

## Chapter 12 – Some Possible Physics of Mental Change

As an electrician, I learn about how inelastic behaviors play a role in energy transfers for serious electrical hazards called arc flashes. Being autistic I look for a loose pattern between psychological energy changes and electrical energy changes, or at least a decent analogy that I can work from.

Electrical engineers minimize arc flash damage by designing their equipment to decrease damage by asking the three similar questions of the change problem:

“How many joules of energy can be involved?”

“How close, attached, or detached am I from the electrical equipment?” and

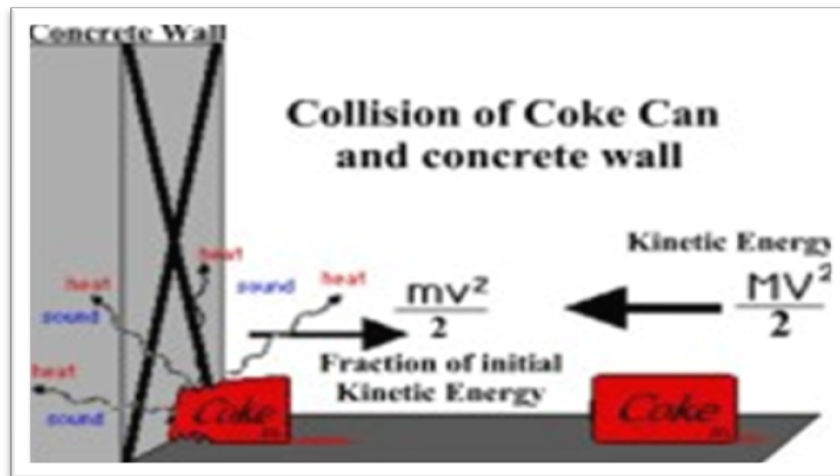
“How many electrical cycles can occur before this energy release is interrupted?”

Our government’s regulations protect people from arc flash damage (1) by requiring that certain safety equipment be worn within

certain distances to the potentially offensive equipment, (2) by limiting the maximum amount of energy involved for each equipment type, and (3) by requiring electrical tripping systems to activate within certain fractions-of-a-second after the energy release rises to unsafe levels.

I notice good parallel, regarding psychological safety, when I consider the amount of psychological energy that a major change can bring in (1) how much psychological distance (detachment) is being applied, and (2) the tripping points where emotions temper and place a person's mind into conditions like acute emotional shock...or more long-term emotional shock like PTSD (Post Traumatic Stress Disorder).

Another concrete example, comparing the physics involved in change, is shown in how automotive engineering works to mitigate passenger damage in car crashes by incorporating crumple zones. Car crash crumple zones are designed to reduce total damage to a car's passengers by extending the time of the crash's impact by seconds or less, and by spreading the energy out to as many places as possible.



Imagine an aluminum Coke can hitting a wall. The Coke-can decelerates at a much slower rate than more solid things because when it crumples, it completely decelerates over a much longer period of time (it experiences lower g-forces), so the Coke-can also rebounds with much less energy. Like both the arc flash and grieving problems, the similar questions help in the analogy:

“How much energy is involved?”

“How close, attached, or detached am I to the un-diverted energies?” and;

“What happens after the initial impact?”

The psychological-energy I require to change can relate to help me make decisions to temper and stagger my psychological-damage by:

- Gaining more knowledge and practicing healthy coping skills, and;
- Using the widest available and most helpful audiences to help me make sense of the irrational differences between what *I expect, want, or need to happen in my life, and what actually does happen.*

I am not sure at all, but it makes sense to me that my stress and anxiety in my grieving exist only so long as I have a need to rationalize the difference between the outcomes I expect (or want), and the outcomes I receive. I don't see rationalizing and accepting as being the same – in the same ways that I don't see ‘getting along with someone’ as being the same as liking someone.

Although rationalizing and accepting both allow me to coexist with ideas that don't fit-in with the make-up of my ideal life. Rationalizing seems to trigger the worries, stresses, and anxieties I use for the battles of my brain's thoughts, while acceptance seems more like a treaty that stops my internal arguments. To reach that acceptance I will probably have to learn to develop new and different types of courage that are based on some subjects I may not haven't considered before - to bring me some measure of peace.

Like any negotiation, this treaty won't make me the winner; it just provides some certainty and some terms that I choose to live with; some terms where I quit displacing those parts of my brain's bandwidth that I need to use to stop my other temporary concerns from becoming more permanent problems.

Mosquitoes seem to live temporary lives, from about a week to several months, but as a species they have been around for nearly 80

million years, and probably only because they evolve through change. Mosquitoes need water to breed and survive and if the water available becomes too salty for them, they are just as likely to change as they are to move; when there is not enough water, or the temperature isn't right, they hibernate. By the time a single pair of mosquitoes become grandparents, their 100-200 egg-count will produce a family reunion with thousands of attendees – and even if some change comes around, like a better pesticide or very effective predators, so long as one mating pair survives there will be future large parties for them to attend.

We all have thoughts that can live from about a microsecond to a lifetime of generally more than seven decades. When it isn't time to act on our thoughts they go into hibernation, but by the time that a single pair of our thoughts become grandparents....

Of course there will be bad days, when it seems like everything is going wrong or things have been going wrong for far too long, or that most of my braincells are only good for throwing going way parties for each other; but sooner or later some mating thoughts get together in my head, and one of them will have paid attention to the changes that I need to evolve again, and before I know it my brain cells holding the bad memories will be dressing up for their going away party, while the grandkid-thoughts will be waiting for another family reunion.

It is important for me to know the difference between temporary problems and permeant problems so that I can use my courage-in-patience and the best temporary solution, rather than resorting to permeant solutions. My burden here is to keep an eye on deadlines and stay within the bounds of reasonable solutions.