

Pornography and the Consumption of Chaos: A Call for Understanding, Education, and Action

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It is a singular honor to have this opportunity to speak to you this morning. I applaud who you are and what you represent. You are a coalition of individuals and organizations who have decided to take a stand that is becoming less common. You are 'against' pornography, despite a growing cultural chorus of other individuals and organizations who are 'for' pornography. I am grateful to you for taking this increasingly isolated stand. Today I would like to talk about the chaos that pornography perpetuates on individuals, families, and on society, and also talk about my perspective regarding what we can do to be effective in our chosen stance as a coalition 'against' pornography. In doing so I will discuss some of the tactics and goals of the 'coalition for pornography.' This coalition is not some nebulous concept, but a well organized and funded group of business, entertainment, and academic individuals and organizations who are determined to mainstream pornography. They want it in your home. They want to create a world where your children and grandchildren will find that pornography is ubiquitous, and in this goal they are succeeding. They want to establish, through faulty pseudoscience, that pornography is not only harmless, but that it is actually beneficial to individuals, couples, and to society. In this they are experiencing remarkable success. They want to remove the social stigma from pornography; in fact, they want to replace the word 'pornography' with the, from their perspective, less biased term 'visual sexual stimuli.' They, of course, do not consider themselves biased. They, as in the SPAN lab at UCLA, want to prevent therapists from treating sexual addiction, which they say does not exist, and have already advocated clients reporting their therapists to state licensing boards for treating them for this non-existent, from their perspective, entity: pornography addiction. They are well organized and have powerful PR machines. Any paper they publish, not matter how flawed and methodologically unsound, is instantly covered by a fawning press, while other papers which demonstrate the harm that pornography causes are marginalized and ignored by that same press.

They have an agenda. They are determined and relentless. I will spend some time talking about them, who they are, and what they say, and I will then talk about what I believe we can do to help change the cultural current. If we are going to be 'against' pornography we must understand them, what motivates them, and how they operate. As Sun Tzu said, "Know your enemy and know yourself and you can fight a hundred battles without disaster." In interacting with them, our goal should be to convert or confound. If we can convert them to being 'against' pornography, all the better; if not, let's at least become educated so we can confound them and refute their claims.

Chaos is defined as a "state of utter confusion." I can think of no more apt medium which both represents and perpetuates chaos than pornography. In our rush to flee from religion, morality and values, we have run over a cultural cliff into a sort of emotional anarchy. After writing his multi-volume *The Story of Civilization*, historian Will Durant said, "Intellect is therefore a vital force in history, but it can also be a dissolvent and destructive power. Out of every hundred new ideas ninety-nine or more will probably be inferior to the traditional responses which they propose to replace. No one man, however brilliant or well-informed, can come in one lifetime to such fullness of understanding as to safely judge and dismiss the customs or institutions of his society, for these are the wisdom of generations after centuries of experiment in the laboratory of history. A youth boiling with hormones will wonder why he should not give full freedom to his sexual desires; and if he is unchecked by custom, morals, or laws, he may ruin his life before he matures sufficiently to understand that sex is a river of fire that must be banked and cooled by a hundred restraints if it is not to consume in chaos both the individual and the group."¹ Durant, an agnostic, spoke not from a religious, but rather from a historical perspective.

¹Will and Ariel Durant, *The Lessons of History*, Simon and Schuster, 1968, 35-36.

Pornography has become the new religion for millions, who worship its power. Its ability to effect chaos rests in its role as a solvent. A solvent is chemical that dissolves things. Pornography is an emotional solvent; it dissolves relationships of all kinds, and dehumanizes and commoditizes people. It is addictive, and I do not use that word lightly. It has the power to affect the brain's reward center in a profound and very biologically fundamental way. Those who have become addicted will value other human interactions less, not only relationships with spouses and children, but professional focus and friendships as well.

There are currently few studies looking at pornography and the question of addiction, and some that have been published have argued against an addictive model. A very interesting study has been done at Cambridge University which supports an addictive model; it is not yet published. I will discuss these studies later, but in order to understand why pornography can become addictive it is important to understand some basic concepts about how the brain learns first. I will spend a few minutes discussing this process, then move to more specifics on pornography.

As humans we each have a brain, although my third grade teacher Mrs. Maddox would have argued that point in my case. Our brain is such a powerful force in the world because it can learn. It is a marvelous instrument through which we can interact with this physical world, but it is learning that allows us to do this. It allows us to laugh, cry, compute, comprehend, invent, create, and love, but it can also learn to hate, destroy, and denigrate. We now know much about how the brain learns, and it has turned our previous perspectives upside down.

