be replaced every Monday morning so that downtime could be avoided for the cost of a one dollar screwdriver tip.

Employee 2 notices that the screw tip he is using is making it difficult for him to properly seat screws into the part he assembling. He continues to work harder and harder to make production, by forcing the screws to seat, sometimes backing the screw out and then forcing it back into the hole until it goes down flush. He does this until the screws will not turn at all and stops working. After an hour, he takes lunch. Then, he comes back and sits until his break and begins complaining about how sore his arm is, and perhaps he needs to see the Company doctor. At the end of the shift, the supervisor inquires as to why the shipment was missed and discovers that Employee 2 paged maintenance twice, but no one came to change out the screwdriver tip, so he had to stop working. After all, it is not his job to keep the tools running.

I am sure you have an employee just like this. If not, you may have one I call **wallpaper**. These are employees who hire into large organizations and never miss a day of work. They are quiet. They don’t check their personal emails at work. They never, ever make any mistakes, and always meet the minimum production with the smallest possible margin. Upon checking their work history you find they never once made any suggestions. They never initiated a single purchase requisition, or spoke up in a meeting, or originated a memo. They were well liked, had no enemies, and parked their white sedan in the same slot for 20 years. They cannot be fired. They don’t seek or receive a promotion. They don’t come to company parties or celebrations. I venture to say that large organizations are filled with employees exactly like this. Before you know it, they have been there for 20 years, and they are retiring with a pension.

Believe it or not, I have a test to find this type of employee as well. The wallpaper test. You can’t fire this kind of employee, but you can damn sure never hire one.

**When Illiterate Children Become Adults**

## Teachers’ unions are cheering the news that New York state education officials have killed off a literacy test which successfully revealed that almost a third of candidate teachers cannot meet eight-grade standards.

Members of the New York state Board of Regents voted on Monday to eliminate the literacy exam which revealed the prospective teachers’ poor reading and writing skills, saying the controversial test is “flawed” and that it puts Latino and African-American teacher applicants at an unfair disadvantage.

Advocates of testing said the decision to kill the literacy test will lower teaching standards, especially for minority students in the city.

“Eliminating the [test just] to increase the number of unqualified, unprepared Black and Latino prospective teachers is the most racist and destructive action taken under the guise of diversifying NY’s teachers,” said Mona Davids, President of the New York City Parents Union, adding:

We, Black and Latino parents, do not want teachers who cannot pass a basic literacy test. We don’t care about the color or race of the teacher, we want highly effective teachers teaching our children.

“It’s alarming because we’ve now abandoned or watered down the teacher evaluation process, and now we’re lowering the bar for entry certification as well,” said Charles Sahm, Director of Education policy at the Conservative think tank Manhattan Institute.

“It is deeply disappointing that the Regents and State Education Department are lowering the bar for teacher literacy skills and astonishing that there has been virtually no public discussion of the potential impact on student learning,” said Ian Rosenblum, the Executive Director of Education Trust-New York, a non-profit advocacy organization that promotes high academic achievement for students of color and low-income students.

“We should be focusing on ensuring that prospective teachers receive the support they need in teacher preparation programs rather than weakening the teacher certification standards that can help ensure students have equitable access to strong educators,” he said.

The Academic Literacy Skills Test, one of the four exams aspiring teachers in New York must take to become certified, was introduced in 2013 to ensure teachers had strong language skills and to assess the ability to master the Common Core standards for English. Considered the hardest exam out of the four, it found that 32 percent of aspiring teachers statewide failed the test — even though it was passed by teachers who just met eighth-grade English standards.

The exam began to [draw controversy](http://www.chalkbeat.org/posts/ny/2015/03/19/aspiring-black-and-hispanic-teaches-struggle-on-new-tests-data-show-prompting-new-debate/) when data from the State Education Department showed that only 41 percent of black test-takers and 46 percent of Hispanic test-takers passed on the first try, compared to 64 percent of white test takers. This disparate result also cut the pool of eligible teaching candidates by 20 percent in just one year.

A Manhattan Federal District Court judge in 2015 ruled that the ALST exam didn’t discriminate against minorities.

According to a report in the [New York Times](https://www.nytimes.com/2015/08/08/nyregion/judge-rules-new-york-teacher-exam-did-not-discriminate-against-minorities.html), Judge Kimba M. Wood ruled that just because racial minorities scored lower on the exam didn’t mean it was discriminatory. Wood determined that the state and Pearson, the company that creates the ALST exam, are doing a “proper job in making sure the content of the ALST is representative of the content of a New York State public school teacher’s job.”

State officials defended their vote to let the least literate teachers into classrooms.

 “We’re not getting rid of literacy, so let’s dispel that right now,” said Kathleen Cashin, who chairs the board committee. “Just because the word ‘literacy’ is on the test doesn’t mean it’s a good test, does it? And if it’s not a good test, our students [teachers] shouldn’t be subjected to it.”

Cashin added, “It’s just that if you have a flawed test, does that raise standards or does that lower standards?”

State Education Commissioner MaryEllen Elia also supported the Board of Regents’s removal of the test. “The Regents and I continue to seek out expert advice from educators, parents and the public as we make important policy decisions,” Elia said, adding:

In this case, the experts and practitioners have suggested changes to our certification requirements that will help support teacher candidates and ensure students are taught by high-quality teachers while helping to address the national teacher shortage at the same time. New York’s teaching certification requirements remain some of the most rigorous in the country, requiring the vast majority of teaching candidates to pass three assessments before earning certification.

