

EPISODE 61

WHOLE WHEAT BREAD

And Rockets To Pluto

Hi there. Welcome to the beginning of the world. My name is Michael Folz. And this is Episode number 61 of my podcast Dial It Back Or Die. Now last episode I laid out the foundations for a different society than the dead one that we presently have. And I would argue that, not so coincidentally, this outline pretty much lines up with the main conclusions agreed upon by all of the major pre-modern classical civilizations, both East and West. Except, of course, with how these conclusions would have been updated by what Science has learned in the last century or so. In other words, what I was really doing was outlining how the social structure of this world would have optimally evolved had it not been for that 18th Century Age of Enlightenment.

And I don't know how you reacted to, as it were, the last episode's foundational paradigm. Nor, probably more importantly, how you will react when I go through the various implications and ramifications of that foundational paradigm. But that's the thing. You change one foundational assumption, and the entire resultant system changes. Change three or four, and there will likely be, in ways small and large, a quite different world than the one in which we are living.

Now I've been spending this entire podcast trying to explain to you that in the present postmodern world there are at least three or four basic, foundational assumptions which are clearly, massively, and scientifically flat out wrong. And that changing these foundational assumptions over to the correct ones is not only the right thing to do, but absolutely necessary if we want any future society to plausibly exist.

Still, however, and even assuming that I've completely convinced you, that leaves you and me up against seven billion or so other folks who not only have yet to see the light, but who, to a lesser or greater extent, are totally bought into the previously simplistic and somewhat childish belief that more and varied sensory pleasures are somehow going to make them happy. And it's not like we're offering free gold or calories that don't count, either. Instead you and I are here in a world which consists of

some countries which have been rich and lazy for at least a century, and other countries which are only now slowly rising above an endless history of all work and no play. And we're trying to sell everyone on the need for more focus, more discipline.

And that's assuming that you're with me on this.

And what makes the challenge seem even more hopeless is that I've specifically ruled out any magic buttons or magic pills. Nor have I given any legitimacy to the idea of mass political movements, to marches and demonstrations, to anything which would make anyone at least temporarily feel good that they were sticking it to The Man or The System. No, what I in effect am calling for is a mass adoption of the Buddha's Middle Path, of Aristotle's Golden Mean.

So how can that be a rallying cry for anything?

Well, for one thing, as I've already pointed out, once you have made the mental commitment to not be endlessly striving for more, once you have accepted—without any self pity—the reality of your mortality, once you have realized that, what with our current level of knowledge and technology and economic well being, the only thing which is keeping our minds from being calm and being happy is, well, our minds themselves, once you have understood all that, then everything which I am recommending is eminently doable.

Which does sounds fair enough, right? Except that you might well point out that both the Buddha's solution and Aristotle's solution have been around for more than two thousand years. And in all that time not that many people have really taken either of them up on it. What's more, the average citizens of 100 A.D. had only a tiny fraction of the pleasurable distractions available to them that people have today. So what makes me think that I, with not one thousandth of the respect or renown of either the Buddha or Aristotle, am going to succeed any better with my arguments and exhortations?

Well, the short answer is: Those guys weren't explicitly aware of that dopamine feedback loop.

Let me explain.

As I went over in the Science section, there are excellent biological and evolutionary reasons for the dopamine reward system to exist in animal brains. After all, for instance, searching for food is, needless to say, a labor intensive activity. And without the pleasure which dopamine provides as a reward for finding, and then eating, food, one imagines that most animal brains would probably rather just sit around and soak up the sun. Even more important, for whatever reason animal biology requires

sexual reproduction—even for amoebas at some point of their life cycle. And why would male animals go through all of that trouble of competing with each other, and female animals go through all of that trouble of reproducing, if they weren't pushed forward by that dopamine imperative?

But as I also went over back then, humans have spent the past ten thousand years or so of their evolution coming up with ever more clever ways of hijacking the 'legitimate' dopamine reward system, and therefore becoming able to experience that pleasurable rush in and of itself, and without the attendant nutrition, reproduction, or positive learning experience that dopamine was originally meant to enhance.

And the ever accelerating scientific and technological advances of the past two hundred years or so have also served to, consciously or unconsciously, accelerate these dopamine shortcuts. And it certainly hasn't helped matters that, here in the West, our dominant ideology, especially in the last century, has equated the pursuit of the pleasure of the dopamine rush with the pursuit of happiness itself. So much so that, as I just pointed out in Episode 58, in our present postmodern world we can most accurately describe ourselves as a Dopamine Nation.