Did you know that when you learn something, there is a physical change in the structure of your brain? It's as if the brain is plastic, and can be molded by thoughts and ideas. Two decades ago some scientists decided to scan the brains of violin players. They found that the part of the brain that controls the left hand of the violin players actually enlarges, and that this enlargement is related to the degree of training! Many other studies have confirmed this finding, but more amazingly other studies have shown that intense learning of other kinds changes the brain structurally as well. For instance, medical students were scanned before and after a three month period of intense studying for exams, and the results showed that the part of their brains associated with learning enlarged in that three month period. One scientist, in describing this process, said 'learning sculpts brain structure'. Just as muscles enlarge with exercise, our brains enlarge with learning. This is not simply correlation; through these and many other experiments we know that learning is causative with regard to physically changing the brain. It is an intuitive concept, but has been actualized in the laboratory as well. We have a name for this changeability of the brain; we call it 'neuroplasticity.'

Not all learning is positive, however. Two neuroscientists, in a paper looking at how brain cells change with addiction said, "Addiction represents a powerful but pathological form of learning and memory." Pathology, in medicine, is defined as the study of disease. Addiction is diseased, disordered learning. It imprints harmful learning patterns on the brain, and writes in powerful software into the brain's logic and memory centers. With time, this software actually changes the hard drive on the computer which is our brain. Recovery involves a similar learning process, and requires tremendous effort and time to re-write the software and eventually change the hard drive back to a more original, functional state.

We should not be surprised to learn, then, that addiction is associated with physically changing the brain as well. Interestingly, virtually every study of addiction shown shrinkage, or atrophy, in the areas of the brain associated with reward and judgment. Note that these changes involve not only substance addictions, but also behavioral addictions such as to food and sex (pedophilia in this case) as well. Interestingly, these studies were all correlative, that is, researchers looked at the brains of those who had already become addicted. Critics would say that maybe all of those with these changes were born that way, or that they changes had nothing to do with neuroplasticity, but rather with the physical effects on the brain from the various addictions and their co-morbidities. They ignore, however, recent studies such as a paper published in the journal *PlosOne* in which the authors supported a causative role in examining brain shrinkage in adolescents experiencing Internet addiction. They summarized: "Our results suggested that long-term Internet addiction would result in brain structural alterations." Other studies of recovery have shown reversibility of the shrinkage with recovery, such as one involving

methamphetamine addiction. A recent study of individuals undergoing mindfulness therapy demonstrated enlargement of the brain with such therapy.

If the brain is changing physically, what is happening at the cellular level with learning? It turns out that when we think, we turn on our DNA. DNA not only contains the blueprint for building our bodies, it also has codes which are transcribed when we think and learn. When we are learning about things that feel good to our bodies, certain DNA sections, or transcripts, are awakened and go to work producing proteins and other molecules which cause us to desire. These proteins actually build new wires between brain cells, of which there are literally trillions, establishing new connections as we learn. Addiction involves establishing these new connections and turning off others, a process called 'pruning', as our brain redefines what it is we want.

We have many chemicals in our brains which facilitate thinking, learning, and wanting. Our brain is a veritable pharmaceutical factory. Consider the following experience. Years ago I had done some missionary work in Africa, and had learned to love the continent. A few years ago we were able to return and experience a safari there. We flew from Victoria Falls along to Zambezi river to a safari camp on the river. While on a game drive, our ranger said he thought we might see some game in adrenaline grass. "What is adrenaline grass?" I asked. He drove along the banks of the river along the high grass, perhaps 7 to 8 feet high. "There! Do you see it?" "See what?" we asked. He drove closer slowly. Suddenly we saw it. There, lying under the grass, watching the river was a lion. It was looking at the water, watching for game. He told us if we sat still in our seats it would ignore the Land Rover. Our daughter Elizabeth, who was 11, shifted in her seat, however. Suddenly the lion was on its feet, staring at Elizabeth. The ranger had a rifle, but we were still terrified. The lion walked around the Land Rover, returned to its position under the grass, and laid back down. Our hearts were thumping out of our chest. "Adrenalin grass!" I got it then!