To replace the ALST, the New York State Education Department recommending on modifying one of the three remaining exams, the Educating All Students (EAS) test to “assesses both students’ ability to teach a diverse population and also their literacy skills.”

Since the federal ruling which supported the test, the Board of Regents, a powerful 17-member panel that sets education policy for New York, established an edTPA Task Force in 2016 to review issues with the teacher certification exams. According to

The [Task Force](http://www.nysed.gov/news/2017/board-regents-act-amend-states-teacher-certification-requirements-based-recommendations) subsequently complained about “the cost of the exam, the ongoing need for the exam in light of the other required exams and the total number of exams required for certification.”

Despite the 2015 ruling and findings from the Task Force that found no racial bias, members of the Task Force still claim the ALST exam has caused a shortage of minority teachers.

“Having a white workforce really doesn’t match our student body anymore,” Leslie Soodak, a professor at Pace University, who also serves as a member of the Task Force. “We want high standards, without a doubt. Not every given test is going to get us there.”

New York education leaders defended killing the test.

“The changes we advanced today strike the right balance for both teachers and students,” Board of Regents Chancellor Betty A. Rosa said in a statement. “Candidates for certification will still be required to demonstrate their teaching skills and knowledge before entering the classroom. At the same time, we are eliminating costly and unnecessary testing requirements that create unfair obstacles to certification for many applicants.”

According to the [Albany Times-Union](http://www.timesunion.com/local/article/Regents-vote-to-ditch-literacy-test-for-teachers-10999601.php), Rosa slammed the critics who are critical of the changes, calling it “insulting.”

“We’ve got individuals out there who don’t even know what this [literacy] test looks like,” Rosa said. “The only thing they know is they hear the word ‘literacy’ and they don’t realize these people are going through a bachelor’s degree, English classes, writing classes. Getting a degree and all of that stuff becomes negated, and it’s so insulting that people make this an issue without having the complete story.”

The New York State United Teachers Union praised the removal of the test.

“The changes adopted by the Regents will, when fixed, fix some of the worst problems associated with the botched roll-out of edTPA and high-stakes testing for aspiring teachers while maintaining high standards for those students who wish to enter the profession,” the teacher union said in a statement. “Eliminating the **duplicative Academic Literacy Skills Test** (ALST) — are pluses for students, and we support these changes.”

Advocates for better education were not mollified by the promise of from the anti-test advocates.

“The Regents eliminating the ALST is again putting the interests of adults before our children,” Davids said. “By lowering the bar for prospective teachers to please the teachers union and sub-par, diploma mills, Schools of Education, the Regents is completely destroying the futures of Black and Latino students. The majority of students do not read, write or do math at grade level and we need teachers who are literate and effective.”

“It is important that we increase the share of black and Hispanic teachers, and we certainly don’t have enough here or anywhere, Sahm said. “I don’t think this is the way to go. This is a literacy exam. If you’re going to be a teacher in New York state, this is a criterion you should be able to meet.”

**Is NATO Preparing to Invade Russia?**

A truly horrifying Ministry of Defense (MoD) report circulating in the Kremlin today states that President Putin has just ordered the immediate creation of a special aviation division responsible for airlifting personnel and equipment from Kubinka Air Base, in Moscow Oblast, after confirmation was received that American-led NATO forces are in final preparations to unleash total war against the Federation. [Note: Some words and/or phrases appearing in quotes in this report are English language approximations of Russian words/phrases having no exact counterpart.]

According to this report, spurring President Putin’s order to begin preparations for the full evacuation from the Kremlin of all top political and military leaders from Moscow is due to MoD intelligence analysts confirming that American-led NATO forces have concluded that a “limited” nuclear weapons exchange war with the Federation was now achievable—but only if conducted prior to the Federations full deployment of the short-range nuclear-capable road-mobile 9K720 Iskander-M (NATO reporting name SS-26 Stone) ballistic missile system scheduled to be completed before years end.

MoD intelligence experts in their making this grim confirmation of a nuclear war outbreak between the Federation and American-led NATO forces, this report continues, is based upon their analysis of the just completed Global Lightning 17 war exercise ordered by President Donald Trump and conducted from 7 to 17 February. [English translation]

This just completed Global Lightning 17 war exercise, this report details, was the most extensive in recent years into implementing the America doctrine of strategic nuclear forces—and that in the course of conducting their rehearsed script dealt with the hybrid escalation of conflict in Europe that quickly escalated into a global nuclear war with the participation of the United States
On 16 February, the day prior to the ending of this insane Global Lightning 17 nuclear war plan, this report further notes, President Trump’s Secretary of Defense, General James Mattis, arrived in Europe to oversee its final execution—and then promptly declared that contrary to Trump’s previously stating that upon taking office he would cooperate with Russia to defeat Islamic terrorists, announced that the US would NOT cooperate with Russia’s military.

With the largest military buildup in NATO’s history rapidly accelerating on the Federations western border with the European Union, this report continues, these “war-like” offensive actions towards Russia can no longer be ignored as thousands of American troops and military equipment continue to flood into this region—and has caused the Australian nuclear war expert Helen Caldicott to warn that atomic war between the US and Russia is nearly upon us all.


In their preparations for total war against the Federation too, this report details, the Americans have deployed to Poland at least 70 AGM-158B JASSM-ER (extended range) missiles that now give this NATO member state first strike capability deep inside Russian territory.

One of the most feared weapons in the American war arsenal, this report explains, these AGM-158B JASSM-ER missiles, which boast an operational range of 1000+kilometers, and have the capability of knocking out key stationary infrastructure sites located deep inside Russia’s territory—and are all equipped with the Counter-electronics High Power Microwave Advanced Missile Project (CHAMP) payload—that is an electronic warfare technology that fries electronic equipment with bursts of high-power microwave energy, non-kinetically destroying them.