When you live for the pursuit of the dopamine rush, though, what happens in the brain is that, since it can only make so much of that particular neurotransmitter, the dopamine depletion which results sets in motion all of the problems inherent in addiction. Which means that, since dopamine depletion ends up making you feel awful, the brain then becomes consumed with trying to procure whatever it was—sex, drugs, you name it—that you had used to short circuit the dopamine reward system in the first place.

For instance, take the example of cocaine. Now when coke first hit the 'mainstream' in the mid Seventies it seemed like it was the perfect recreational drug. A person could snort a few lines, feel euphoric for a few hours, and then the next day seem to have no hangover or after effects. And I suppose that if someone were able to make cocaine use a very occasional thing then they might be able to go on like that for months, maybe years.

But that's the problem with short circuiting the dopamine reward system. By its very nature it is antithetical to moderate behavior. And what made everything worse with cocaine was that each 'hit' was both relatively incremental and instantaneous. So that, as opposed to hard drugs such as methamphetamine, a middle class user could much more easily convince themselves that the next line of coke wouldn't be nearly as bad on their system as indulging in another round of speed.

The end result, though, would be that over the course of a few days a mound of cocaine would dwindle down to nothing. And the user's brain would then be just as depleted and just as empty of motivation and of inspiration as that of any other speed freak. And if that middle class user still had any existing connection to those gratification delay mechanisms which they had learned earlier in life, then they had to face the reality that for the next while they were just going to have to bite the metaphorical bullet, look forward to a certain level of a dark night of the soul, and trust that at some point their brain chemistry would heal itself, and motivation and inspiration would return.

And that's assuming that they were still in touch with their gratification delay mechanisms. Otherwise they would just spiral downward into more and more addiction, less and less net dopamine, and an end point of raw nerves, an inability to concentrate or to feel normal pleasures, achingly dark depression and hopelessness, and an endless desperation for distraction of any kind. And then at some point, when they had truly hit rock bottom, they might enter rehab or a twelve step program.

Or not. With death as the only other real option. I mean, in the late Sixties there might well have been more speed freaks than there were people who did psychedelics. But one doesn't know about that nowadays. Because the speed freaks all pretty quickly died off.

Okay. So why did I just veer off into a short, depressing talk on the horrors of addiction. Because, even if you still don't buy into my thesis about the Age of Enlightenment and Jeremy Bentham and John Stuart Mill and all, it's still entirely plausible to see our current societal state of affairs in terms of the dynamics of addiction. Because, whether you want to ascribe the ultimate cause to Capitalism itself, the ubiquity of advertising, or the machinations of the present day big tech companies, it is difficult to deny that the net result is that we now live in a postmodern world of raw nerves, of an inability to concentrate or to feel normal pleasures, of ever increasing depression and hopelessness, and of an endless desperation for distraction of any kind.

In other words, for whatever reason, the plain fact of the matter is that we are really living in a chronically depleted Dopamine Nation.

The good news, however, is that to a large extent the ultimate cause doesn't matter. Because once we know what we are really dealing with in our present state of affairs—the death throes of addiction—then we also know, from practical experience, the only two ways out of it. One, some version of rehab or a twelve-step program. The other, Death plain and simple.

Of course, what applies to the individual also applies to the societal. That is to say, and again from practical experience, one can try anything and everything with a loved one who is an addict, including bringing about interventions or resorting to the law. But the addict themselves will almost invariably still be totally convinced that what they really need is that next fix. That this will solve their problems. And, actually, the next fix almost always does. Except for ever shorter and shorter periods.

So that, at least at first glance, this analogy to addiction might make the prospects for social change even more remote. Because even though it is always heartwarming and inspirational when we hear stories of individuals who have bit the bullet and who have broken that cycle of addiction, the plain fact is that many, if not most, people who are addicts don't do that. So what are the odds, again, of an entire culture voluntarily making the decision of getting off the hamster wheel of that dopamine rush?

Surprisingly, not that terrible. Because the even better news is that we've already done it. And it wasn't so long ago.

Now not so many episodes back you might have wondered why I spent so much time on the relatively brief period between 1962 and 1982. Well, it wasn't just because I'm an aging hippie remembering the good old days. It's because an understanding of that period is critical in our understanding as to how we can get out of the mess that we currently find ourselves in.