Our bodies produce adrenaline, which is an excitatory chemical which works in our brains and our bodies. It is also a drug that we as physicians give patients when their heart stops. It is an excitatory neurotransmitter. It has a close cousin named dopamine, they are both in a chemical class called catecholamines. Dopamine is also a drug we give to people with Parkinson's disease, as it is important in movement. It has another very important purpose. It is a powerful promoter of desire. It causes us to want rewards that help us survive. The dopamine factory is in an area of our brain called the brainstem. An area of the brainstem called the midbrain has a group of cells called the ventral tegmental area, or VTA. This area is one of the important dopamine factories in the brain. The VTA sends brain wires to another area of the brain called the nucleus accumbens. Dopamine is released from the end of the dopamine cell wire, and it crosses a narrow space called a synapse to the wire attached to the nucleus accumbens reward center cell. There it attaches to a protein called a dopamine receptor, and it turns the protein on like a key turns on a car. After it does this it travels back across the synapse and is re-uptaken back into the cell from which it came.

This area is important in our valuing rewards. If all roads lead to Rome, it is the Rome of our brains as far as rewards go, as Blum said. The frontal areas are important in judgment and executive control. They communicate with other areas of our brain such as the amygdala to color our desire, our attachments, our pleasure seeking with meaning, with context. These areas, the frontal control areas, the nucleus accumbens reward area, and the dopamine factory VTA area all communicate with each other. It turns out that in addiction, and this has been demonstrated with drugs such as cocaine and with behavioral addictions such as to food, when we overuse our rewards system there is a scaling back that occurs in these systems. Cocaine blocks the re-uptake of dopamine, and therefore it stays in the synapse and keeps the reward cell turned on; it's as if the car is left running with the accelerator pushed down, and the engine is running at a high RPM. As a response the body tries to return to a more normal state, and therefore it reduces the number of dopamine receptors available to turn on. This is a key concept in understanding addiction. The result is that the new normal is a state of less pleasure. This literally resets the brain's pleasure thermostat, called the hedonic set point. Now the person is in a state, simplistically speaking, of dopamine-craving. To try to return to normal they must awaken the now downgraded dopamine system by acting out in their addiction with every larger doses of drugs and ever harder pornography...can you see how tolerance to drugs and behaviors develops with addiction?

Marc Lewis experienced addiction to many drugs, and has now experienced many years of recovery. He became a neuroscientist, and wrote a book, *Memoirs of an Addicted Brain*, which has become a best-seller. In it he describes not only what it feels like to use the drugs, but what is happening in the brain as well. About dopamine he says, "Good old dopamine, the chemical mover that gets us to chase after whatever it is we want, whatever spells relief. For starving animals, dopamine makes the brain a vehicle for seeking food; for addicts, it send the brain hunting for drugs. In fact, dopamine-powered desperation can change the brain forever, because its message of intense wanting narrows the field of synaptic change, focusing it like a powerful microscope on one particular reward. Whether in the service of food or heroin, love or gambling, dopamine forms a rut, a line of footprints in the neural flesh. And those footprints harden and become indelible, beating an intractable path to a highly specialized – and limited – pot of gold." (pg 156)

These changes start a molecular chain reaction called a 'signaling cascade' which changes the microscopical, and later, as we discussed earlier, the macroscopic or visible structure of the brain. These powerful desires, these cravings, turn on DNA sequences, or transcripts, which initiate and potentiate chain reactions called molecular cascades. In these cascades there are many powerful molecular switches which turn on other engines of learning and desire. I will briefly speak of one such switch called DeltaFosB. Originally discovered in laboratory animals in drug addiction, it was found to be elevated in such animals. Scientists such as Dr. Eric Nestler consider it a very important molecular switch in driving addiction. Interestingly, in the last decade it has also been found to be elevated in laboratory animals which over-consume natural rewards such as food and sex. Consider this summary, for instance, from a paper in the *Journal of Neuroscience* which states that in addition to drugs of abuse, elevation of DeltaFosB in the nucleus accumbens on animals is supportive of the concept of natural addiction: "...our results raise the possibility that Δ FosB induction in the NAc may mediate not only key aspects of drug addiction, but also aspects of so-called natural addictions involving compulsive consumption of natural rewards." (Wallace, et al., *Journal of Neuroscience*, Oct 2008). Critics will say that this DeltaFosB machine hasn't been found in humans, just lab rats, but this is not true. A recent study in the same journal demonstrated that we do in fact see the same molecular machine present in human cocaine addicts in post-mortem studies. While DeltaFosB stays around longer than most molecules as both an addiction marker and facilitator, it mediates more permanent changes of addiction farther downstream in this signaling cascade in the DNA itself. These changes don't involve changing the actual genetic structure of the DNA, but change which sections of DNA are used or transcribed. We call these alterations in the conformational structure of DNA 'epigenetic' changes. It is in epigenetics that much addiction and behavioral research is now focused.