Stationed in Poland along with these “first strike” AGM-158B JASSM-ER missiles, this report continues, are thousands of just deployed US Army troops from Fort Carson—and who, for the past 2 years, have been specifically trained to wage war on Federation military forces in Russian cities and villages.

Though the US Army claims that these thousands of Fort Carson soldiers have been trained as a “global response force”, MoD experts in this report state, the only historical equivalence that can be said about them is their resembling the “Pentomic Divisions” established by the American military in the 1950’s and 1960’s to wage war on nuclear contaminated battlefields—and that the prospect of so horrified the Kennedy administration (after President John Kennedy’s brother Robert saw a demonstration of first hand), the US began an immediate détente with the then Soviet Union to keep such a war from ever occurring.

With Deputy Foreign Minister Sergei Ryabkov warning just hours ago that Moscow’s relationship with the US is at its lowest level since the Cold War when our world last saw these American-trained nuclear battlefield “Pentomic Divisions”, this report grimly says, new reports from the United States are showing this wars inevitability—and as confirmed by President Trump’s Defense Science Board have presented him with a new atomic war plan against Russia whose strategy calls for a limited nuclear (“You need to escalate a conflict just enough to end it.”) and whose theory advocates using low-yield nuclear weapons against Russian conventional forces to demonstrate that Trump means “serious business” and might be crazy enough to launch an all out nuclear attack—thus causing Russia to “blink” and ultimately back down, rather than risk global thermonuclear war or continue conventional hostilities.

The critical flaws in this American plan to wage nuclear war against Russia (limited or otherwise), this report concludes, is that unlike the United States or European Union, the Federation is fully prepared with nuclear bomb shelters to protect every citizen in the Federation (with Perm alone being able to protect 1 million war workers)—and whose nuclear war doctrine, once the Motherland is attacked, calls for an immediate de-escalation action to occur—but which is, actually, a devastating “first strike” nuclear response against the aggressors.

**The Battle in the Senate**

All-out war breaks between Republican senators Rand Paul and John McCain ad unhinged McCain said “Rand Paul is now working for Vladimir Putin”. Rand Paul is now calling for term limits, saying “I think he makes a very strong case for term limits.”

Senator John McCain lost it on the floor of the Senate Wednesday and accused Senator Rand Paul of “working for Vladimir Putin.”

Paul opposed giving NATO membership to Montenegro, saying it would be “unwise to expand the monetary and military obligations of the United States given the burden of our $20 trillion debt.”

McCain on the other hand insisted anyone who is against bringing the small country into NATO is a Putin agent.

“If there is objection, you are achieving the objectives of Vladimir Putin,” McCain said. “You are achieving the objectives of trying to dismember this small country that has already been the subject of an attempted coup.”

Paul then proceeded to vote against the accession protocol and walk away.

“That is really remarkable, that a senator blocking a treaty that is supported by the overwhelming number – perhaps 98, at least, of his colleagues – would come to the floor, and object, and walk away,” McCain said.

“He has no justification for his objection to having a small nation be part of NATO that is under assault from the Russians. So I repeat again, the senator from Kentucky is now working for Vladimir Putin.”

Rand Paul: McCain a “Strong Case For Term Limits”

Sen. Rand Paul (R-Ky.) fired back at Sen. John McCain (R-Az.) in response to his stunning accusation that Paul works directly for the Russians.

“I think he makes a very strong case for term limits,” Paul told host Willie Geist on Thursday’s Morning Joe. “I think maybe he’s past his prime.”

“Maybe he’s gotten a little unhinged.”

To talk about NATO sensibly, first there needs to be a rational discussion about the “pros and cons” of expanding it, Paul said.

“We currently have combat troops in about six nations, we have troops actively just stationed in probably a couple dozen others, we have a $20 trillion debt,” he noted. “If we put active troops and got involved in combat where McCain wants us to be, they put an angry McCain on the map. It’s virtually everywhere.”

“His foreign policy is something that would greatly endanger the United States, greatly overextend us.”

McCain delivered his scathing remarks on the Senate floor toward the Kentucky Senator after he flatly objected to McCain’s “treaty” seeking to give NATO membership to Montenegro.

“If there is objection, you are achieving the objectives of Vladimir Putin,” McCain said just before the vote. “You are achieving the objectives of trying to dismember this small country that has already been the subject of an attempted coup.”

“I object,” Paul said before walking out of the chamber.

“He has no justification for his objection to having a small nation be part of NATO that is under assault from the Russians,” McCain added. “So I repeat again, the senator from Kentucky is now working for Vladimir Putin.”

Paul later explained his rationale for voting against the protocol, saying it would be “unwise to expand the monetary and military obligations of the United States given the burden of our $20 trillion debt.”

