

4 Crime Versus Destructive, Dysfunctional, or Anti-Social Behavior

Currently our universities teach (broadly speaking) two—oftentimes sharply different—ways of looking at destructive human behaviors. One of these centers on the behavioral sciences and what can be shown empirically, in other words, through observations of *evidence* and experience, the area of specialization in looking at inter-personal harms and their causes is called criminology (Criminology, 2014).¹ The other way of looking at these things currently taught in

¹ A note on language: this term, *criminology*, along with the majority of the jargon used in the current literature begs for thoughtful re-evaluation. While there is some utility to proper application of emotionally charged words, it has been observed that there is a phenomenon within human cultures which sociologists identify as *labeling* (Henslin, 2014). James M. Henslin, the author of a standard college sociology textbook challenges the reader:

Suppose for one undesirable moment that people think of you as a "whore," a "pervert," or a "cheat" (pick one). What power such a reputation would have—over both how others would see you and how you would see yourself. How about if you became known as "very intelligent," "truthful in everything," or honest to the core" (choose one)? You can see how this type of reputation would give people different expectations of your character and behavior—and how the label would also shape the way you see yourself.

Both within the law and the scientific literature there are many terms which carry connotations in the wider culture and which may be detrimental toward any goal of addressing the problems they describe. Most obviously, the loaded terminology has come to include terms such as *offender*, or *deviant*, which while might be used without regard to connotation in science (Henslin, 2014) to others carry strong negative connotations. Less obviously this jargon contains the word *victim*, which was originally used to refer to "*a living being sacrificed to a deity or in the performance of a religious rite*" (Miriam-Webster's Dictionary and Thesaurus). While it has come to mean also *one that is acted on and usu. adversely affected by a force or agent* <the schools are ~s of the social system>: *as a* (1): *one that is injured, destroyed, or sacrificed under any of various conditions* <a ~ of cancer> <a ~ of the auto crash> <a murder ~> (2): *one that is subjected to oppression, hardship, or mistreatment* <a frequent ~ of political attacks> *b: one that is tricked or duped* <a con man's ~>, and these uses are how it appears in the context of crime, there

are suggestions in sociological research that the original meaning still effects the role the victim plays in our cultural narrative.

Sociological literature is rife with illustrations of how much of the perpetuation of current crime-problem is based on underlying human needs to feel good about oneself by comparison to the misfortunes or evils of others. In short, victims are *still* used (albeit subconsciously) as sacrifices for the sins of the community and criminals are now filling the role of villains which are used as points of contrast for how good the rest of us behave. In the news, they are used as negative examples, what to avoid, how not to be, and also what to be angry about and rally around or against respectively. The functionalist school of sociology goes so far as to say that crime is an essential element of our underlying modern social fabric (Henslin, 2014). Our (essentially immature) tendencies as people are to rely on comparisons between ourselves- in both fortunes and qualities- to those of others, who we see as either *more* or *less* fortunate, or qualitatively *better* or *worse* people than ourselves. When somebody is harmed, if they are not particularly close to us, we count our blessings, or express our outrage--or both. Unless, we feel that that person deserves said harm, in which case we might variously breathe a sigh of relief, or even revel in that person's misfortune. When somebody does harm--other than the kinds we might engage in- we feel morally superior; or, when they do reflect things we engage in, we might become defensive, perhaps to the point of feeling compelled to deflect attention to our own similar transgressions.

This kind of language is intertwined with our predispositions as a society to encourage us to cast victims and criminals into their various supporting roles in our personal narratives. While there is utility in identifying in sympathetic terms those who have been the targets of violence, or calling for example murder murder or rape rape, there is a difference in how one might react emotionally to hearing the statement "Shirley killed Maxine" and "Shirley murdered Maxine". The first is (maybe) a statement of fact. The second is telling us how to think about what happened without providing any facts and could be used by a person who wanted you to think of Shirley in a certain way even if there were circumstances which strongly suggested self-defense. Such a sentence could be further made problematic by some relatively minor twists, consider for example "Shirley is a murder. Maxine was her victim". This could really set up some strong preconceptions about the kind of person Shirley is and the level of sympathy we should feel for Maxine, we have already implied, Maxine was an innocent. Shirley is beginning to sound pretty malevolent by now.

In an interesting sidenote, as I write this, the headlines are saturated with warnings about the Corona virus pandemic. In apparent direct response to the health scare, sales for Corona beer (which is no way related to the Corona virus) have dropped significantly. Unfortunately, the words we hear, affect how we think, we just are not very good at being objective. Not even those among us whose job it is to be objective. For example, it has been shown that judges when given hypothetical cases to apply sentences to, if they are given a six-sided die and instructed to roll that die prior to deciding what sentence to give, the number on the die actually effects the

number they believe is fair to give for a sentence (Kahneman, 2011). Higher numbers on the die result in higher fair sentence choices, lower numbers result in lower ones. Also, it has been shown that judges are more lenient earlier in the day than later, and that generally, they lose patience (so called decision fatigue) with having to sift through facts as the number of facts increase. While these latter facts are not directly related to labeling, one can appreciate the connections. If something as simple as seeing a number can throw off a sophisticated decision, and so many other things play into deteriorating our decision making processes, in the area of life altering decisions, the kinds made in courts every day, shouldn't we be a little bit more careful about how we present things, and more importantly, how we present people? People are complicated. Labels are all too often simplistic to the extreme and can cause many of us to overlook important things about the people they define in one dimensional terms, or in the case of crimes, permanently by the single worst thing they ever did (or were ever accused of doing).

While there is perhaps some danger in getting bogged down in arguments about semantics, or political correctness, in light of the overwhelming body of evidence surrounding the effects of word choices in psychological, neuropsychological and sociological literature on things like decision making and how people treat each other, I would be remiss in failing to call attention to the language of criminal justice and the suggestion that any alternative model try to use language which is more thoughtful of effects, especially as it relates to making decisions about how to respond to the situation wherein this person or that has sexually violated or killed, or maimed, or damaged the property of that person or this, and how either of the parties should be treated in moving forward.