To briefly go over it one more time:

The early to mid Sixties were characterized by, on the one hand, an adoption of, even almost a reverence for, the artificial and the plastic by much of the population. On the other hand, there was a small minority, mostly among the well educated youth, who were disturbed by this. Then in the late Sixties the psychedelic experience, which at the time was both totally unexpected and totally revolutionary, acted as a catalyst, especially among the young, to upend the prevailing belief system. So that within a few brief years, by the early Seventies, a whole new ethos of trying to live a life which was more meaningful than the cliched nine to five rat race, and of trying to live a life which was in harmony with Nature, had taken hold. And not just among that youth culture. But, to a greater or lesser extent, throughout the entire society.

Now those of you who are too young to have lived through this period may still not really believe that it happened. After all, to a large extent history has been rewritten, and this inconvenient reality has been airbrushed out of the picture. After all, the dealer doesn't want to see his customers

going into rehab. And whatever those forces are which want to see us addicted to that dopamine rush—Liberal Democracy, Capitalism, advertising, whatever—they certainly don't want us to remember or know that once upon a time we were all honestly trying to kick the habit.

So let's go back to that period and look at the similarities and the differences between then and now.

At first glance there might not seem to be similarities. As I went over in Episodes 55 and 56, the best parallel to the period known as 'The Sixties' was the Romantic Era of the early 1800's, when a new vision of the emotional, the artistic, and the transcendent suddenly replaced the atheistic sterility of the Age of Enlightenment. And my emphasis on the positive revolutionary experience of psychedelic drugs as the catalyst of change (as opposed to there being a reaction against the horrors of addiction) would seem to confirm that diagnosis.

But anyone who was there knows that, while taking LSD was most definitely a qualitatively different experience than was taking amphetamine or cocaine, a bad trip was still most definitely a bad trip. A mind out of control might have little or nothing to do with dopamine depletion. But it wasn't any fun. Worse, when you were in that situation you couldn't kid yourself that taking more acid would even temporarily alleviate the problem. So that many people found out the hard way that in the end it was the bad trips which really effected the positive change.

What's more, as I pointed out those few episodes back, in terms of numbers only a small percentage of the population ever took psychedelics. The larger social change happened because the older population went through a process of recognizing that post war America had slid into a life of far more artificiality than they had known growing up. Had, in other words, become addicted to the fake and the plastic. And, once they had gotten used to the ideas of Peace and Love and Nature and all, then this way of life seemed much more appealing. So that they were then highly motivated to go to the trouble of breaking their recently acquired addiction to the artificial.

Now you might respond that, nevertheless, the differences between then and now are much greater than the similarities. For one thing, even bad trips usually had at least moments of transcendence. And dopamine rushes, although they certainly can be intense, by their very nature tie one down even more to the senses. So that by their very nature they are not transcendent. More important, back then a full blown consumer culture was still a recent add on, was still somewhat alien to the traditional values of small town America. Nowadays it's not just the mainstream, it's pretty much the only stream.

And we'll get to that in a bit. But for right now I want to make another very important point. Namely, that almost all of the changes which took place in the early Seventies were organically grown. That is to say, the sudden appearance of multiple types of whole grain breads in supermarkets across the country had nothing to do with government mandates or with political action committees. Nor did the fact that little boys genuinely no longer wanted to play soldier, so that no one bought G. I. Joe toys any more, have anything to do with peace marches or well intentioned public service messages. No, these were actually examples of the free marketplace in action. Thousands upon thousands of individual choices. No 'movement', no leader telling other people what to do or what to buy. Individual free choices. Just lots and lots of them.

Again, it's not like every single person in the country was eating granola. But enough of them were. And for at least a short period that was the reigning ethos.

So it most definitely can be done.

Because it most definitely already has been done.

Well, now you might really go 'ahem'. Because, as I also went to some pains to point out a few episodes ago, that determination to go back to Nature didn't really last that long. In fact, not only did the tide go out once again, but it went out with a vengeance. And the result was a world culture which was way more fake and artificial than anything which anyone in the Sixties had rebelled against. So, if that is the case, then what would be the point of trying it again? Hasn't my little history of that era actually proved the reverse of what I am arguing now? That in fact change can't be accomplished? That in fact our addiction is just too strong? And that we are doomed?

Okay. Time for another analogy. Because the reality that we hardly ever keep those New Year's resolutions, that we lose that weight only to see it come back again, that we join the gym but never consistently go there and therefore never get ourselves in shape, all of that doesn't mean that these weren't good or worthwhile ideas in the first place. No, it just means that we are typical human beings living that typical human condition of inertia and lack of discipline. In other words, those resolutions and those goals were the right ones. They still are. And we just have to suck it up and try harder next time.