**Will China Ever Take Military Action?**

**For most of its recent history, China has largely been a land power with no significant naval capabilities.** They haven’t been able to exert much military influence beyond their coastline for well over a thousand years. In fact, one of the reasons why Western powers had no trouble bullying China during the 19th and 20th centuries, was because the Imperial Navy under the Qing dynasty was incredibly weak. **With that in mind, it’s no surprise that lately, China has been putting a lot of effort into building an effective overseas naval force. But when it comes to war, there is no medal for effort. Everything China makes falls apart. Their ability to miniaturize electronics is impressive, but it wasn’t their idea. In fact, I cannot list a single original idea China has contributed to the global economy in nearly a millennia. Even silk was not a Chinese invention.**

**China has the ability to make news, but not war.**

One of the most significant news stories is about how they have been **busy constructing their** [**first combat-ready aircraft carrier**](http://www.popularmechanics.com/military/navy-ships/a25009/chinas-second-aircraft-carrier-shandong/)**. First of all,** you have to be able to make aircraft that can stay in the air. And they have to be able to land, without the landing gear falling apart. They have stolen every single bit of technology they use, and they do a copy that looks the same, but it sure doesn’t work the same. They have a car called the Camery. It’s an identical copy of the Toyota Camry, but it has Chinese suspension and a Chinese motor. You guessed it. it is a piece of crap. There guns are notoriously cheap and faulty. Their batteries blow up all the time. Without American companies spending billions on technology, and then painstakingly training them how to produce that technology, China would have nothing, but people.

 And, let’s not forget that their new, high tech navy can’t really exert much military influence if it doesn’t have soldiers and experienced sailors to deploy. That’s why Chinese officials have recently announced that they are preparing to [rapidly expand the ranks](http://www.news.com.au/world/china-to-boost-marine-corps-by-400pc-to-enforce-growing-world-influence/news-story/0d39501cbedd214994e435cecaf8c835) of the People’s Liberation Army Marine Corps. For the Chinese, that means putting them in uniform and having an amazing parade.

Chinese media is reporting the People’s Liberation Army’s ambitious new plans following the announcement of a 7 per cent increase to $200 billion in defense spending last week. Yeah. That is an expansion. The US spends nearly 1,000 times that much on its military. That’s billion with a “B”.

 Among the details to emerge is a **move to boost China’s marine corps** — highly trained and well equipped troops intended for rapid deployment and offensive missions launched from the sea — from an existing 20,000 troops to more than 100,000. Highly trained by whom? China hasn’t won a war; ever. Go all the way back to the year 216, if you like. You might say they won against the Indians in 1961, but do you see even one square foot of Indian land in the hands of China today? No, you do not.

Chinese officials have stated **this is to protect arterial maritime trade routes and enforce its growing overseas interests.**

***“What growing overseas interests” you might ask?***

Well, **China has been in the process of building their first overseas military base in Djibouti, on the Horn of Africa.** And that base [is expected to be completed this summer](https://www.defensetech.org/2017/03/13/chinas-first-overseas-military-base-nearing-completion/).

Marine Gen. Thomas Waldhauser, commander of AfriCom, told the Senate Armed Services Committee that he expected the Chinese base on the Horn of Africa to be operational later this summer.

Without getting specific, **Waldhauser said he recently met with Djibouti’s President Ismail Omar Guelleh “and expressed our concerns about some of the things that are important to us about what the Chinese should not do at that location.”**

The Chinese base would be about four miles from the U.S. base at Camp Lemonnier, one of the Pentagon’s largest and most important foreign military installations, where about 3,000 U.S. military personnel and contractors are assigned to Combined Joint Task Force-Horn of Africa.

**Given that base’s close proximity to Camp Lemonnier, China’s intentions are obvious.**

They want what the United States has, which is a vast overseas empire, and an expeditionary force that can reach any coastline in the world. **They want to compete with our current role in the global theater.** Unfortunately, there isn’t enough room in the world for two countries carrying out that role. **We may very well be witnessing the first stages of a new conflict between the United States and China.**

**So, let me tell you the truth, here. China is a paper tiger. I have visited that country many times and traveled to more than a dozen cities. I cannot tell you the number of times I have seen assembly line workers leaning over the hoods of cars hanging from the overhead chain conveyor as I was touring their facility. The one problem was that there was no production going on. The workers had no tools in their hands. There were no parts standing by to install. In nearly every case, we met in conference rooms with no heat, with the lights turned off. Yes, that is right. The lobby, the offices, and the conference rooms were only lit by windows.**

**They have high tech ships with 10-year-old software. They have stealth aircraft that are so heavy, they cannot carry anything except the pilot. They are experts at copying things, but they cannot improve anything. The only thing China can make on their own, that is unique, is Chinese men. The women? Oh, so sorry. They are limited in supply due to government efforts to curb overpopulation.**

**They have a standing army of 200 million men? Really? Do you know how many cheeseburgers it takes to feed an army that size when it is deployed? If they ever left their own shores, their army would die like maggots on a hot sidewalk. They know absolutely nothing about war. They might be able to launch an ICBM from Korea, or from their new little island base. One. The next one would fail the quality tests, and drop into the sea.**

**I would not worry too much about China. Their debt-to-GDP ratio hovers around 100. That’s a positive 100. Nations normally plunge into a spiraling depression when that ratio reaches 20. The US would win every trade war between China and the US.**

**The real worry is not a protracted war. The real worry is suicide. You see, China has a pit bull on a chain named Korea. What is going on right before our eyes is a little sleight of hand. We are busy watching the little missiles that Korea is launching here and there. Their skills at miniaturization, and their apparent lack of any sense of self preservation, have resulted in a dangerous combination. They may not care in the least about deterrence, or sanctions, or even survival. Their purpose is to trigger the collapse that has been so carefully planned for so long.**

**Our last president was evidently deeply involved in this as well. It was his job to strangle our military, fire all the experienced intelligence officers and take down our perimeter defenses. He was supposed to put our inner cities in separate jars like isolated swarms of wasps, and then shake the jar for 8 years to really make us angry from within that jar. Then he imported hundreds of thousands of suicidal jihadists and placed them in the room with the jars. Their job is to take a hammer, provided to them by the government hardware store at taxpayer’s expense, and smash those jars. Now, we could clean up a little broken glass, but it is rather hard to do when your eyes are being swelled shut by stinging wasps.**

