## D'var Va'yakheil-Pekudei March 12, 2021

Tim Harford's Cautionary Tales on MLK's I Have a Dream speech in 1963. It was originally entitled Normalcy Never Again.

MLK would spend 15 hours every week preparing his Sunday sermons, researching, drafting, redrafting, memorizing. He was one of history's most brilliant orators, but he didn't, as a rule, improvise.

250,000 people, millions more on TV. Used his prepared remarks which were fine but not by any stretch iconic, until close to the very end when the singer Mahalia Jackson called out to him "Tell them about the dream, Martin!", and he went off script, and the rest is history.

Mouse brain experiments: when trained on a T-maze in which they can enter either arm and get a reward, mice will quickly develop a strong bias and only go to one side or the other. They are creatures of habit. If the experimenters change the rules and the mouse has to learn to go to the other side they struggle with it. But they are much quicker at learning the new rule if they are placed in a novel environment first. Novelty changes the circuits in their prefrontal cortex so that they are better able to learn.

There is a raging debate in neuroscience at the moment as to what areas of the brain are critical for consciousness. It basically comes down to two camps: those who believe the back of the brain is essential, and those who believe the front of the brain is. The front of the brain in humans is usually referred to as prefrontal cortex, and this structure is most highly developed in our species. Even dolphins, super intelligent and social, with enormous brains, have underdeveloped prefrontal cortex compared to ours.

One set of data that people use to argue for the back of the brain is lesion data. If someone is missing a part of their brain but they still are conscious, the argument goes, then that part of the brain is unlikely essential. One of the most famous lesion patients is Phineas Gage, who suffered a horrific accident back in the 1800's in which a metal spike took out most of his prefrontal cortex, but he recovered and lived his life for many years afterward. So that would argue against prefrontal cortex being essential.

The thing is, although after the accident he was still conscious, his personality changed pretty dramatically. Whereas before he was super planful and well-liked, energetic and efficient and all that, afterward he became a real jerk, impulsive, anything but planful.

It's now well-established that the prefrontal cortex is heavily involved in controlling our behaviors, inhibitory control it's called.

It's become a riff in my meetings at work when things are light and someone says "I almost just said such and such inappropriate thing, and we respond "Good job, prefrontal cortex".

Being planful and improvising would appear to be at odds with each other. Jazzz musicians often refer to improvisation as an act of attentive listening, as if you're making space for an internal dialog to unfold that is unpredictable and potentially creative. And if you look at the brain circuitry involved in both of those types of behavior, you find that the circuits involved in all that planning and inhibitory control have to themselves be inhibited, turned off, when you improvise. And when scientists put jazz musicians into brain scanners and have them improvise, they find exactly that.

So we can live lives of constraint and hewing to norms, and of course it's a good idea to do that most of the time, but if we never did anything else our lives, and human history, would be impoverished. But when we go outside those norms, sometimes we'll channel our inner Phinneas Gage, after the accident that is, and have outbursts and be jerks and act impulsively and unwisely. And sometimes we'll compose a piece of music that is extraordinary and entirely new.

So what does this have to do with the parasha? And the Sefat Emet? This week's parasha, actually a double parasha, the last two two parshiot of the book of Sh'mot, Exodus, is rich in detail about the construction of the mishkan ha'eidut, the Tabernacle of Witnessing, this portable sanctuary that the people built to center and ground their community spiritual practice during their years in the desert.

The Mishkan is a rich source of learning and commentary in our tradition, but one of the things about it that has generated a lot of discussion is the name. Why is it called the tabernacle of witnessing? What or who is being witnessed? Mostly the teachings go in the direction of us humans witnessing Creation, of us being witnesses to the presence of the Divine in this world, things like that.

But one teaching of the Sefat Emet caught my eye. In it he says that the witnessing was not something the people were doing. It was to bear witness to Divine forgiveness. This is all in the aftermath of the episode of the Golden Calf, in which the people were seized by this collective fear-driven madness and at the very moment that Moshe was up on Har Sinai getting the skinny from the Lord, the people below were engaged in the orgiastic hysterical idol worship, this colossal blunder that eventually ended up costing them forty years of their lives as they wandered around waiting for all the people who came out of Egypt to die before they could enter the Promised Land.

The Sefat Emet imagines the people wracked with guilt and self-loathing at this epic collective failure, a state of mind that I'm sure we can all relate to. And he does something quite beautiful and tender. He teaches that the project of building the Mishkan was God's way of getting them out of that funk. He imagines that God is over it, way past that angry outburst that sent them into that frenzy of self-loathing in the first place, and the project is offered up as a project of

redemption, of showing them that they are still connected to the Divine, always were, always will be, no matter how badly they screw up.

The sin of the Golden Calf, he writes, was not fundamental to who they are, it was incidental to who they are. They, like all of us, did not deserve to be defined by their most heinous act. Far from it. In fact, it is out of our flawed nature that loving kindness and compassion arise. If we are so prone to mistakes and worthy of forgiveness, then so is everyone else in our lives. But our work is to understand and embrace that idea: we are worthy of love and forgiveness. And with that realization comes responsibility. We can't say that we are unworthy to do the work of healing the world because we ourselves are flawed. If we waited until we're perfect that work would never get done.

And so my prayer for all of us is that this Shabbat and every Shabbat we find some loving kindness and compassion for ourselves, so that we might bring healing to the world. Shabbat shalom.