Let's consider these natural molecular engines of desire for a moment. Consider the need for salt. Animals depleted of salt will develop an intense craving for salt which they will ravenously satisfy when given the chance. This is a powerful natural craving. In visiting with a close friend in Australia while I was speaking there, we, with colleagues from Duke University, decided to look at the same DNA gene sets, or transcripts, which are turned on by this basic and powerful natural craving, and compare these with the DNA transcripts which are turned on in addiction to cocaine and other drugs. Remarkably, we found in our paper that they are one and the same! I was honored to be a co-author on our paper which was published in the *Journal of the Proceedings of the National Academy of Sciences* (PNAS) in 2011. We summarized that drug addiction is a "'usurping' of pleasure reward system important in survival," and National Geographic, in an article about our paper, used the word 'hijacking' in describing how these natural reward gene sets are 'taken over,' as it were, in addiction.

Are these powerful 'hijackings' associated with the neuroplastic changes we talked about earlier? Yes! It turns out that previous studies have shown that brain cell changes in the actual structure of the wires connecting the brain cells, or dendrites, change with cocaine. New 'sprouts' are formed as the brain 'learns' to like something new. We have also seen these neuroplastic changes in salt depletion, thus mirroring the model in our DNA experiment, but more relevant they have recently been demonstrated in sexual reward in animal models in 2010.

Thus we now know that sexuality is a powerful inducer of DeltaFosB and of neuroplastic change in the form of dendritic arborization.

Remember the changes in the dopamine systems? We have seen drugs such as cocaine demonstrate a metabolic sensitization with addiction, which we can scan on fMRI. I spoke recently in Phoenix at the IITAP meeting for sexual therapists, and Dr. Valerie Voon of Cambridge presented a study on pornography which demonstrated clear sensitization consistent with an addiction model. As I mentioned, she has not yet published her work, but it supports, in my opinion, what we already know from the metabolic and molecular work on addiction.

Does all this mean that pornography use can become an addiction? Yes, if one can or will understand the evidence and the perspective. Critics of the addiction model say there is no evidence of addiction because there is no prospective study yet published specifically looking at pornography. To do this, they say we would have to take two groups of children, addict one to pornography and protect the others, and scan their brains before and after an extended time and correlate that with their behavior. If that is the standard to define addiction, what about the tobacco study? You know, the one where we take two groups of kids, addict one to tobacco, protect the others, and follow them longitudinally? Of course it doesn't exist, and never will, but we know tobacco is addictive. Remember the Tobacco Seven in front of Henry Waxman's congressional committee? All seven, with their experts said tobacco was not addictive. They are probably the only seven people in the world now who don't believe tobacco is addictive. Why? Because we now understand brain receptor neurochemistry and neuroplasticity! The definition of addiction has shifted from a strictly behavioral definition to include a neuroscientific component as well. That is why the American Society of Addiction Medicine (ASAM) re-defined addiction in 2011. They are a group of medical doctors who require an MD for membership because they need to be able to prescribe narcotics and other medications to treat addiction and withdrawal, thus they are obviously very biologically based.

So what is their new definition? First, it is that addiction is a 'disease' of the brain affecting three systems, reward, motivation, and memory. Second, that it includes not only substance addictions such as to cocaine and heroin, but also behaviors such as to food, sex, and gambling. So pornography addiction is definitely a brain disease according to ASAM.

Dr. Norman Doidge, a psychiatrist at Columbia and at the University of Toronto agrees. He said, "The addictiveness of Internet pornography is not a metaphor. Not all addictions are to drugs or alcohol. People can be seriously addicted to gambling, even to running. All addicts show a loss of control of the activity, develop tolerance so that they need higher and higher levels of stimulation for satisfaction, and experience withdrawal if they can't consummate the addictive act. All addiction involves long-term, sometimes lifelong, neuroplastic change in the brain." (*The Brain That Changes Itself*, pg 106)

Dr. Nora Volkow, head of the National Institute on Drug Abuse (NIDA), had called for changing the name of the NIDA to include natural addictions to the National Institute on Diseases of Addiction, as quoted in the journal *Science*: "NIDA director Nora Volkow also felt that her institute's name should encompass *addictions such as pornography*, gambling, and food, says NIDA adviser Glen Hanson. 'She would like to send the message that [we should] look at the whole field.'"