**If is not the plan, then will someone please enlighten me? Because that’s what the plan looks like from here. When you place loaded guns on the playground with mean little kids, do you think everyone is going to just play nicely? When you spread rumors about the good kids to the bad kids, and then turn out the lights and let the teachers leave the room, what do you think is supposed to happen? When you import 1,400 years of evil into your living room, don’t expect to be able to take a Sunday nap after church on the couch. It may be time to pray. Because when the lights go out, the police won’t be answering the 911 line.**

**The Battle of Lepanto**

**By HW Crocker, III**

The clash of civilizations is as old as history, and equally as old is the blindness of those who wish such clashes away; but they are the hinges, the turning points of history. In the latter half of the 16th century, Muslim war drums sounded and the mufti of the Ottoman sultan proclaimed jihad, but only the pope fully appreciated the threat. As Brandon Rogers notes in the Ignatius Press edition of G. K. Chesterton's poem "Lepanto": Pope Pius V "understood the tremendous importance of resisting the aggressive expansion of the Turks better than any of his contemporaries appear to have. He understood that the real battle being fought was spiritual; a clash of creeds was at hand, and the stakes were the very existence of the Christian West." But then, as now, the unity of Christendom was shattered; and in the aftermath of the Protestant revolt, Islam saw its opportunity.

The Ottoman Empire, the seat of Islamic power, looked to control the Mediterranean. Corsairs raided from North Africa; the Sultan's massive fleet anchored the eastern Mediterranean; and Islamic armies ranged along the coasts of Africa, the Middle and Near East, and pressed against the Adriatic; Muslim armies threatened the Habsburg Empire through the Balkans.

The Ottoman Turks yearned to bring all Europe within the dar al-Islam, the "House of Submission" — submissive to the sharia law. Europe, as the land of the infidels, was the dar al-Harb, the "House of War."

But the House of War was a house divided against itself. The Habsburg Empire was Europe's bulwark against Islamic jihad, but its timbers were being eaten away by the Protestants who diverted Catholic armies and even cheered on the Mussulmen, whom they saw as fellow enemies of the pope in Rome.

In 1568, the emperor Maximilian, of the Austrian half of the Habsburg Empire, had agreed to a peace treaty with the Turk; and the Danube was reasonably, temporarily, quiet.

In Spain, the other great pillar of the Habsburg Empire was Philip II. And for him, things were not quiet at all. We think of Philip II as dark and brooding, and so he was — to the degree that it is surprising to remember that he was blue-eyed and fair-haired. But the lasting image, especially to those of English (even Catholic English) blood, is Chesterton's sketch; as King Philip is in his "closet with the Fleece about his neck":

The walls are hung with velvet that is black and soft as sin,
And little dwarfs creep out of it and little dwarfs creep in . . .
And his face is as a fungus of a leprous white and grey
Like plants in the high houses that are shuttered from the day . . .

As a ruler, Philip was harsh, saturnine, and austere. He embodied a scrupulousness that went beyond a personal failing to become a public vice, where there was no room for charity and far too much room for plottings and calculations, which, though they always had the protection of the Faith as their goal, were too admixed with lesser, baser metals than the gold of the monstrance.

Philip's knights had ranged into the New World and were carving out a vast empire, its extent virtually beyond imagining, whence came gold and other treasures. That, Philip knew, was the future. But to his immediate north was the menace.

**Europe Divided**

Philip was no friend of the Mohammedan, and the Mussulmen remained a persistent threat to Spain's possession of Naples and Sicily. Spanish vessels clashed throughout the Mediterranean with Barbary corsairs. At that very moment, Spanish infantry were suppressing the Morisco revolt of apparently unconverted Moors. But Philip trusted that Spain was well equipped to defeat the Mussulmen. That was old hat.

But Protestantism was something relatively new. It was treason and heresy. And, though Philip would not have been so eloquent, it was worse:

The North is full of tangled things and texts and aching eyes,
And dead is all the innocence of anger and surprise,
And Christian killeth Christian in a narrow dusty room,
And Christian dreadeth Christ that hath a newer face of doom,
And Christian hateth Mary that God kissed in Galilee . . .

Where the Austrian Habsburgs hoped against hope for conciliation with their own violent, Teutonic Protestants, Philip II trusted to his renowned Spanish infantry. They had the answer that Protestantism deserved.

The pope had no sympathy for Protestants either, but for him, as for previous popes, Islam remained the real threat. The pope felt he had many urgent tasks to attend to, but the vital one was confronting the Islamic challenge.

Pope Pius V, like Philip, was no exemplar of rubicund, jovial Christianity such as the Italians preferred. He thought the Church had seen too much of that, with the concomitant slackness in Renaissance morals and an excessive generosity to Protestant error. He had never known the high life. He was a former shepherd, an ascetic, a Dominican, and an inquisitor. Though much of a mind with Philip, he had a finer balanced spiritual core that kept him from Philip's failings. As a pope, he was a reformer, and brought a monastic purity to the organization and administration of the Church, to a review of the religious orders, to educating the faithful, to evangelizing, and to caring for the poor (which he did personally).

If Christendom was split asunder — with even Philip disputing papal control of the Church in Spain — the pope nevertheless had the spiritual and temporal authority, the presence of a future saint, to assemble a Holy League, a fighting force that included Catholic knights not only from the papal states and the Knights of Malta, but from Italy, Germany, and Spain; and even from England, Scotland, and Scandinavia, Catholics and freebooters, gentleman adventurers and convicts condemned to row the galleys.