The language I have chosen to try to emulate throughout this paper for the most part is that of Restorative Justice, which uses terms such as harm, harmed party, and so forth. A good friend of mine who is an attorney also likes the idea of just simply using the person's name and dispensing with labels such as the defendant wherever possible. I do also in this paper still use the criminal system language here and there as to otherwise seems at times awkward, by virtue of the fact that it is so baked into our current lexicon. That doesn't mean we shouldn't question it and think about alternatives, especially if there is the possibility that our language effects our ability to make good decisions. If for example I told you, "here try this ice cream, it tastes like vomit", you probably wouldn't want to try it. It might be however that I lied, and that it was the best ice cream I've ever tasted, nonetheless, my choice of words has soured the deal.

We do need a balance, as George Carlin pointed out, some element of political correctness can be to soften that which is hard to look at. We did go from, as he pointed out "shell shock" to "post-traumatic stress disorder", which is a mouthful, and lacks the power of the original. The point I make here is not that we should soften the language around violence to minimize the role of the person who inflicts it, but that words which describe bad situation

our universities is something called *criminal justice*, which is more properly understood—on the whole—as pseudo-science rather than science, in that much of it continues to revolve largely around empirically unsound non-evidence-based adherence to *hypotheses* (typically mislabeled as *theories*)² such as *deterrence* and *punishment*, as means of remedy for destructive impulses (Davis, 1998), (Criminal justice, 2014). While criminal justice does look to statistical data in suggesting that states adopt more rehabilitation-oriented schemes of criminal justice, it remains in a sort of limbo between both scientific and anti-scientific

should be plain enough that they don't color what kind of outcome we're looking for before we've been able to really digest the facts of the given situation.

The term criminology, while it includes the harms we call crime generally, implies also that it is the study of some kind of category of person, some type, distinct from those of us we count as *good people*. For PCJ, we need terms that specify *only* the behaviors, or activities which we seek to eliminate, *not* which *combine* these with the people who engage in them, as qualities of their beings. Otherwise, we tend to ignore the inherent tendencies built into the lumping of these two together which in ways which make reaching for solutions aimed at elimination of both the problem and the problem maker as a unit, i.e. those which are conducive to hating the proverbial sin, not the sinner. *People* cause harms. We call (some) of these harms crimes and in and of itself, that term is much more emotionally loaded than what is called for in terms of problem solving. We need to identify the people that cause serious harms as people, not some kind of aberration outside of humanity. Elsewise, we should replace the word "people" with "criminals" altogether, as we all have probably broken some law at some point. We need to identify the specific instances of serious harms as individually identifiable problems, with varying underlying causes and potential solutions. Criminology could, just as accurately and to less stigmatizing and obfuscating effect be called something like destructive behaviors research, or dysfunctionology, if we are to insist upon a single categorical word. In short, we need to reframe this area of research as one which looks at how to eliminate or diminish the behaviors, not the persons who act them out.

² **hy-poeth-e-sis** (ca. 1656) 1 a : an assumption or concession made for the sake of argument b : an interpretation of a practical situation or condition taken as the ground for action; 2 : a tentative assumption made in order to draw out and test its logical or empirical consequences. **the-o-ry** (1592) 1 : the analysis of a set of facts in their relation to one another (Miriam-Webster's Dictionary and Thesaurus).

sentiments of various schools of thought about what crime³16 *is* and how it *should* be addressed. Much of what is being taught in this field, is just not worthy of academic endorsement.

Social scientists, experimental psychologist and even economists have conducted numerous experiments that evaluate the ideas which criminal justice insists upon. Experimenters have demonstrated, for example that punishment, rather than deterring bad behaviors, encourages the target of the punishment to become more sneaky about how they do the things which are meant to be discouraged, and it also makes the recipient of the punishment resentful (Citation information unavailable) [note: there was an article on this in Scientific American or Scientific American Mind within the past five years]. For that matter, the practice of scolding or chiding individuals for poor performance even has been shown to have no positive impact on future performance (Kahneman, 2011). Simply put, yelling at somebody does not improve that person's future behavior. Experimenters have also shown that all forms of long-term social isolation or exclusion and even immersion with others who have themselves been steeped in impoverished environments⁴ lead to socially destructive behaviors, in both

³ Though one contention put forward in this paper is that words such as *crime* are not well suited to addressing the problems they describe, I will occasionally use at least that particular word in certain contexts throughout the paper for the sake of clarity.

⁴ Economic poverty is perhaps too narrow a way of thinking of poverty in the context of harms. Various other forms of poverty come to mind that could play a significant role in this arena. It is possible for example to grow up in a wealthy but abusive or neglectful household. In this light, a broader definition for poverty may be called for, one that includes the possibilities of being impoverished in for example compassion or empathy. Similarly, there could be a poverty of education, which leads to destructive behaviors. It is interesting to observe in this light, that research conducted by the Rand Corporation in the 1970s showed specifically that Liberal Arts college education

humans and animals⁵ (The Perils of Loneliness, 2016). Furthermore, those who have analyzed the effects of the criminal justice based system of retribution have demonstrated that it does significant harms to the *families and communities* of those who are punished in addition to any it does to them personally (Petersilia,

(versus other sorts of education) is both a good predictor among the population at large for an immunity to legal entanglements, but also a highly effective means of reducing recidivism among prison inmate populations (Citation information unavailable). Research on compassion has suggested that this is because 'this sort of education leads to thinking that is more creative (Citation information unavailable). This enhancement in cognitive sophistication in turn reduces the likelihood of a person feeling the kind of lack of options that might otherwise lead to destructive behaviors. Such an education regimen also puts a high degree of emphasis on so-called perspective taking, wherein one is required to imagine the world through the eyes of others. To this later point, reading literary fiction (which is the kind of fiction that tends to be character-centered, as opposed to commercial fiction, which tends to be plot-centered), has also been shown to improve pro-social tendencies and diminish propensities for violence in individuals.

