

Positive Emotions and the Addictions

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Editors' Note:

At the 2008 Guest House Institute Summer Leadership Conference in Minneapolis, MN noted psychiatrist George E. Vaillant gave a talk entitled, “Positive Emotions and the Addictions.” It was a provocative and very well received presentation. We have edited this talk, and reviewed it with Dr. Vaillant, in order to publish this revised paper for our readers.

Lord, make me an instrument of your peace . . .

Where there is hatred, let me sow love.

Where there is injury, let me sow forgiveness;

Where there is doubt, let me sow faith;

Where there is despair, let me give hope....

Where there is sadness, let me give joy;
O Master, grant that I may not so much to seek
compassion but to give compassion . . .

*“The Peace Prayer of St. Francis”
attributed to Father Esther Becquerel (1912)*

Spirituality, I believe, is at the heart of the treatment of addiction. Since spirituality is difficult to define, I am suggesting that the list of positive emotions found in “The Peace Prayer of St. Francis” is a good starting point. This prayer, attributed for the last 100 years to St. Francis, was actually written in French just before World War I, but its message is not only crucial for recovery from the addictions—it’s referenced in the Big Book as the Eleventh Step, just prior to the Twelfth Step and its discussion of service—but it is also, I think, the best definition of spirituality that I know.

Now it’s important to realize that I’m going to be talking today about biology; I’m not going to be talking to you about theology. The negative emotions—outrage, revenge, doubt, grief—and our readiness for others to show us compassion, these are all lifesaving. The problem is that such emotions are all about me. But, if you want to find true meaning in your life, if you want to create in your brain what you’re actually looking for in addiction, then the positive emotions become terribly important. Compassion, love, joy, forgiveness are not all about me.

Science didn’t know zip about the positive emotions until the last twenty years. St. Paul knew about them. St. Francis knew about them. But not science. It’s only in the last 30 years that ethology, neuroscience and psychology have finally escaped from the thrall of the behaviorists, and we can appreciate just how powerful the positive emotions are.

Take, for example, Forgiveness: This emotion allows us to appreciate that there are in reality no sins. There’s disease; there’s immaturity; and, there’s enormous pain. But there are no sins.

When we have an acute stomach ache or when we are about to be eaten by a Bengal tiger, we are enormously preoccupied with ourselves and that's a good thing. However, by virtue of being thoughtless about other people at such times, we are self-centered and other people, having trouble forgiving us, deem us sinners.

One reason why the positive emotions are so helpful is that they lead us away—and I'll go into the neurology of this—from wanting to punish sins and instead shift us towards the pro-social emotions of the Peace Prayer of St. Francis. All of the positive emotions are about someone else and, if you can induce them in people, you find that they learn faster and are more creative. In the same way, if you induce the negative emotions you reduce creativity, you reduce learning. The brain, you see, works better when it's experiencing positive emotions, when it is not preoccupied with "me." Reward teaches others better than punishment.

Now, here is where I may get into trouble this morning. St. Paul told us that faith was very important, but faith has two meanings. One meaning of faith is *belief*: that's cognitive, that's about ideas, and our cognitions are very often wrong. When I was in medical school, the dean told us that "the bad news is that 50 percent of everything we teach you is going to be wrong, and the problem is we don't know which half." Now, of course, we were there as "religious" acolytes; our god was medicine and we wanted infallible truth. Instead our high priest told us that half of what our physicians were teaching us was possibly wrong. In other words, sometimes science teaches tolerance and truth better than theology.

But faith has another meaning besides cognitive belief. Faith is also about the *emotion of trust*. Religious belief causes wars; spiritual trust causes comfort. It is in this case, like St. Paul, I include *faith* as a positive emotion and a theological virtue. Erik Erikson and countless modern researchers have taught us that basic trust is absolutely crucial to a sense of finding meaning in the world. As priests you all have devoted your life to helping other people to have faith instead

of doubt, trust instead of mistrust. And that is a perfectly wonderful thing.

On the screen is a slide of the human autonomic nervous system. It looks complicated but the underlying principle is simple. When you're being chased by a tiger, your *sympathetic* nervous system comes into play; your blood pressure goes up, your heart beats fast, all the blood goes from your stomach to your muscles, your cortisol rises. In other words, your whole body makes you feel stressed, but the negative emotion of fear also helps you to run a little faster.