France, *la belle France,* would be present in the Knights, but not as a party itself. The great period of the *fleur de lis* had passed away with the end of the Crusader kingdoms. Now the king of France could support no venture in league with the Habsburgs, whose dominions surrounded him. Worse, he was quite willing to cut deals with the Mohammedans in order to turn Muslim corsairs against Genoese and Spaniards and away from Frenchmen (unless they were Knights of Malta, where Frenchmen of the old school continued to thrive). So the French king, from the line of Valois, Charles IX, pleaded exhaustion from having to fight the Huguenots. Even less willing to cooperate with the pope was Protestant England, whose Virgin Queen was establishing a cult around herself and a church subordinate to her will. The sad result of French realpolitik and English apostasy was that the sons of Richard *Coeur-de-Lion* sat this one out:

And the Pope has cast his arms abroad for agony and loss,
And called the kings of Christendom for swords about the Cross.
The cold queen of England is looking in the glass;
The shadow of the Valois is yawning at the Mass . . .

**A Rude Awakening for Venice**

Others, who might also occasionally yawn at Mass, nevertheless were enthusiasts for a crusade against the Turk — this was most especially true of the merchant Republic of Venice. It is one of the many commonly accepted myths of history that Protestants invented capitalism, but Venice is proof that Catholic states were exercising their capitalist muscles centuries before Luther burped into his tankard or Calvin had his first glint of his predestined salvation and others' predestined damnation.

The Venetians were prime exponents of the capitalist art. They were, in fact, something like the entrepreneurs of modern Hong Kong, to the extent that their city was built in a lagoon, the buildings actually resting on logs; and the Venetians enjoyed great economic success despite having no natural resources to speak of, save the sea.

No one knows exactly when Venice was founded, but it was during the Roman Empire, perhaps in the fifth century. By the early Middle Ages it was an established city-state and had carved out a commercial and territorial empire — the territory necessary to protect and extend Venetian commerce.

As with all men of commerce, the Venetians' preferred mode of interaction was trade: They wanted to make money, not war. But they realized that, as the similarly minded Thomas Jefferson realized half a millennium later, "Our commerce on the ocean . . . must be paid for by frequent war." Still, given the choice, just as Churchill thought "to jaw-jaw is always better than to war-war," the Venetians thought ka-ching—ka-ching was better than war-war.

As such, crusades called by the pope merely for the sake of repelling the Mussulmen had no appeal to them. The Mohammedan was a customer, after all — and the customer is always (at least up to the point of heresy) publicly right, even if the merchant secretly despises him.

The Venetians, however, had been forced to come to some sober conclusions about Islamic aggression in the eastern Mediterranean. In 1565, the Ottomans had laid siege to the island of Malta, which was defended by the Knights Hospitallers (also known as the Knights of St. John; or, given their new home, the Knights of Malta). For four months the gallant Knights threw back the besieging Turks, inflicting massive losses on the enemy, who finally called it quits after the Knights were reinforced by Spain.

The Ottomans hated the Knights, but reckoned that Venetian-held Cyprus was easier pickings, and five years later it was Cyprus that was besieged. Now Venice, which had ignored previous papal calls to defend the Mediterranean against Mohammedan raiders, was itself in the firing line. As was good business practice, the Venetians were not caught unprepared. Their insurance policy was the Venetian Arsenal, which built and held the merchant republic's mighty naval forces. The arsenal, however, had caught fire in late 1569; and in February 1570 the Ottoman mufti Ebn Said, on behalf of Sultan Selim II, declared a jihad against the Christians on Cyprus. Selim was known as "the Sot" for his rather un-Islamic drinking habits. He also had the distinction of having blond hair. Despite his heavy drinking, he, like Philip II, was not a blond who had more fun. With his harem, free-flowing alcohol, and access to all the pleasures that the devout expected only to find in paradise, he tramped his palace in depression and rage against the infidel and Western decadence. While no soldier or sailor himself, he lent his full support to every corsair who would attack Western shipping, to every expansion of the Ottoman navy, and to the siege of Cyprus.

**The Muslim Onslaught**

The Turks came on with 70,000 men, including their shock troops, the praetorian guard of the sultan, the Janissaries — Christian youths taken as taxation from their families, trained up in the art of war, converted to Islam, and given the power of the sword and the possibility of advancement.

The Catholic defenders of Cyprus were frightfully outnumbered — by about 7 to 1 — but then again, the Knights of Malta had faced even stiffer odds. The two key points in Cyprus were Nicosia and Famagusta. The city of Nicosia held out for nearly seven weeks. Finally, reduced to 500 soldiers, it surrendered, expecting the civilians to be spared, even as the Christian troops were enslaved. Instead, the Muslim attackers butchered every Christian they could find — 20,000 victims, murdered regardless of rank, sex, or age, save perhaps for 1,000 women and children who would be sold as slaves. The Mussulmen knew something about commerce, too, and those with an eye for harem-flesh tried to spare the most valuable Europeans.

That left the former Crusader fortress of Famagusta as the only defensible point on the island. Inspired by the Turks' display of severed Venetian heads from Nicosia, the Christian soldiers put up a stiff defense and were at one point resupplied by gallant Venetian sailors.

But the man most devoted to the relief of Famagusta was Pope Pius V. It was his incessant diplomacy that finally brought together the forces of the papal states, the Knights of Malta, Venice, its smaller rival Genoa, the Savoyards, and, most important, Spain and its possessions Naples and Sicily to form the Holy League. The pope did not punish Venice for its failure to support previous papal calls to combat. He was above such pettiness. He only wanted to restore Christendom. He knew, however, that there were national and personal rivalries and hatreds aplenty within his League, and it would take enormous tact to hold the League together and lead it to victory against the Turk and to the relief of Cyprus.