In a separate but related vein, there has been in the past decade or so movement towards teaching entrepreneurial skills to prisoners and providing them with business education. The research indicates that this approach works well on some—but not all—inmate populations toward the end of reducing recidivism (How to Reduce Recidivism with Prison Entrepreneur Programs, 2019). This sort of education takes advantage of the fact that some of what undergirds problematic behaviors is the willingness to take risks, which is actually an essential quality of an entrepreneur. It also speaks to the employment challenges that convicted felons are likely to face and it opens up awareness to the possibilities of legitimate self-employment.

Taking these somewhat oppositional approaches to education together, the suggestion is that while there may be a one-size-fits all benefit in the liberal arts approach where discouraging destructive behaviors is concerned, it is not the only approach which works, and there are multiple things which might be tried in conjunction with each other, rather than separately.

⁵ Thanks to the observations of animal behavior at the Seattle and other animal research centers, we have mostly stopped allowing animals to be kept in such environments. This is not just because of compassion for the animals, but also for the safety of the people that worked with them (Segment on the first gorillas housed in a naturalistic habitat at the Seattle Zoo, 2016). Animals, especially mammals, kept in cages—not much different from the cells we keep prisoners in—become deranged, destructive and dysfunctional. People do too. Yet, while this was well understood over 100 years ago, yet we keep trying to make it work.

2003). Jails, prisons, and adversarial law enforcement tactics may have some crime controlling, or containing effect, but they also *contribute* to the underlying factors that *encourage* crime. They do not function as adherents to the ideas of penology argue that they *should*.⁶

The penal concept of corrections is based on daydreams about how *imaginary* people might be expected to respond to punishments and threat of punishment, or people simply projecting their imaginings about how they personally would respond to these, rather than asking, "How might a real and desperate person, *other than me* respond to these threats?" It simply does not account for anything as complex as the human brain and the mechanisms within it which actually motivate and produce both positive and destructive behavior, much less what might produce remorse or a desire to atone for harms done to others.

⁶ For example, in heavily policed areas, it has been shown that once a certain number of people have been incarcerated, the crime rates increase even further, the magic number appears to be 2% of the neighborhood (Levitt & Dunbar, 2005). There are various reasons for this owing to the fact that people who have spent some significant amount of time in the penal system become institutionalized and bring home destructive or dysfunctional habits when they return to these neighborhoods. This in-turn contributes to the rise of what is called the oppositional culture among youth in the neighborhood, wherein they become convinced that it is better to be feared than loved (Petersilia, 2003). In my own experience, I have met numerous people in prison who come from such neighborhoods and express openly the belief that going to prison is simply a fact of life one must accept associate to life on the streets. It is for some a cost of doing business, wherein the underground economy is concerned, for others more of a rite of passage wherein being seen as tough, or simply not a pushover contributes to the perceived need to act out violently.

The Destructive Brain

One thing which has become exceedingly clear over the course of the last hundred years or so is that *the brain is the organ of behavior*. Whatever happens to the brain has effects on what the brain later does. Some of these effects the owner of that brain more or less exclusively,⁷ some can have far flung social consequences. What we have begun to understand about the brain is in part due to various case studies wherein some individual experienced a dramatic change in brain architecture which then resulted in dramatic changes being observed in behavior.

One of the most famous early examples in the literature which is particularly pertinent to the kinds of behaviors we currently classify as criminal is the case of Phineas Gage who lost a large amount of his prefrontal cortex in a blasting accident in the mid-1800s wherein a railroad spike passed through the frontal portion of his skull, ablating a large amount of his prefrontal cortex.⁸ Gage went, in one instant, from being an upstanding, socially reserved, respectable and responsible member of the community with good work ethics, good financial habits and realistic life goals, towards which he was actively working, to becoming a bar fighting, loudmouthed braggart, who swore like a sailor, drank and gambled his substantial life savings away, got divorced and ran off to join the circus, only to

⁷ It should be appreciated however that even so-called personal problems typically effect a great many people connected to the individual in question, humans are social animals, what effects one more often than not effects those around him. Taking for example the simple contagious nature of things such as laughter, yawning or anger.

⁸ The area, which (thanks to study of him and others with similar damage, including prefrontal lobectomy [a.k.a. lobotomy] patients in later decades) we learned effects a significant portion of what we think of as moral judgement and impulse control.

die some years later, alone and penniless. Predictably, all of the other known patients who have suffered similar damage have taken similar turns (though their particular levels of anti-social behavior and capacities for foul language seem to hinge somewhat on what they might have been exposed to prior to their loss of brain matter) (Damasio, 1994). While Gage never became an all-out criminal (though it is a safe bet if he were alive today many of the things he did could have landed him behind bars), it is the kinds of behavioral change he underwent that are important to appreciate here.

Generally speaking, a person who has diminished frontal lobe capacity, or diminished interconnectivity between their frontal lobe and the parts of the brain which regulate what neuroscientists jokingly call the three F's (fight, flight, and reproductive activity), there is a greater degree of likelihood that that person when exposed to environment triggers associated with these will react as their brain stem 21 **POSITIVE-COOPERATIVE JUSTICE** 39 would have them react. The thing to appreciate here for most of us is that we all have thoughts about doing terrible things. The differences between people in this arena is in their ability to let those thoughts pass without acting on them.⁹ Without the appropriate neurological hardware this is next to impossible.¹⁰

⁹ Though conditioning also accounts for a great degree of variability in the content of these thoughts.

¹⁰ Note here I say it is next to impossible, but not necessarily completely impossible. It is in this area that there is some potential wiggle room. Though in fact, there *does* in fact need to be sufficient hardware, and interconnectivity in the brain for this to work, it is possible that it need not be exactly the correct hardware and set of circuits at the outset. This is where the potential for learnable skills such as cognitive therapies or mindfulness come into play. In these frameworks the individual might be able to learn to take a mental step back from the

Various things have been shown to impact the brain in ways which could contribute to destructive behaviors, of the sort which we currently label criminal (Citation information unavailable). Included among these are the following:

- Traumatic brain injury (TBI)
- Brain lesions (structural or biochemical changes in the tissue caused either by injury or disease).
- Under or overdevelopment of key brain regions due to genetic variation¹¹ or injury • Alcohol and drug use
- Residual effects of poverty including:¹²
 - Lack of exposure to stimuli which promote problem solving skills
 - Lack of sufficient resources or guidance to promote pro-social habits such as sharing

normal flow from impulse to action and find a way to think a set of breaks onto the impulse or otherwise manage to ride out the impulse and let it pass.