So why the confusion still? Because the DSM manuals, which are used by psychologists and psychiatrists to diagnose and treat mental illness, does not recognize pornography use as an addiction or as anything possible pathologic. Never mind that the DSM has stated that it is not a biology book and that doesn't even try to explain how the brain causes mental problems. Some behavioral psychologists and psychiatrists, amazingly, still look to the DSM for authority and information about biology! Consider this webpage from the SPAN lab at UCLA which was taken down for obvious reasons: it suggested that therapists trying to help people struggling with pornography addiction should be reported to their state board for treating a condition which according to the DSM, doesn't exist. It is not surprising that this latest version was criticized in *Scientific American* last year for its "fundamental flaw: it says nothing about the biological underpinnings of meal disorders." (Jabr, May 2013, *Scientific American*)

No wonder the coalition 'for' pornography continues to ignore the neuroscience; they either refuse to accept it or simply are unable to do so. The ASAM definition webpage explains that given their biologic perspective, an "...understanding of addiction requires understanding of a broader network of neural connections involving forebrain as well as midbrain structures." That is why many supporting the coalition 'for' pornography continue to deny the evidence; they simply can't understand it. By ignoring

the biology, they can keep the debate on the 'free speech' level, and therefore simply one of preference rather than inherent harm.

Consider, for instance, this opinion from one such individual: "Another way to conceptualize sex addiction is as a violation of society's moral standards, along with someone's distress about that violation. One should not [self stimulate] too much, according to common norms; one should not have too much indiscriminate sex; cheat on one's spouse; be too sexually involved with porn, objects, or those with whom there's no romantic love to redeem the sex (such as casual pickups or sex workers). The sex addiction concept helps patrol these *arbitrary* moral boundaries." (Marty Klein PhD, *The Humanist*, 2012).

Note that this is simply reduced to a moral argument, and therefore one of free speech, that sex is simply for pleasure: that unattached, unemotionally relevant sex is healthy and harmless. Now consider this, in contrast, from ASAM's Dr. Michael Miller: "At its core, addiction isn't just a social problem, or a moral problem, or a criminal problem. It's a brain problem whose behaviors manifest in all these other area... It's about underlying neurology, not outward actions."

Note that while it may be a 'moral' problem for those of us who believe in morals, to those who don't it is still a brain problem! These are not mutually exclusive.

Consider this from another member of the coalition 'for' pornography: "It provides a legal outlet for illegal sexual behaviors or desires, and its consumption or availability has been associated with a decrease in sex offenses, especially child molestation...We need better methods to help people who struggle with the high frequency use of visual sexual stimuli, without pathologizing them or their use thereof..." (David Ley, PhD, *PsychCentral*, 2/2014)

In other words, he is supporting what Milton Diamond, PhD, said in that if we produce more virtual child pornography it will decrease rape and child abuse because potential rapists and abusers will be able to watch the acts in pornography, and therefore have no desire to act them out. If this is true, it is unfortunate that Mayor Bloomberg in New York didn't know about this when he was trying to get New Yorkers to eat more healthy; he could have simply increased commercials such as this one so the kids could simply 'watch' the hamburgers, fries, and drinks without having to eat them! It good that we finally know how advertising works, although this means that those paying 4 million for a 30 second Super Bowl ad are being robbed! People will watch just watch the car ads instead of buying them!

This line of reasoning is based on studies by D'Amato and Diamond that have noted a decrease in rape in government statistics from various countries over the last three decades. They are deeply flawed for several reasons. First, there have been many studies demonstrating negative consequences; they ignore them in their blatant bias. The premise that the more one watches pornography, the greater the benefit is flawed and is absurd both empirically and from a common sense perspective.. Second, these numbers are correlative only, and take no account of latent variables. These authors have claimed causation from this correlation. However, what about the fact that fertility rates have also declined to unsustainable levels over this same period? Tom Wolfe, the author of the *Right Stuff* and *Bonfire of the Vanities* noted this correlation when he said, "The bigger pornography becomes the lower the birth rate goes." So, why did these authors report only the positive correlation, the decrease in rape, and ignore the obvious negative correlation, the decrease in the fertility rate? Third, the rates they report are taken from notoriously inaccurate and underreported government statistics. They involve no actual data collection or interview. It is impossible to say anything definitive from a social science perspective with numbers that are heavily influenced by political and social pressures. Do politicians get smiley faces when the report higher crime rates? Fourth, in the last 5 years the correlation has now turned. No one seriously argues that sexual assault is decreasing now. President Obama has called ballooning sexual assault rates in both the military and on college campuses a 'crisis'. Many women don't want to report simply because nothing happens. In the UK, for instance, the number of rape allegations actually prosecuted has reached a five year low, despite a 30% increase in the number of rapes reported to the police. So Diamond and D'Amato, can we now argue that the effect of porn is finally being felt? What about that correlation/causation association? It seems to have flipped, and according to their previous reasoning they would now have to say that yes, increasing pornography both increases rape and decreases fertility rates.