Now, as I've been saying all along, I'm not going to pretend that it's going to be easy. But, as I've also been saying all along, at the present moment—if you're being honest, and if you've been paying any attention at all—there just aren't any other options. Each of us is like one of those monks

in the 8th or 9th Century, at the height of the Dark Ages. So that if you and I don't put all of our effort into keeping the fire burning, it most definitely is going to go out.

And the fact that we are hypersocial animals, and that if everyone else jumps out of the window we are extremely likely to do so ourselves, that doesn't help matters any. After all, those monks in the Dark Ages at least had monasteries, both to protect them and to reinforce their beliefs. What do we have?

Well, to all of that I can just say, 'Tough nuggies'. Because for all of our being swayed by others due to our hypersocial nature, for all the transparent libertarian B.S. of saying, 'If you don't like watching snuff films, just turn the channel', in the end, if the wider society has degenerated to the level where everyone is jumping out of the window, then at some point individuality does kick in. At some point, even if you can't physically get off the grid, you can still develop the mental habits and disciplines to psychologically, intellectually, and 'spiritually' disassociate yourself from all of this. So far, at least, no one is forcing you to look at pornography or waste your time watching infantile comic book movies or wallow in the fake news of the Left or the Right. And in a future episode I'll discuss what reasonable societal parameters of 'good, clean fun' could look like.

For right now, though, what you need to know is that, yes, the wholesome and the natural are possible. And that, if you are of a certain age, then fifty years ago, give or take, you already were in that mindset. And, granted, inertia and social pressure and all of those people swearing that the shorter arrow is longer are all incredibly powerful forces. But if you are old enough somewhere down there deep in your memory vault you can remember that mindset. And in the end there is absolutely nothing that is keeping you from returning to it.

And if you were able to do that, and then I did that, also, and then a lot of other people did that, too, then, needless to say, this would be a significant step in turning the corner. And, as with whole wheat bread fifty years ago, market forces in and of themselves would then be sufficient. Because it should be pretty obvious that if everyone just stops buying a lousy product, then the company making it goes out of business.

And our present day postmodern society is about the lousiest product possible.

So just stop buying it. Just stop consuming it. It's as simple as that.

Okay, as I just admitted a couple of paragraphs ago, it isn't that simple. What's more, even if this plan works for old fogeys, it doesn't do anything for all of the gazillions of people who were not alive and cognizant back in 1971. So what solution do I have for all of them?

Well, for one thing, if you happen to be one of those gazillions, why not try a little research? You can look up the Sunshine Family and the joys of macrame on the internet. You can find old episodes of 'Kung Fu' to watch. Video clips of rock groups and concert crowds, recordings of the songs, are all readily available. You can still buy a copy of 'Be Here Now'. And almost all of it was way more substance than it was style.

Next—and this is a really important point—the seemingly paradoxical reality is that the younger you are the easier it will be to break your dopamine addiction. And I say 'seemingly paradoxical' because, at least superficially, the life of smart phones and social media and all that crap is all that the Millennials and the Gen Z's and the whoevers have ever known. But I'm telling you that in 1965 suburbia and 'American Bandstand' and giant gas belching cars with big fins was all that the youth back then had ever known.

But what the youth back then and the youth now have in common is that youth also has always had much more energy available to them than has the old. That is to say, and as hard as it may be to believe at first glance, in practice it would probably be far easier for the youth of today, as opposed to the adults of today, to turn off their smart phones and to close out their Facebook accounts. After all, at least some of those kids must be aware of how useless and empty their lives essentially are. Of how pointless the pleasures of the flesh ultimately are. And therefore it would be far easier for them to start substituting reality for artificiality, for developing new habits of appreciating the Sun in the morning and the Moon at night. For actually putting energy into creating something that had meaning or value.

Really.

But it's too hard.

Okay. Just about anyone who has had children knows that one. Although, in reality, this sort of whining, on one level or another, is also true for most adults. Because, as I keep saying, the real issue is that this certainty that one cannot change, cannot improve, is almost a hallmark of the human condition.

So let's return to the 19th Century for a moment.

Because a lifetime of reading history has made me pretty familiar with the mindsets of previous centuries. And I don't believe that a typical 19th Century person would have been able to conceive that even a trained specialist would have been able to drive a four thousand pound vehicle around at seventy miles per hour. Further, if you had told them that in the future literally millions upon millions of normal citizens, including many with somewhat limited intelligence and many more who were somewhat buzzed on alcohol, drugs, or medications, or what have you, and, further, with somewhat limited training, would as a matter of course drive those four thousand pound vehicles at high speeds on crowded, multi-lane freeways, any 19th Century person would have reacted with utter disbelief.