¹¹ It is important to note here that the mere fact of the presence of the so-called violence gene (a genetic marker which is more prevalent in violent men than in the majority of the population), other hereditary or even acquired deficiencies in such brain regions as effect impulse control or violent capacities will always lead to destructive behaviors. Rather, these are factors which when combined with various other stimuli contribute to a bigger picture which might result in such.

¹² In an interesting parallel to human behaviors, experiment have been done which show that groups of mice when confined together in a cage with nothing but food water, bedding material and other mice will begin to pick on each other, frequently engaging in violence, and other anti-social behavior whereas mice put in cages with things to play with will remain more or less peaceful toward one another and show pro-social behaviors including grooming and sharing (Citation information unavailable) [Most like this was in PJ Pinel's Biopsychology, which is a secondary source, but is also widely cited elsewhere].

- Exposure to environmental toxins such as lead which have demonstrated links to diminished decision making capacity and whose prevalence in impoverished communities corresponds to crime rates
- Neglect as well as both physical and emotional abuse
- Surgical removal, ablation or, or temporary interruption of brain areas

The above list is by no means exhaustive, however, the key point here is that there are an enormous variety of things which can go wrong with the brain, and this arguably explains nearly all of what we call crime,¹³ not just the rare case wherein the courts have acknowledged insanity as a defense. Most of these things are beyond any hint of being under the control of the individual toward whom they happen, and when one appreciates that the impulse to take drugs or alcohol and corresponding lack of inhibition which allow one to follow through on that impulse also arise from the brain itself, it can be appreciated that personal choice has nothing more than some kind of mystical, undefinable place in the equation. Simply put, brains with destructive behaviors are shaped more by the environment¹⁴ than the owners of those brains.

Although the facts discussed above are more or less universally accepted throughout the scientific community, for some reason this remains a hard sell for laypersons. This owes perhaps to the fact that we tend to feel very much as

¹³ The exception being acts which are deemed criminal but lacked any criminal intent or negligence.

¹⁴ In this context, I am defining environment as something which would include genetic factors, or in older terminology both nature and nurture, as neither can be pointed to as being truly self-originating.

though we make a lot of decisions which somehow express an innate ability to weigh things out and do whatever we feel to be best. However, if one really looks deeply at the decision-making process and trace out the supporting factors for each decision it becomes impossible to find any room for what we have historically called *free will*. Take for example your favorite color. Is this something which you can honestly decide to change on the spot, or is it something which only might change if you begin to associate that color with various things which are beyond your control? Even then, is this preference more or less just part of you? Our complex behavioral choices are even more difficult to work out the whys for. The urge to eat might for example send me searching my environment for food, perhaps in the context of contemporary society driving me to the refrigerator, the store, or a restaurant, but why do I choose *which* of these options? First there would be environmentally imposed limitations: what is nearby? What is open at this hour? What do I have the energy for? What am I craving? What can I afford? Do the environment and my other various limitations support my ability to satisfy my exact craving, or do I need to make a compromise?

For an ordinary person under ordinary circumstances something as simple as a hunger pang can lead to a cascade of little problems we must contend with just to initiate a plan of action. Now, what if something is interfering with some aspect of the process? What if for example we add to the complication that there is no money in my wallet, and no free food available? Or, what if my neurological mechanisms for putting the brakes on my impulses are damaged and there is plenty of food? What if I am on a lifeboat with one other person and there is only

one morsel of food? What if the only food available is something I find repulsive? Could any kind of punishment or threat of punishment influence these decisions and if so what does that actually resolve?

The Real Impact of Punishment

When behavioral scientists conducted experiments on animals in controlled environments, they found that they could *sometimes* teach aversion (getting the animal to avoid a certain object or behavior), by pairing the targeted thing (or activity) with a negative result. Up to this point, except for the fact that it doesn't even always work, this may sound like a partial win for punishment; however, experimenters found that in order for this to work, the association basically the behavior being discouraged and the negative consequence has to be *temporally related*, or in other words, a more or less immediate consequence to the action. For the animal to understand the relationship between the behavior and the punishment, it must be clear that the punishment is the direct- and *consistent-result* of the behavior. This is perhaps the weakest form of *behavioral modification*, and is known as operant conditioning, which was pioneered by B.F. Skinner at Harvard University in the 1950s (conditioning, 2014).

People, rather than being able to use our smarts to be able to work out the associations between a forbidden action and its potential consequences at some remote time, have been shown to operate in much the same way. Though we may intellectually understand the connection, we are actually *more* inclined to use our smarts to work out that if we want to do something-or put more specifically, if we are *attracted* to doing some action because it produces either

some good feeling, or some relief from a bad feeling, even if fleeting- and there is some risk of punishment if we are caught doing that thing, or in the case of addiction, some risk of bad side effect, or even death, rather than skip the discouraged action, we might take measures to try to avoid or soften the consequences of that action. Taking this a step further, we may even do things we *do not want* to do, feel morally disgusted by, or by which we are aware we will suffer in the long run for doing, if our desire for relief from some kind of discontent in a given moment is strong enough to overcome the better angels of our nature. People are highly subject to internal conflict, sometimes for the better- in the case of pushing ourselves to do unpleasant work to reach some higher goal- and sometimes for the worse-in the case of overriding our internal alarm systems to quench some *feeling* of need (even if that sense of need seems misplaced objectively.)