For the brave defenders of Famagusta, it was too late. In August 1571, after ten months of resistance, the Venetian commander Marco Antonio Bragadino gave in to civilian pressure and opened negotiations with the Turks. Terms were agreed: The garrison would be exiled, the people spared. The troops were disarmed and boarded transports — and then they and their commanders were slaughtered. But for Marco Antonio, the Mohammedans reserved a special torture. He was not killed immediately. Instead, his nose and ears were severed, and, as T. C. F. Hopkins has it in *Confrontation at Lepanto:*

He was pilloried in Famagusta and dragged around the Ottoman camp in nothing but a loincloth and a donkey's saddle and made to kiss the ground in front of Lala Mustapha's tent. The Ottoman soldiers were encouraged to throw garbage and excrement on him, and to mock his misery, and to pull hairs from his beard . . . Lala Mustapha himself came out to spit on the Venetian and to empty his chamber pot over the old man's head . . .

And even that was not the end of it. Marco Antonio — still, for the moment, alive — was flayed, skinned like a trophy, and then his corpse was stuffed and sent to the sultan, who had the prize stored in a warehouse of other human trophies — a slave prison.

**Don Juan Takes to the Sea**

But for this outrage, the pope had an answer, and he had found the man to deliver it. Among all the courageous, experienced, jostling commanders in his unruly Holy League, he chose a handsome 24-year-old. The young man, raised on tales of chivalry, was a student of war and an experienced commander, with a track record of victory against the Moriscos. He was also the bastard son of the late, great Charles V, which gave him good bloodlines as bastards go. He was Don Juan of Austria.

Don Juan was also the half-brother of Philip II, who treated him with the cold, brooding calculation one might expect, and an apparent jealousy that one might not. Philip was pleased that Don Juan's elevation affirmed Spain's leading role in the Holy League. But he did everything he could to tie Don Juan's authority to his other Spanish commanders and thus to himself. When the decks were readied for action, however, such constraints had of necessity fallen away, and Don Juan the swashbuckler took full command.

Where, risen from a doubtful seat and half-attainted stall,
The last knight of Europe takes weapons from the wall,
The last and lingering troubadour to whom the bird has sung,
That once went singing southward when all the world was young,
In that enormous silence, tiny and unafraid,
Comes up along a winding road the noise of the Crusade.

His first victory was keeping the Venetians, the Genoese, and the Spaniards from killing each other. His second was more important: Against urgings of caution from some of his commanders — most especially the Genoese Admiral Giovanni Andrea Doria — Don Juan of Austria pressed his fleet forward to the attack.

Andrea Doria had reason to fear. If defeating the Turkish fleet required the united naval force of Christendom, what chance had this cobbled-together coalition of fractious rivals commanded by a 24-year-old who, though he had fought corsairs, had sought instruction in commanding so huge a fleet from Don Garcia de Toledo? Don Garcia had once been renowned as a tough old naval warrior, but having run afoul of Philip II, he had been forced into retirement, his reputation blackened. Don Juan, however, trusted him, and believed his advice would be unsullied by Spanish politicking. And Don Juan, fortunately, was right, for in the words of Jack Beeching in *The Galleys at Lepanto,* he "had the fate of the civilized world placed in his hands."

**The Battle Begins**

The Turks had an estimated 328 ships, of which 208 were galleys, the rest being smaller supporting craft. Aboard them were nearly 77,000 men, including 10,000 Janissaries, but also 50,000 oarsmen, many of them Christian slaves. At Don Juan's command were 206 galleys, along with 40,000 oarsmen and sailors, and more than 28,000 soldiers, knights, and gentleman adventurers. He also had the blessings of the pope and the papal banner; the ministrations of Jesuits, Dominicans, Franciscans, and Capuchins who accompanied the fleet, the prayers of the faithful; and the rosaries that were pressed into the hands of every Christian oarsman.

The Catholic armada had been spotted by Muslim spy ships (painted entirely black so that they cruised through the night unnoticed). They reported that the Christians would be no match for the Ottoman fleet. On October 7, 1571, Don Juan's lookouts raised the alarm as the Christian ships entered the Gulf of Patras. The Ottomans, from their naval base at Lepanto in the adjacent Gulf of Corinth, had formed a battle line, its front arrayed in three "battles," as were the Christians (though the battle had started before Andrea Doria, commanding the Catholic right flank, could bring his ships fully in line). Ahead of Don Juan's three battles was a wedge of galleasses — slower, less maneuverable gunships that made up for their lack of mobility with their unrivaled firepower.

The battle was met, the galleasses drawing first blood, splintering Turkish decks and Turkish men. But the Ottomans sailed around them, the goal, to grapple with the Catholic ships and turn the battle into a floating melee of Muslim scimitars, bows, and muskets against Catholic swords, pikes, and arquebuses.

Cannons erupted, arrows rained on the Christians, and arquebuses spat back balls of lead. When the ships closed, grappling hooks threw them together; the Christians hurled nets to repel boarders and followed up with gunfire. Still, the fighting closed to hand-to-hand aboard decks. Catholics turned swivel guns on the enemy ships, and the Turkish bowmen fired dark volleys of arrows that claimed the life of Agostini Barbarigo, commander of the Catholic left wing, whose eye was pierced when he raised his visor to issue orders.