The *parasympathetic* system, the part of our autonomic nervous system that allows us to feel in love and at peace, is really very dangerous in such a situation. Your parasympathetic nervous system allows you to rest and digest. Your metabolism goes down, your cortisol goes down, and your blood pressure goes down. You feel at peace. Our bodies respond very differently to the martial beat of *Onward Christian Soldiers* and the peaceful cadence of the 23rd Psalm.

The parasympathetic nervous system is stimulated by the positive emotions. It is very much at the heart of what's achieved by meditation and prayer. If you feel joy, if you're being cuddled, if you have trust in your surroundings, the parasympathetic nervous system kicks in and you're at peace. It is much healthier unless you need to fight or flee.

Addiction is enormously stressful. Heroin, like love, makes us feel at peace. Strenuously seeking either love or heroin produces stress. Most alcoholics, most pedophiliacs live in a state of alertness and fear. And remember, alcohol, unlike heroin, does not produce peace. In a bar room or a stadium alcohol is a stimulant. The whole spiritual recovery process in Alcoholics Anonymous—with a home group and its "attitude of gratitude", and its Franciscan absence of possessions, power and prestige, and its loving support—leads the body to feel safe. The physiological effects are enormous. In AA they don't have a language of the head, they just have "the language of the heart," which can be understood across nations and across religions. The heart isn't just an imaginary metaphor about spirituality; a peaceful heart is all about

physiological safety.

Today, I want to review briefly with you the principles of recovery from addiction... for alcoholics, for heroin addicts, and, I suspect, for pedophiliacs. Let me first review what doesn't work in addiction. Alcohol is not an anti-depressant; it makes depression worse. So, you don't treat addictions by trying to treat depression. Alcohol creates depression and the best way to treat the dual diagnosis of a depressed alcoholic is treat the alcoholism.

Psychiatry doesn't help addiction very much, because psychiatry is all up in the head. Psychiatry works in large part through cognitive insight; psychiatry is a little like religion—when religion is being all words and commands, and no heart. Addicts, like alligators, don't come when they're called.

Again, and this will surprise many of you, will power has got nothing to do with treating addiction—if you do prospective studies. All treatment centers admit addicts on the basis of their motivation for recovery. But when you follow the patients up two years later, their will power (their prognosis based on their wish on admission to stop being an addict) has nothing to do with outcome. In short, we need to find non-verbal, non-insight-oriented, “heart,” ways of treating addiction.

Having suggested what does not work in the treatment of addiction, let me suggest four ingredients to help recovery that I believe really work.

The first ingredient is to *find a substitute dependency*. If you want to stop somebody from sucking their thumb, don't beat them; don't put an aluminum mitt on their thumb; help them to chew the erasers from their pencils. In recovery from alcoholism many of the men in my studies gained a great deal of weight or increased their smoking. In order to overcome their heroin abuse, many of the men turned heavily for a year or so to alcohol. Now this may upset you. Alcohol, obesity and cigarettes are bad for you. But, substitute dependencies help us to recover.

In the same way with regard to pedophilia, both masturbation, which is forbidden in all cultures, and getting married (which is not forbidden among the Anglican and Orthodox priests, but is forbidden among the Roman Catholic priests) can be useful. The point is that you want a competing behavior for an addiction, not just a commandment to say “no.”

The second ingredient that is important is *compulsory supervision*. You don't ask addicts to police themselves. The best addiction treatment that I know is provided to physicians. Nobody trusts recovering doctors—although they're honorable men in all other respects—to tell the truth about their drinking. Instead, they are told that (a) their medical license and (b) their competing “addiction” to make very large amounts of money each year are contingent upon them peeing in a bottle at a random time every week. Alligators may not come when they are called, but doctors comply with this combination of carrot and stick and, unlike clients in most clinic programs, recover.

The third ingredient in recovery from addiction is a no-brainer to you. Addicts need to *recover a sense of meaning*. Addicts need to be given a deep sense of the Peace Prayer of St. Francis.

That is why it is the 11th Step of AA. The reason why religious involvement was helpful to street addicts and to the Protestant middle-class drunks of an earlier era was that religion facilitated the dedication in their lives to compassion, forgiveness and gratitude. Such dedication brought them closer to being held in the arms of Christ, in the arms of the church community, in the arms of spirituality. Marx was wrong. Religion is not the opiate of the masses. Heroin is the opiate of the spiritually bankrupt.

The cognitive credo of religion, like the threat of eternal damnation or death from cirrhosis, does little to halt addiction. Recovery is spiritual and the difficulty with clergy who are addicted is that they've got full access to religion with all its capacity to induce negative emotions like guilt and shame and fear of the Lord. What's missing is a setting where they can again experience

unconditional love and forgiveness and an attitude of gratitude—in a word, spirituality.