Worse still for the arguments in favor of punishment, when people *do* get caught in some discouraged behavior and punished, the parts of our brains which deal with emotional reactions to outside circumstances cause us to feel as though the punishment is associated with the *fact* of getting caught, *not* with the *act* we were caught for. And- because we are aware of the fact that when one is *blamed* or otherwise afflicted with social pain for some wrongdoing in this culture, the social consequences are typically long lasting or even permanent-when we are caught in some bad act, we are more inclined to protest our innocence than admit any fault. Many of us (but not all) can rationalize the larger connection, but what we inevitably will *feel*, no matter how smart or sophisticated we are, is that we got in trouble because we got caught, and will still know that the unavoidable

consequence of being seen as guilty by one's accusers, under the current social climate, is lol].g-term alienation.¹⁵ No amount of rationalization can stop these feelings. The *only* way a person can be made to directly associate punishment to an undesired action, thought, or impulse, is to make the punishment immediate *and* consistent, and ensure that the punishment is finite in time and degree. We—for the most part (not all of us)—are able to be conditioned to become averse to doing things which reliably produce negative results in a *temporally contiguous* manner. So for example, most of us (but not all of us), *will* learn quickly that literally putting one's hand to flame hurts, and will stop doing that (some will not or cannot stop) (Citation information unavailable). To this point, this means the person would need to be punished nearly one hundred percent of the time the action was performed, and the pain¹⁶ would have to recede in conjunction with

¹⁵ It is important to appreciate that much of our collective sensitivity and inability to *forgive and forget*, is related to particular ways of looking at human behavior that are embedded in our current cultural norms. Other societies both historically and on the micro level currently, demonstrate a much greater capacity to see a person's transgressions in context of a given set of events and conditions and are thus able to inflict temporary social sanctions which leave room for the person who broke the communal trust to regain that trust, or otherwise move on without enduring penalties (Davis, 1998).

¹⁶ It should be appreciated here that neuroscientific research has recently proved physical and emotional pain are both generally interpreted by the brain as *pain* and that *it* has similar responses that pain irrespective of the which kind it experiences (Citation information unavailable). This calls into question the notion that turning from corporal to psychological or social punishment were any less cruel, especially where emotional pain has more potential staying power and deeper repercussions (Citation information unavailable).

While any call for a return to corporal punishment should be seen as a step backwards, and clearly inhumane, as well as contrary to the bases of an ethical society, corporal punishment was at least, in some forms, finite and more readily measurable. Though, it should be appreciated that people vary greatly in pain thresholds and sensitivities—some in fact, though none have been known to live beyond their twenties, feel no pain at all— and as a result, even a given corporal punishment tends to be of variable levels of significance to the recipient, making it impossible to say that any two people can be given *equal* (even if identical) punishment under any circumstances—

the absence of the behavior. Worse still, this association in order to be durable, would have to be made permanently, as what behaviorist call *extinction* of a behavior (the point when the *habit* of the behavior seems to have stopped), is *not irreversible*. Any number of experiences in the subjects' life after so-called extinction can cause the behavior to resurface and become even more resistant to modification (Citation information unavailable).

The Peak-End Rule

Prisons work on the concept of locking people away for prescriptive periods of time. Unfortunately, what we now know about the impact of this strategy is deeply contrary to any sort of desirable outcome. One of the reasons for this is that it turns out that due to something called the duration neglect, in conjunction with the peak-end rule, pain—of any sort—is experienced as greater or lesser in memory based *not* on the length of time over which it is experienced, but entirely on what was felt at the worst moment—the *peak*—*combined with* what was felt at the end (Kahneman, 2011). It works like this; the amount of pain a person feels is felt in degrees from greater to lesser. When a person experiences pain, there tends to be some level of ebb and flow, wherein there are peaks and valleys in the severity. The peak-end rule works such that the memory of the overall intensity of any experience is averaged between the worst pain felt, and the pain felt at the end of the experience. In other words, all of the less than peak values *do not* factor into the memory. For example, if a person goes for a dental procedure,

and it is also well understood that circumstances themselves effect pain perception (Pinel, 20xx). Nonetheless, corporal punishment, while it may scar both physically and emotionally may not have the same tendencies inherent to emotional punishment, which might more readily lend itself to being a source of lifelong pain.

there will be some period of build-up toward the actual event of say root canal wherein there might be smaller pains, such as needle pricks for Novocain, followed by a ramp up period of initial drilling, and then a maximum spike wherein the closest contact is made with, or maximal pressure is applied to the nerve tissue. The minor pains do not form a part of the mind's assessment in narrative memory of overall pain felt, unless any one of them happens to come right at the end of the procedure. It turns out that if a person has such a procedure and is then kicked out of the dentist's chair in close proximity to the time of peak pain, that person will remember feeling more pain than a person who has an identical procedure, but then has a little more poking and prodding done, inducing smaller amounts of pain, toward the end of the procedure.

The initial experience of incarceration carries with it a substantial amount of pain. To begin with, there is the simple fact of being forcefully restrained which produces anxiety and frustration (Citation information unavailable), there is also physical pain associated with restraint devices such as shackles.¹⁷ Added to this there are on a highly variable basis-dependent on the individual and her

¹⁷ Note: some countries have replaced the pain inducing variety which are standard police issue in this country with a rubber variety which are as secure if not more so and non-pain inducing (Citation information unavailable). In fact, in this country the type currently used, while perhaps having certain minor conveniences for the person doing the restraining in terms of how they can be quickly applied, are considerably more painful to wear for extended periods of time than some types used in the 1800s which were rounded and had no hard edges. While there may be some basis for use of the quick restraint type in an emergency, in transport situations there is none, yet they are persistently used by Departments of Corrections to restrain transportees over durations of hours and even entire days. For anyone who has never been cuffed, or has been cuffed, but only briefly, when wearing these things for hours on end, the pain becomes torturous, it continues to build and nag at one for the entire duration, especially in the areas where there is bone.