Ottoman ships tried to turn the left flank of the Christian line, and while they appeared to succeed, the Catholic ships responded — amid a blinding hail of cannon blasts, arrows, grenades, and gunfire — in pinning the Muslim ships against Scropha Point. There, against the shoals, the Muslim vessels were trapped — and, at first, the Mohammedans fought with the ferocity of trapped animals. But more Catholic ships joined the battle, and what had been the right of the Ottoman line began to splinter, the Christian slaves on the Ottoman ships revolted, and Ottoman captains and crews, sensing disaster, beached their ships, hoping to escape to shore. By early afternoon, the Catholic left had emerged victorious.

At the head of the Catholic center was Don Juan aboard the flagship *Real.* For him, and for the Muslim commander Ali Pasha, the battle was a joust. They fired shots to announce their presence one to the other, and then drove to the clash, using their galleys as steeds. The ships crashed together, Don Juan in the lead, and everywhere the line erupted with explosions of cannons, bombs, gunfire, and the clash of swords and battle axes, while silent-flying deadly arrows thudded into timber and men.

It appeared that in this violent shipyard scrum, Don Juan's ship and men were getting the worst of it — despite the handsome hero's pet monkey hurling Ottoman grenades back at the enemy — until Marco Antonio Colonna, commander of the papal galleys, rammed his own flagship into Ali Pasha's. The surging Catholic forces, in what had become an infantry battle fought across ships' decks, swept the Muslims aside. Ali Pasha himself was killed and beheaded, and when Don Juan waved away the present of the severed head, it was tossed overboard. The Holy League's banner was raised aloft the captured Ottoman flagship, and Ali Pasha's banner — the sultan's own undefeated standard made of green silk and with the prophet's name threaded through it 28,900 times in gold — was Don Juan's.

On the right flank, Andrea Doria was engaged in a battle of maneuver that was anti-climactic to the battles on the Catholic left and center, save for the fact that in being drawn away from guarding the center battle's right flank, he allowed the Turks to pour through the gap. Some Catholic ships — without orders — pulled out of Andrea Doria's battle to plug the gap. But they were too few, and were forced to such desperate heroics as firing their own powder magazines. The Muslim lunge was then directed at the flagship of the Knights of Malta, who, like so many of their brave fellows before, fought to the death against overwhelming odds. (There were, perhaps, six survivors. The sources vary; six is a high guess. The one certain survivor was the Knights' commander, Pietro Giustiniani, though five times wounded by arrows and twice by scimitars.) Andrea Doria, having hardly distinguished himself thus far, wheeled around and chased away the remaining Ottoman raiders who were commanded by Uluch Ali Pasha, an Italian turned Barbary corsair. Uluch Ali had his prize — the Knights of Malta's banner — and he knew how to skedaddle when necessary. A realist, he knew the bigger battle was lost.

**Victory at Lepanto**

Not only was the battle lost for the Turk, but so were 170 of his galleys and 33,000 men killed, wounded, or captured, as well as 12,000 liberated Christian slaves. Lost was a generation of experienced Ottoman bowmen and seamen; and though a mighty fleet could, and indeed was, rebuilt, and though the sultan was committed to renewing the jihad by sea — or if not by sea, then by land — the threat of the Ottoman Turks dominating the Mediterranean was finished.

*Domino Gloria!*
Don John of Austria
Has set his people free!

Catholic losses were 7,500 dead — though many of these were knights and noblemen — and another 22,000 wounded (including Miguel de Cervantes). Pope Pius V, who had commanded the faithful to pray the rosary for victory, was convinced that it was prayer that had turned the tide. The Battle of Lepanto became the feast day of Our Lady of Victory, later of Our Lady of the Rosary.

Don Juan, a hero to the last, gave his portion of the captured booty to the Catholic wounded who had not bee able to pillage for themselves, and redoubled his generosity by adding to their treasure the 30,000 ducats awarded him by the city of Messina. He also made gifts of two captured banners: The imperial Ottoman banner went to the pope; the fabulous green silk banner went to Philip II, along with his after-action report. He gave credit to everyone else and little to himself, though he had been wounded in the hand-to-hand fighting. Don Juan was everything a *parfait gentil* knight should be — and, alas, as is often the case of the good and noble, died young, felled by fever; a romantic hero, a devoted and faithful Catholic and soldier (but one appalled at his half-brother's brutality in the Netherlands), in love with the charming Marguerite de Valois, whose blood was royal but whose character was far less admirable than his own. Still, Don Juan showed that chivalry could indeed live and breathe, even in the thinner air of a Europe no longer unified by the Catholic ideals that gave birth to chivalry.

And so:

Cervantes on his galley sets the sword back in the sheath
*Don John of Austria rides homeward with a wreath.)*
And he sees across a weary land a straggling road in Spain,
Up which a lean and foolish knight forever rides in vain,
And he smiles, but not a Sultans smile, and settles back the blade . . .
*(But Don John of Austria rides home from the Crusade.)*

Today, Christendom is even more divided, and certainly more deracinated and less confident, than it was in Don Juan's time, but there are still fighting men, the valiant core of that civilization, who even now patrol the dusty villages of Afghanistan and the dirty streets of Mesopotamia. The enemy smiles as "suicide bombers" smile, but our fighting men — some holding rosaries (the very same as I have, made by a Marine Corps mom) — smile with thoughts of sweethearts, wives, and children; of football and cold beers by warm fires; and of Christmas. They are the inheritors of the men who saved Europe at Lepanto; and they are the men who will, with God's grace, save the West again. So in honor of Don Juan, of Lepanto, of who we are as Catholics, let us pray for them, for their safety and for their victory. St. George, St. Michael, Our Lady, pray for them — and for us.