Finally, the fourth ingredient in recovery from addiction is to *find a new love relationship*. And there is absolutely no question in my mind that a new love relationship can be an addict's first discovery of Christ or of God. The love, however, has to be for someone new—and very often for someone more needy than yourself. That's why, if the Eleventh Step is all about spirituality and positive emotion, the 12th step is all about a new love relationship—unconditional love and service towards another still suffering alcoholic. Lourdes heals because it teaches pilgrims to pray for the afflictions of others, not the healing of their own.

It is also important to remind you that there's an enormous difference between love and lust. Confusion about this is where the psychoanalysts, the poets and the ancient Greeks let us down. They are all caught up in *libido* and in *eros*. True love is about *attachment*. True love is what mothers feel for their babies; it's what grandparents feel for their grandchildren; and, it's about what a priest feels for his parishioners.

These four ingredients of recovery all combine in Alcoholics Anonymous. Let me give you a glimpse of the effectiveness of AA. In two contrasting groups—Harvard graduates and inner city men from Boston—at the end of 60 years of continuous follow up, we compared about 65 of the men who had been continuously abstinent for an average of 19 years, with about 65 of the men who at the end of 60 years were still abusing alcohol or had died of drink. All the men in both groups had been alcoholic for an average of 20 years. The problem drinking scores were actually worse for the ones who had recovered than the ones who didn't; their family histories for alcoholism were equal. So I am talking about the difference between serious alcoholics who achieved stable recovery and those who did not. The biggest difference between these two groups is that the average alcoholic that had recovered had been to 147 AA meetings, and the average alcoholic who didn't recover had been to 5 AA meetings. You don't need a statistician to figure

out that something very interesting is going on. But remember, it took the average alcoholic who recovered in AA up to 20 years to get there. Patience is needed.

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A speaker told us yesterday that in some ways these are the worst of times. It sometimes seems that humanity and evolution are going backwards. Vatican II is nearly dead. There are wars all over the planet. And, if you just listen to Richard Dawkins and the *NY Times*, boy, is the Catholic Church in trouble. You're killing innocent African children with AIDS by not permitting condoms. By not allowing the clergy to marry, you create the whole problem of pedophilia. Of course, that is to miss the point of what you're really doing. Like Alcoholics Anonymous you help people pull the positive emotions—like hope, love and compassion—embedded in the Peace Prayer of St. Francis --up into consciousness. I wish my profession of psychiatry was as successful.

We all forget the enormous changes in the world that are taking place for the good. The world is evolving, and morality is evolving; and if instead of just looking at Fox News, we pay attention to history you can come up with some pretty interesting statistics. If you listen to Fox News, the United Nations is bureaucratic; it's impotent; it's corrupt and it's un-American. But think about the World Health Organization (WHO). In 1900 the World Health Organization would have been just as improbable as trying to design a 747, and yet today the World Health Organization is a tremendous force for healing in the world. In 1900 if you were a poor native in Africa, you could only get medical care if you went to a clinic that was the same denomination that you were supposed to be. Those restrictive missionaries have been replaced by Oxfam, WHO, and Doctors without Borders.

Okay, those are bold words. Let me try to back it up with a little bit of science. First, this is how biology works. It's only with the heart, it's only with the positive emotions that we can

appreciate what we really need. You do not cure addiction by shaming and waving a stick; you do not save souls that way either. It isn't just addictions that the positive emotions heal. It's our bodies and our souls. Okay, I'm not paying attention to St. Augustine, but I am paying attention to Christ. In Matthew, Christ tries to put sense in the Pharisees, "You have eyes but cannot see. Therefore let me speak in parables because in seeing, you see not and hearing, you hear not, neither do you understand." Our heads are wonderful organs but they don't always understand as well as Christ might wish.

Now, I'm calling spirituality the same thing as the Peace Prayer; and the Peace Prayer consists of action verbs. Action verbs! Theologians can say all they want about spirituality coming from *dispossession*, as exemplified by the unworldliness of the great Spanish mystics. Is not dispossession what is sought by Yoga masters, Zen Buddhists, Amazonian *shamans*? Was it not inner rather than outer illumination that underlay the *Spiritual Exercises* of St. Ignatius? Did not John-of-the-Cross tell us: "The mysterious and sweet tasting wisdom comes home so clearly in the inner most parts of our soul. The soul then feels as if placed at an immense and boundless desert. A desert the more delicious the more solitary it is."