circumstances any number of socially and psychologically induced pains which may come into play including humiliation, fear, anger and so forth. Next, there is—depending again on the personal psycho/social circumstances but also the duration—the potential pain of losses or estrangements, fust of material possessions, and then of social connections, livelihood or career, and so forth. Finally, there may be a loss of identity as these things gel and the person becomes resigned to the idea that her old life has effectively died, while her mind and body persist. But, if there is enough time spent behind bars, much of this recedes into memory prior to release. For that individual who has adjusted over a lengthy stay to the circumstances of prison, there is likely to be minimal residual pain associated with various aspects of the experience by the time it comes to an end. In fact, the prospect of *leaving prison* now might be a greater source of anxiety and fear than the ongoing circumstance. To be certain, some events are likely to be remembered as distinct miserable events, but a large number will very likely get chunked into the category of "when I was locked up". This has definitely been my personal experience, and matches the reports I have heard from my fellow inmates. Similarly, the reader, will likely recall, there is some general categorical memory most which allow us to make statements such as *High School was* (variously) *the best time of my life, the worst time of my life*, or what have you. The result being that the person who spent the most time behind bars will recall the overall prison experience with the least horror.

The irony which needs to be appreciated in the context of the exploration of justice issues is that the maximally effective prison sentence—presuming we are adopting the deterrent philosophy—would be the *shortest* one, and presumably

also the first one. Simply put, people who get shorter sentences will tend to recall the experience of incarceration as more hellish than those who have been incarcerated for lengthy periods of time.

One reason for this is the fact that the norm is that as a person progresses through the penal system, the punishments are typically reduced over the duration. One starts with the nightmare scenario of being stripped of one's possessions, ripped from one's environment, separated from one's loved ones, tossed into some typically cold, windowless, hard and ugly, often filthy confined space. They are then either ejected from this hell-scape back into their normal reality, or gradually acclimated to some less severe iteration of such an environment where they are able to live some semblance of a normal (albeit highly impoverished) day to day existence, and then eventually turned back onto the street. The former provided this was a singular experience and not a return trip-is more likely to remember incarceration as one of the worst experiences of her life. The later might very well have acclimated so well and regained so much relative comfort-owing to reductions in security restrictions as she is (in other contexts wisely and humanely) restored to a living situation which comes closer in approximation to life in society at large—that by the end of her incarceration experience the pain felt is near zero, or closer in any event to that individual's default day to day pain levels. In actuality, for prison to work as a reliable inflictor of pain, the leaving would have to be as bad or worse as the arrival, and time would serve no role in the equation.

To illustrate how the peak-end rule might apply to incarceration, an illustration might be useful. Let's assume that the average person would rate the level of

emotional pain of being incarcerated for the first time, on a scale of one to ten as an eight. This number is being assumed based on surveys which list this experience in this range in terms of stress levels, which are being equated here with pain [There was a list which rates stress levels for everything from death of a loved one to moving and a wide assortment of other stressors. I recall the number for being arrested, or put in jail as eight, which was on par with death of a loved one. This also comports with my own experience and that of people I have consulted in this environment re: their initial incarceration period.] (Citation information unavailable), (Author, 2020). We will also assume that this initial pain rate holds pretty steady during the initial six months of incarceration, meaning that during the first six months, the rating will remain steady at eight- and that any time during this period can be seen interchangeably as *peak* pain [There have been various reports, including interviews with a former New York state prison commissioner (I believe this was Martin Hom) turned advocate for prison reform observing that beyond about 6 months, people begin to become inured to the prison experience.] (Citation information unavailable), (Author, 2020). After this initial steady period, we should observe a general pattern of decline, wherein from peak, the level begins to subside on a curve over the following two and a half years- meaning that any exit point taken along this curve or thereafter can be seen as *end*.

For sake of simplicity I will illustrate this as linear function, though my guess is that it's more nuanced, perhaps a declining logistic curve,¹⁸ or more likely, as we

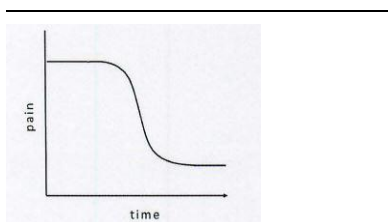
¹⁸ A declining logistic curve, showing a gradual decline, leading into a steeper one, which gradually levels off:

are people and tend to have our ups and downs from day to day, something more erratic.¹⁹ The linear equation which represents this problem algebraically is $y = mx + b$, where y is the number of months, and x is the amount of pain, b is the y intercept and m is the slope. In this case, the actual values would be $m = -1/6$, for all x values, we would subtract 6, since the sixth month is the starting point, or effectively 0, and $b = 8$, as that is where the pain level starts. Our result on a table would be as follows:

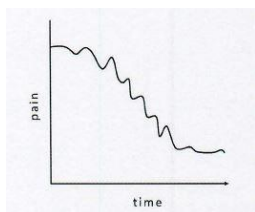
x	y
<1 to 6	8
12	7
18	6
24	5
30	4
36+	3

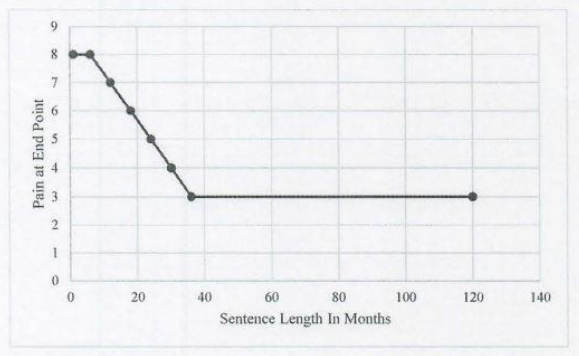
Looking at this on a chart it is something like this:

Fig. 1



¹⁹ A more randomly variable descent:





Applying the peak end rule, this means a person who spends less than 1 month to 6 months in prison recalls the experience as pure horror, an eight all the way. The 1 year incarcerated, has left with a memory of level of 7, $7+8/2=7.5$, still pretty horrendous. However, by the time, we get down to midway, the person who has spent a year and a half in prison experiences perhaps a full point drop in the remembered pain of the experience, and the person who has spent 3 years is all the way down to a middling 5.5 overall memory of unpleasantness.