Sadly, in 2002 the Supreme Court has bought into this line of reasoning in legalizing virtual child pornography in the *Ashcroft vs. Free Speech Coalition* decision, stating that there is no evidence that

virtual, that is, cartoon or computer generated material, actually causes harm. As Patrick Trueman, former Chief of the Child Exploitation and Obscenity Section, US Department of Justice told me, "That ruling was a disaster. What the Court failed to understand is that whether the image is real or a composite, so long as it appears to be a child, it has the same effect on the viewer. So the notion that virtual is a good alternative to real is ridiculous.

The practical effect of the ruling is that many judges will not allow a child porn prosecutions to proceed unless the prosecutor can establish that the person(s) depicted is actual. That has meant that many good cases don't go forward - the prosecutor simply cannot track down the child and therefore verify to the court that he or she is real."

Seriously, we have to take these current doctors of public opinion with a grain of salt. What we think is good medicine today doesn't always turn out to be so good. My physician colleagues of 200 years ago, in trying to cure George Washington's throat infection, bled him to get rid of the heat. It turns out they took over half of his blood volume, and probably killed him faster than the infection could. Or consider these advertisements from the medical profession of just over a century ago.

I think our pro-porn academics of today will appear just a ludicrous to future generations, but we are living in the here and now. What can we do to change the direction of this debate?

Dr. Victor Cline's stated that there are four things in his experience which those who achieve long term recovery do to "gain and retain" recovery: First, a desire to do whatever it takes. Second, create as safe an environment as possible. Third, a 12 Step support group, and fourth, working with a therapist with experience treating sexual addiction. In our church my wife and I have had the opportunity to work organizing support groups for those who experience pornography and sexual addictions and for those affected by their actions. We have been able to meet many marvelous individuals who have found healing. Many marriages have been saved, but even when they have not, others have gone forward to find freedom from addiction and from the pain of betrayal trauma. Some couples have found that their path of recovery involves reaching out publicly. Such is the case of my dear friends Steven and Rhyl Croshaw. Their story is one of hope to those who may have lost it. They have seen despair turn to healing, not only for them, but for many others they have helped. I will share one such story with permission.

Many years ago I received a phone call from a loved one. This person had become involved in pornography addiction years ago, and it had escalated to other serious forms of sexual acting out. It had all come out, and his devastated wife understandably needed some time to absorb the tremendous blow. He went home to be with his parents, and before he left, knowing that I was writing on this issue, called me for guidance. I knew of a 12 Step group near his parent's home, and found the address and gave it to him. He arrived in the city in time to attend the meeting. He drove to the meeting, but lacked the courage to leave his car. He sat in the car, frozen with fear and uncertainty. After some time he heard a knock on his window. A man had noticed that he was sitting in his car. "You look like you need some help," the man said. "Can I help you?" He helped my loved one out of the car, into the meeting, and into a life of strong recovery and healing.

It turns out that Steven Croshaw, who was strong in his recovery at the time, was going to that same meeting to help sponsor a new person. He had never been to that meeting. As he was walking in, he saw a man in a car, unable to move, and recognized a need. He acted, and helped to change a person's life with his simple act. He personifies what Dr. Patrick Carnes said about individuals who experience strong recovery from sexual addiction, "Another characteristic of this growth stage is a deep abhorrence of one's old behavior. Once people in recovery have enough distance from their old problematic behaviors, they often have extremely visceral reactions when they think about them. Many say they look back almost in disbelief at some of the things they've done. By the time recovery reaches the growth stage, it no longer involves false starts. Consciousness of sobriety and of richer relationships has brought the person to a new level of being. And it's at this stage that people in recovery often talk about the compulsion of addictive behavior as a gift. They have experienced a depth of humanity that many people never achieve. Their compulsive or addictive behaviors and subsequent recovery have given them a greater perception, compassion, and presence. Not only do they serve as models for other recovering

people who follow them, but they are literally helping our whole society heal." (In the Shadows of the Net, pg 142).

What is it about 12 Step meetings that works for so many? The 12 Step principles of AA, including dependence on a Higher Power, working steps of recovery as an ongoing lifelong process, and reaching out to help others are powerful. I call it the 'George Baily Effect'. You may have seen the movie "It's a Wonderful Life" with Jimmy Stewart. Remember the scene in Martini's bar? George has lost the money, and is desperate. He prays to God at the bar, "God . . . God . . . Dear Father in Heaven, I'm not a praying man, but if you're up there and you can hear me, show me the way. I'm at the end of my rope. Show me the way, God." He doesn't get an immediate answer. In fact, he encounters the husband of his children's teacher whom he had been rude to in his extremity, and was punched in the face right after the prayer. "That's what you get for praying" he mutters.