Yes, those were the words of John-of-the-Cross. So how can I refer to spirituality as really about love and community building? Both in caring for addiction and caring for the Church the answer is that instead of paying attention to the "talk," I need to pay attention to the "walk" of John of the Cross. And how did John-of-the-Cross spend his day? Tending monasteries and convents. Likewise, St. Teresa who was a good friend of John of the Cross wrote with just perhaps an undercurrent of *Lucy and Peanuts* criticism, "God deliver us from people who are so spiritual that they want to turn everything into perfect contemplation." It's good to remember that the philosopher William James wrote of the author of *The Spiritual Exercises*, "St. Ignatius was a mystic. His mysticism made him assuredly one of the most powerful, practical human engines

that ever lived.” Spirituality is as much about action verbs, about love and community building, as it is about contemplation.

Let me talk a little bit about the evolution of the positive emotions outlined in the Peace Prayer of St. Francis. And to do this we have to go back to the dinosaurs; today we would call them sinners. The dinosaur brain was very good at negative emotions and very good at survival.

Might made right. And for all of the millions of years that Mother Nature had wrestled with evolution, until 200 million years ago and the evolution of mammals, she did not do much to improve the brain. So we had *tyrannosaurus rex* with those claws, those big sharp teeth, and that thick hide; such dinosaurs were selfish, walnut brained and for a while they were masters of the universe. However, about 200 million years ago, little, bitty, scared-out-of-their-britches mammals started to evolve. Unlike dinosaurs, their brain evolved a limbic system and when the mammals' limbic system started to evolve, they survived while the dinosaurs became extinct.

Why? The limbic system, you see, allows mammals to do three things that the reptiles cannot do. The most obvious, of course, is *agapé*, unselfish love for one's young. The second is *play*. Mammalian creativity and intellectual development comes through play and joy and that's what the research shows. Reptiles don't play much. And the third is the *separation cry*. If a baby reptile makes any noise, either his parent or someone else is likely to gobble it up. All mammals, including humans, cry out in our neediness. It helps our survival.

Five million years ago, the neocortex began to expand as well as the limbic system. Now the neocortex, the “left-brain” can be a lot of trouble; it can lead to all of those theological arguments that lead to wars between best friends. I mean it's hard enough for Dominicans to lie down with Franciscans, let alone Buddhists to make friends with Hindus, or Muslims with Christians. Some of the stuff we do with our heads is bad stuff, but it's also good stuff.

Primates with bigger neocortices did all right and they were selected for this; but one problem

with a big neocortex means that in order to pass through the birth canal, you've got to be born prematurely, and that's big trouble. A gazelle when born can run at birth, but not children. Indeed, children sometimes stay dependent on their parents until they're 25 or 30. And if you're a hairless *Homo sapiens* living in the Ethiopian and Kenyan savannahs, you are in danger even when adult. You can't run like the gazelle, you can't climb like the gibbon, you can't fly away like the flamingo, you can't burrow away like the rabbit, and you can't defend yourself like the elephant and the lion. It's amazing that our ancestors didn't all end up as some predator's breakfast!

What saved us, of course, was social organization. And so the primate's limbic system and primitive frontal lobes began to expand and develop structures that had more in common with the rules in the New Testament than with the rules for dinosaur survival. Primate, especially *Homo sapiens*, brains began to develop specialized brain cells that facilitated compassion and empathy rather than reptilian "me first" instincts. The most outstanding of these specialized cells—spindle cells and mirror cells—are far more numerous in humans than in the higher primates. These cells do not even exist at all in other mammals. These nerve cells each facilitate delicate social tasks, which is how you get a cooperative community that is not just interested in what Richard Dawkins called "preserving selfish genes"—but deeply "christian." One of the most elegant of these cells is the mirror cell. The mirror cell fires if its owner sees another person in pain, and creates in that person the sensation of pain as if it were hurting them too. The person, however, has the wisdom to know it's not them that's actually involved. So they're compelled to relieve the pain, but not to protect themselves. This of course is the difference between sympathy and empathy. If you're run over by a steamroller, the paramedic is compassionate but empathically knows that your pain is not actually his pain. If your mother drives by, however, you're in serious trouble because she's going to be overcome by sympathy. The recognition of your

trauma is going to hurt her as much as it's going to hurt you and that's not going to help anybody's survival. A key to compassion, therefore, is to understand the distinction between your pain and the other person's pain.