The above is obviously a somewhat imperfect representation of the situation. To begin with, the peak-end effect as described by Kahneman assumes a relatively finite experience, such as a dental procedure. In that context the pain is more or less a singular event. In the case of incarceration, I would still however contend, as discussed above, that the experience gets lumped together as a single chapter in memory. The duration of the pain itself however, and other ongoing stressors associated with incarceration might nevertheless have more lasting negative impacts associated with duration, as they would tend also to generate long-term changes in one's stress hormone levels and so forth, leaving the subject less healthy, or more debilitated after a lengthy prison stay, and thereby, as in other respects, more of a burden on society. Nonetheless, the above presents what is most likely a more or less accurate picture in terms of felt pain. The key takeaway

being that the sense of having been punished in *narrative memory* may be greater for the person who has had less of it, while the underlying debilitating impacts would still be likely greater in the person who has had more. It would be interesting to follow up with survey data to find out how the reported interpretations of people's incarceration experiences vary in correlation to the amounts of time incarcerated.

In my own anecdotal observations over my various years behind bars what I have seen and heard does seem to strongly support the above analysis. To begin with, I can say that my first year or so behind bars was by far the worst, and going back over that time line in memory I recall that the first several, maybe six months were the worst of those, the first couple of weeks and days worse than those, and the initial arrest and events immediately following, a nightmare-like scenario, many details of which are burned into my memory. What I have observed and heard stated by others over the years seems to indicate that this is more or less universally how people experience incarceration. I have also noticed that, for the most part, those who have spent anywhere from a few days to a couple of years behind bars are the ones who are most deeply affected by the day-to-day discomfort and speak the most about getting out. Conversely, those who have spent significant amounts of time behind bars, on the order of decades, do not seem too phased by the day-to-day inconveniences of institutional life, and while they may express hopes around getting out or the things they might do when they get out, they also tend to express anxiety about re-adjusting to life "out there". Those who have spent multiple stretches of time behind bars seem to be

completely inured to the experience. Prison to them is often expressed as a fact of life.

A handful of people who have spent a lot of time behind bar-particularly addicts, and including among these some sex addicts who have turned to *directly* harming others in satisfaction of their impulses- will openly discuss either resignation to the belief that they will inevitably come back to prison within a short time of release, because either they lack the life skills needed to function outside of the institutional environment, or because they fear that the system is stacked against them and designed to ensure that they will return. An even smaller handful that I have met openly express their intention to get out and deliberately do something to ensure that they come back. This does not to my thinking describe a deterrent.

Deterrence: The Failed Hypothesis

While the prospect of losing everything might appeal to the imagination of an ordinary person as a something to avoid at all costs, and while a brush with something like that might be enough to scare a certain kind of person straight (though there isn't much evidence to support that even this works very consistently on any demographic), the hard reality is that for people who wind up doing the worst sorts of things to one another, prison is just some abstract thing off in the back of their mind somewhere that probably doesn't much influence their behavior. The problems with using threats to keep people in line seems to me very clear, yet somehow, the idea that these tactics *should* work are very persistent throughout human societies. It seems to me that most of us don't really walk around thinking that we choose not to do terrible things because of

the threats of what we face if we do them. The reason we do not do bad things is that our bad feelings about doing them outweigh our desires either to do them or for the results that doing such things might produce. The problems happen when the equation tips the opposite way.

What does work to keep most people from causing harms to themselves and others is very much the opposite of threats and violence, it is *prospects* and *nurture*. People who function well in society are people who are able to deal with their own stresses in healthy ways and are able to cooperate with others to achieve both mutual and personal benefits. Jails and prisons, and tossing people into such places for arbitrarily prescribed periods of time do nothing to make up for the lack of emotional and interpersonal skills required by our society for one to stay out such places.

Socially inflicted pain, or shaming, is also not at all useful to this endeavor in our current cultural context wherein those involved in the administration of it lack the organization and discipline that would be needed to ensure that it is finite and consistent. For punishment to work in any reliable way, we would need some kind of guardian for each one of us, following us around, checking to ensure we were following all the rules and then punishing swiftly and consistently at each infraction. The East German Democratic Republic was the only society to ever have come close to achieving this with its secret police (Stasi, 2014), which employed as many as 2 million people to spy on 6 million of its citizens. To most tastes, this produced a significant number of undesirable side effects, for one a complete lack of privacy, and along with that, a strong tendency toward governmental overreach and overreaction to the slightest perception of potential

threat to the imposed public order. And, it still did not fully eliminate the behaviors the state was trying to discourage. Nonetheless, in spite of any basic aversion the majority of us might express to such things happening here, there does seem to be a strong trend toward this kind of solution, as surveillance technology such as publicly located security cameras, drones enabled with super-high resolution cameras able to monitor the movements and track the locations of entire cities full of people from the sky,²⁰ threat prediction algorithms and convenience technologies such as location tracking GPS enabled smart phones, On-Star™ enabled cars, social media behavior tracking and projection have been growing ubiquitous and ever-more sophisticated. Even if we accept the effective

²⁰ A PBS documentary (need date and title) aired in 2018, interviewed people involved with an experiment with such technology conducted in Baltimore Maryland by the police (without citizen approval or awareness) in the previous year. In this documentary, the purveyors of the technology demonstrated how it was used to look back in time, zoom in on an area where a robbery had occurred, and then track the suspects as they moved throughout the city and were subsequently intercepted by police who were able to pinpoint their current whereabouts through these means. The company spokesperson boasted that this technology could be used to zoom in at high enough resolution to identify people's facial features, or even the text on something they were reading in-hand, but that their company policy was not to go that far. At higher resolutions, this technology could also be paired with facial recognition, to allow identification of suspects. Whether or not infrared cameras of such high resolution currently exist was not discussed, but one can imagine that, if not now, perhaps soon, that the police could be equipped to watch everyone in the supposed privacy of their own homes at all times, and that artificially intelligent software could be utilized to zero in on people whose movements suggest illegal (or otherwise suspicious, or whatever the current administration deems dangerous or undesirable) behavior, at least in public spaces, and potentially, only if they choose not to ignore them, private spaces, and dispatch officers (or drones, if or when that becomes legal to do, on domestic soil) to the scene of the crime (or potential crime). This is not dystopian science fiction; it is highly plausible today that things could be done this way today, or in the very near future. We (more or less) have the technology. We don't even need the manpower of the Stasi; however, we persist in constantly expanding the ranks of our law enforcement agencies, even as their means for crime detection and efficiency increase by leaps and bounds.