It's a powerful scene; he is crying, and it is beyond acting, it is real. Frank Capra, the director, was so moved he wanted to repeat the scene with a better shot. When he asked Jimmy Stewart to film it again, he refused. It turns out Jimmy had just come back from the war, where as an accomplished pilot he flew 20 missions, attained the rank of colonel, and was a decorated squadron commander. It's a Wonderful Life was his first movie back, and the emotion of lost friends and the trauma of hopeless pain are evident in the scene.

In the movie his character, George Bailey, leaves Martini's Bar and goes out to the bridge to commit suicide. He doesn't kill himself, though. Remember why? Clarence, the angel, jumps in first, and George forgets himself and jumps in to save Clarence. In doing so he saves himself. This is a powerful principle in 12 Step groups; those who have experienced recovery share their path with others, and in doing so strengthen themselves.

Just as addiction is a neuroplastic process, so is recovery. It take time to re-program the brain, to reverse that pathological learning that addiction is. The pillars of recovery are understanding, support, vigilance, and time. Even with years of recovery, the person will wisely remember that there are trails in the brain which they do well to avoid, which can be repaved instantly with relapse. That is the main difference between those who have experienced addiction, and those who have not. Lewis described 'rut's in the neural flesh, traces of the ruts remain even in those with years of recovery, and relapse can turn them into raging ravines very quickly. Hence the need for lifelong vigilance, and hence the power of 12 Step support.

What can we do to change the direction of the debate and of the cultural current?

First, we must be better organized and funded with regard to serious research demonstrating the harms of pornography. This research needs to proceed on three fronts. One is the biological front, as in Voon's study; the second front is in social science research demonstrating demographic effects, and the third is research demonstrating behavioral and emotional harm. All of these already exist, and there are young people emerging who want to focus on these fronts as career paths, but we need to be more organized with funding.

Second, and just as important, we must be much better at getting the word of such research into the press, so that the coalition 'for' pornography are not the only ones framing and shaping the public debate, as is largely the case now. For instance, Ana Bridges and co-authors published a recent paper showing that 9 out of ten scenes from the most popular renting and selling pornographic movies demonstrate aggression towards women. This should have been a major press release with subsequent echo, but it passed largely unnoticed except for some academics. Another example is the Steele paper published in the journal, which stated that brain EEGs of individuals viewing pornography compulsively show that they 'merely' have an inherently high sexual desire, and that there is not evidence of addiction. Despite what I and many others considered serious methodological and definitional flaws in this paper, the UCLA SPAN lab press machine ensured that it was widely echoed in the popular press, despite the fact that I published a paper in the same peer-reviewed journal which came out the same week as the Steele paper. My paper discussed the evidence for natural addiction based on neuroscience, and it was essentially a head to head paper, yet it was ignored by the same press which ran with the Steele paper. Interestingly, I also recently published a peer-reviewed response to the Steele et al. paper itself with Penn State's John Johnson. Even though it published in the same journal at the Steele paper it wasn't received

with the same enthusiasm by the 'pro-porn' press as the original flawed paper. We are definitely losing the press war, and we need to change that.

Third, we need to change how we treat those who struggle with pornography addiction in our homes, our society, and our religious organizations. Those who struggle frequently do so secretly, afraid to tell spouse or parents or to seek support. Therefore, it is common for them to try to overcome the problem secretly and alone, which is a recipe for failure and escalation. Sadly, many well meaning ecclesiastical leaders try to address the problem without considering the addictive nature and involving 12 Step and professional support. As Dr. John Mark Haney said, "Since pornography can be an addiction, *these "just say no" types of approaches are likely to only create more frustration and self-defeating ideation...* the intervention and treatment modality must *recognize the problem as a full addiction*, and treat it with the *same consideration given to alcohol or chemical substances.*"² Ecclesiastical leaders that fail to consider this are deceiving themselves if they think they are providing more than short-term assistance. Lifelong recovery requires much more effort and support.

We need to understand that the vast majority, up to 90%, of young men and up to a third of young women are struggling with this problem, as was demonstrated in the paper by Jason Carroll and co-authors. With the ubiquitous Internet the addiction is starting early in adolescence and is deeply ingrained in many, if not most, in their 20s. The cultural effect of this we are just beginning to see. We must understand this if we are to help these young men and the growing number of young women who struggle. Our dialogue with them should be inviting rather than shaming. Otherwise, we will be the last to know. When acting out in addiction it is necessary to set firm boundaries with loved ones who struggle with addiction, but the goal is always to encourage change and healing. As Rhyll Croshaw said, sometime it is only an interruption that will cause them to change, and interruptions, while usually painful, can be life changing.