And yet.

Or take space travel.

Now when Jules Verne and others started writing fictional accounts of voyages to the Moon, they assumed that such a journey would be somewhat analogous to a trip to Norway or Italy: You set off in the general direction, and then steer more accurately as you get closer to the destination. But the actual physics involved mean that maneuvering around outer space isn't remotely as easy or convenient.

Because although the Moon might loom large in the sky, in reality it is a relatively tiny rock surrounded by a lot of empty space. What's more, it is zooming along at 2300 miles per hour. Or about 2/3 of a mile per second. So that a rocket launch can't be aimed at where the Moon presently is, but where it will be (depending on the speed of the rocket) two or three days from now. And this preposition has to be calculated precisely. Because once a rocket is launched it has incredible forward momentum. So that changing its velocity or direction is no simple matter.

Then, once you've gotten to the moon, there are the multiple problems of getting back. And one of the worst is that the speed of reentry into the Earth's atmosphere is around 17,000 miles per hour. Which means that the angle of reentry is beyond critical. The flight path angle has to be within one or two degrees of the optimal. Otherwise the capsule will either burn up or bounce back up into orbit. And the so-called angle of attack, which is the placement of the capsule's heat shield vis a vis the atmosphere, has to be between 37 and 43 degrees. Otherwise, once again, everything burns up.

And the problems of getting to the Moon pale in comparison with the problems of getting rocket ships to other planets and the like. Because, although we don't notice it, it turns out that the Sun is also traveling at a tremendous speed through our galaxy. And even our galaxy is traveling at a tremendous speed through intergalactic space. So that, for example, if you want to send a rocket that

leaves the plane of the ecliptic (which is kind of a flat imaginary disc upon which all of the planets inhabit) you have to figure out a way to negate all of that unseen forward momentum. And if you want to send a rocket to one of the outer planets, and you want it to get there in fewer than umpteen years, the plain fact is that we don't have thrusters which are powerful enough to make said rocket go that fast.

So one clever trick which rocket scientists have come up with is to use the force of gravity of other planets to make their rockets go faster. For instance, instead of aiming a rocket directly at Mars, they might instead send it to Venus for a loop around flyby. Then as it gets close enough to Venus, that planet's gravity will then semi-capture the rocket, and then shoot it out like a slingshot in the direction of Mars. Which means that it will end up getting to Mars a whole lot faster.

But now we're talking about an incredible need for precision in figuring out how to aim the rocket at the precise angle and distance from the surface of Venus, some thirty million miles away, so as to achieve this slingshot effect. Not to mention that they also have to precisely know where Mars is going to be a year or so after the encounter with Venus. Nor, as I've already pointed out, do the engineers have much of a luxury of changing the trajectory in midstream.

And a really good example of what's involved in all this is the relatively recent flyby of Pluto, which is over two billion miles away.

So, first, the most powerful rocket available had to be used. Which created an initial speed of some 36,000 miles per hour. Which meant that the mission flew past the Moon's orbit in only nine hours. Still, in order to save six years, it had to be aimed at Jupiter, which then provided a gravity slingshot which boosted the speed to 52,000 miles per hour. And to show you how precise everything ended up being, some time after launch there was a trajectory correction. It only needed to add 40 miles per hour to the speed. And then later there was another, which changed the speed by 5 miles per hour.

And that was basically it for the 2 billion mile journey. Now Pluto is so small that it only has two tenths of one percent of the mass of the Earth. But some ten years after the launch our spacecraft flew by Pluto at a distance of less than 8,000 miles.

Pretty damn good.

And that's what we humans can do when we put our minds to it.

So let's not be like children and whine that the changes which are necessary for you and me to make in order for humanity to continue are just too hard. And kindly remember those lessons from the Science section. The fact that the probability that the Universe should exist at all being beyond bizarre. And the same with complex life existing. And the same with the plausibility of Consciousness itself.

I mean, if you think that any of the changes which I am mandating call for too much self-sacrifice on your part: How frigging self-absorbed do you have to be not to be prepared for that self-sacrifice???

Well, for right now I'll leave that to hang in the air as one of those rhetorical questions. And over the next few episodes you can consider it as I go over the level of self-sacrifice that you, yes you, will be called upon to do.

In the meantime, though, this episode is over.

Although, as always, I will be once again thanking you once again for so far having listened.