Let me continue with evolution. About 170,000 years ago *Homo sapiens*, but not the Neanderthals, probably for genetic reasons, evolved effective language. Language permits cultural rather than genetic evolution. Suddenly there was an extraordinary expansion of creativity in *homo sapiens* but not in Neanderthal. Cultural evolution permitted the understanding of cause and effect. And understanding cause and effect means asking questions like "what will happen when I die" (religion) and "if I plant a seed in the spring, it will turn into wheat in the fall" (agriculture). And so about 12,000 years ago, you got the coming together of the religious and the agricultural. Small towns arose and with them the hierarchical skills of religion to create order and organization. Around the world Pharisees arose but not the Buddha and the Christ—Torquemadas but not Gandhi.

Now, this worked out pretty well, but the cultural evolution of that time thought only about things and negative emotions. Mammals are genetically hard wired for love, but for the first 10,000 years of civilization, unselfish love was ignored in cultural evolution. Instead, people focused on prestige, power, and possessions. By 1000 BC great cities arose all around the world. Yet, all of those cities, the early capitals of Egypt, the early capitals of China, the great Near Eastern cities and the great cities of Meso-America, created by religions that were seriously into power and hierarchy, arose only to vanish. They now lie under jungles, fields, and desert sand. There's little trace of them left. About 500 B.C. a transformative millennia began and the world's great enduring religions emerged one at a time. The key to all of them was compassion and love. If you date the emergence of compassionate religions and the emergence of our enduring cities—the match is pretty nearly perfect.

Today, the average lifespan of a Fortune 500 company is 40 years. There are very few dynasties, and actually very few nations that are more than 300 years old. All of the world's great religions share two things in common: they've all endured for at least 1400 years and unlike dynasties and corporations they're all based on love and compassion.

We can do this evolutionary math a different way. We can listen to Richard Dawkins writing about "selfish genes" and study a nation that decided to take him really seriously. The Nazis came up with the sensible, financially sound, science-based idea of killing all the chronically sick in Germany and using that money to build autobahns, tanks and guns. They created full employment for Germany while the rest of the industrial world was drowning in unemployment and compassion. Now let's compare the Third Reich to a rather interesting invention of Benedictines at Monte Cassino in the 6th century and by the Islamic world governed by the loving rules of the Abrahamic religions at Damascus in 707: the "hospital." The number one rule of the Benedictine Order was to take care of the sick. If we look at Darwinian survival, the Third Reich lasted ten years, and the Benedictine Order is still alive and well after sixteen centuries. Now I've been picking on the left-brain as made up of too many words and not enough music. The credos of the great world religions, like the world's left-brain languages, divide us, but the right-brain music and the limbic positive emotions of the great religions bring us together. It's important, however, to have both. So E.M. Forster wrote, "Only connect. Only connect the prose and the passion and both shall be exalted and love shall be seen at its highest." So even though everybody in this room exists with two brains—a brain that understands their language and the rules of their order, and a brain that understands Christ's love—both are needed.

So when people say we should listen to Ralph Nader instead of Henry Ford, it's perfectly true that automobiles kill around the world about 100,000 people a year, but it's also true that automobiles bring about two billion people around the world comfort. In similar fashion when

people say that we should listen to Richard Dawkins and the *NY Times* instead of the New Testament, it is perfectly true that religion needlessly kills about 100,000 people a year, such a position ignores the fact that thru religion and spirituality all of you as priests in your daily lives help people take the positive emotions that we're born with and pull them up into "left brain" consciousness.

I've said I'm a psychiatrist. If you take my 21st century textbook of psychiatry and you look in the index, there are 100 to 600 lines on sin, on shame, on guilt, on hate, on terrorism; there are thousands of lines on fear and anxiety, thousands more lines on depression. However, there are only five lines on hope, 1 line on joy, and not a single line on compassion, forgiveness or gratitude! So you can see what a tremendously important lifesaving message you bring to the world.

I want to close by pointing to Awe—an emotion reflecting *appreciation for a power greater than ourselves*—which isn't in the St. Francis prayer, and isn't in my psychiatric textbooks either.

The most beautiful positive emotion that we can experience is awe and an awareness of the mysterious. St. Ignatius understood awe, and so did Albert Einstein who asserted that Awe “is the fundamental emotion that stands at the cradle of all true art and science. He to whom this emotion is a stranger; he who can no longer stand in wonder and in awe, is as good as dead. A snuffed out candle.” Today, I thank all of you for helping the world around you understand the importance of the other positive emotions and most especially of Awe.