Fourth, we need to better understand betrayal trauma of the loved ones of those who have been addicted, primarily spouses, primarily wives. In those who attend church, a frequent complaint is that an ecclesiastical leader may visit with a husband seeking recovery from addiction, but ignore the wife. Sadly, this is an all too common occurrence. Whereas women who have experienced the loss of a spouse through death or divorce tend to receive support from other women and from such leaders, those who have functionally lost such support with a living spouse who is physically present but emotionally absent usually suffer in silence. In fact, Bergner and Bridges study found that "Although their partners were not in actual contact with other females, *these women clearly viewed the pornographic activities as a form of infidelity*. The theme that runs through their letters is that *the man has taken the most intimate aspect of the relationship, sexuality, which is supposed to express the bond of love between the couple and be confined exclusively to the relationship, and shared it with countless fantasy women.*"(Bergner and Bridges, 2002, *Journal of Sex and Marital Therapy*)

Such women would find healing through confidential support groups where they can interact with other women who have experienced similar challenges and found healing. Unfortunately, few religious and community organizations have such programs available, and even when they do, they are administered by local leaders who are frequently male, many of whom give only minimal support. Many women simply won't go to them for that kind of emotional support.

Fifth, in considering the above, to fundamentally change the direction of this fight we must ask ourselves: what are we personally willing to do? Are we willing to be inconvenienced? Are we willing to give financially? Are we willing to endure persecution, be mocked, libeled, and slandered? Are we embarrassed to help, afraid someone will wonder why we are so interested in this problem? Sometimes people will ask me why I am so involved in fighting this. I always want to ask them, why are you not involved? Are you a father, a mother, grandfather or grandmother, brother, husband, wife, father or

² HANEY, JOHN MARK. TEENAGERS AND PORNOGRAPHY ADDICTION: TREATING THE SILENT EPIDEMIC. COUNSELING OUTFITTERS [ON-LINE], ARTICLE 10. AVAILABLE: [HTTP://COUNSELINGOUTFITTERS.COM/VISTAS/VISTAS06/VISTAS06.10.PDF](http://counselingoutfitters.com/vistas/vistas06/vistas06.10.pdf)

mother in-law? It has already affected in some way someone you love, even if you are not aware of it yet. It is a cruel master, it doesn't leave easily, and it seeks more slaves. Let us get more involved in educating the world about this plague, so we can free the captives.

Make no mistake about it. This is a war, and our opponents, the coalition 'for' pornography will use every means available to frustrate our efforts to stop them. Dietrich Bonhoeffer, the German Lutheran minister who was executed by the Nazis for opposing Hitler said: "Silence in the face of evil is itself evil. God will not hold us guiltless. Not to speak is to speak. Not to act is to act." He spoke with his life. Speaking to the Nazis Winston Churchill said, "We will have no truce or parley with you, or the grisly gang who work your wicked will... You do your worst - and we will do our best...We ask no favors of the enemy. We seek from them no compunction. We do not expect to hit without being hit back, and we intend with every week that passes to hit harder. Prepare yourselves, then, my friends and comrades, for this renewal of your exertions. We shall never turn from our purpose, however sombre the road, however grievous the cost, because we know that out of this time of trial and tribulation will be born a new freedom and glory for all mankind." (July 14, 1941)

Pornography *is* a drug which produces an addictive neurochemical trap, as Shakespeare described perfectly, "The expense of spirit in a waste of shame, Is lust in action...past reason hunted, and no sooner had, past reason hated, as a swallowed bait, on purpose laid to make the taker mad." While we must continue to fight the good fight legally and societally, we are way beyond avoidance as our only defense. Pornography wants you, it wants your husband or wife, it wants your son and daughter, your grandchildren, and your in-laws. It doesn't share well, and it doesn't leave easily. It is a cruel master, and seeks more slaves. Abraham Lincoln, when he faced a similar war over freedom, said; "If all do not join now to save the good old ship of the Union this voyage nobody will have a chance to pilot her on another voyage." All hands on deck. The battle is on. We need you. We need your time, your energy, your effort, your interest. Please join us in this fight for sanity and serenity, for peace and prosperity, for today, and for all our tomorrows. May God bless us in this effort. Thank you.

The Collected Works of Abraham Lincoln edited by Roy P. Basler, Volume IV, "Speech at Cleveland, Ohio" (February 15, 1861), p. 216.