termination of our rights to privacy, we might consider what happens when we become too reliant on some outside agency to police our actions. Like the child whose parent hovers over their every decision (or the person with a mentor cited in the footnotes above), if we become too dependent on others to make decision for us, we can become incapable of working out what should be done in a given situation for ourselves. Worse still, we can become defiant, taunting our sitter to react in order that we might feel some sense of agency.²¹ In spite of the evidence

²¹ In the author's own prison experience, he has met numerous individuals, who when residing either in solitary confinement, or in a cell within a regular General Population (GP) cell (the designation for those who are not in solitary confinement), will, on occasion (sometimes motivated by things such as bad news from their loved ones, sometimes out of reported boredom or anxiety, occasionally out of anger towards the conditions of their confinement or treatment endured in their dealings with officers or other institutional officials), choose to "fight the move team", which is to say that they will engage in some act of open defiance, such as putting a mattress in front of their door to block the window so that officers are unable to look in when doing their rounds. This then triggers a "use of force" response by officers, who will typically come to the inmate's door, in groups of 5 or more officers, and demand that the inmate stand-down, or come to the door with his back turned and hands behind his back such that they are able to be cuffed through the door's feed slot (which is like an oversized mail slot on a household door). Assuming the inmate refuses to cooperate (which is the point of the exercise from the perspective of the inmate), the move team will discharge pepper spray on the prisoner, often exhausting multiple canisters of this noxious, pain inducing, sometimes physically damaging substance. In some cases, when the inmate still refuses to cooperate (which again, is part of the ritual), harsher chemicals, such as chemical tear gas may then be used. When the inmate still refuses to cooperate (again part of the ritual), the move team, who are dressed in body armor, provided with gas masks, helmets and billy clubs will have the cell door opened, move in, beat the inmate into submission, and then, in many cases, strap the inmate into an immobilizing chair (which may not allow even head movement, and has every appearance of a mediaeval torture device), in which he may be kept for some indefinite period of time until security can be convinced that he is done resisting, at which point he will return to a solitary confinement cell, oftentimes naked, with no items in the cell, including a mattress.

Similarly, the chair (as I have heard this restraint device called) may be used to manage other unruly, but less overtly violent inmates, in cases where the inmate is deemed to be a potential active threat. Perhaps most disturbingly, inmates who have expressed an urge to commit suicide (either verbally, or by taking actions to harm themselves) may be put on "fire watch", wherein they are kept naked in a cell, in some states with no toilet and

highlighted here and the vast body of readily available research which refutes any basis for such beliefs, some of us might feel that, in our *personal experience* (i.e. subjective, anecdotal experience, which fails to account for that we might only notice the things we are looking for, known as *confirmation bias* in research, or that our experiences may not be representative of the norms, or what statistics calls an insufficient sample size), punishment *has* worked. This sentiment however discounts the possibility that the punishment which we associated as having a positive impact might have been coupled with other things that might have affected the outcome, such as other aspects of the situation under which the punishment was inflicted which might have aroused feelings of empathy, remorse, personal responsibility, or already embedded beliefs which arose from previous experiences. Also, this kind of argumentation would tend to assume that those who commit crimes were not punished adequately for smaller infractions in the past. This however does not bear the weight of the evidence, which shows that those who are punished the most in youth are actually over-represented among those most likely to go to prison when they grow up.²² This relationship proves to be direct, it is not that the unruliest kids get punished more *and* wind

shackled to a ring on the floor in the center of the room, wherein, if they need to relieve themselves, they are required to urinate or defecate on the floor, which is hosed down periodically, but on a schedule which allows for the inmate to live in filth for hours on end between cleanings. In some states, the inmate under fire watch is monitored 24 hours a day by a fellow inmate whose job it is to sit and watch them through the cell door and report any problems to a corrections officer.

²² In this context it is also interesting to note that the famed scare tactic programs of the 1980s which brought school children on field trips to prisons panned out the opposite of what was hoped, in that far more of the children who participated in these programs wound up in prison later in life than the groups of demographically and behaviorally similar children who did not participate in these programs (Citation information unavailable) [article in Scientific American Mind from perhaps 2014].

up in prison, but that regardless of whether or not a given child is unruly, severity and regularity of punishment correlate directly to later legal entanglements, especially violence related ones.²³ None of this is to say that being overly permissive or lenient with children will keep them out of jail later in life, rather it is to say that it takes more thought to respond wisely to bad behaviors than simply meting out punishments.²⁴ To illustrate these points more personally, let

²³ A well-known example of this comes to us from the sociology literature. A field study conducted by William J. Chambliss, first published in 1973 and then revisited in 2014, followed two groups of high school children into early adulthood. The two groups were dubbed by the researcher as respectively the Saints, and the Roughnecks. At the outset, the two groups behaved in more less the same ways, causing trouble, stealing, drinking, destroying property and the like. However, the group identified as saints came from well to-do families, were well-spoken and came across as respectful of authority whenever confronted with their misdeeds, as a result, they were treated with kid-gloves and given little if any punishment. The Roughnecks conversely came from working class backgrounds. They spoke like street kids and when confronted with their misdeeds, came across as being disrespectful of authority. They wound up being punished more severely, more regularly, developing a generally more adversarial view of and relationship with authority, and eventually began running into greater and greater legal troubles, cycling in and out of jail; two of them eventually committing separate homicides (Henslin, 2014). While there are obviously a great number of additional factors involved in what led to the different outcomes of these two groups, especially in the socio-economic sphere, one of the clear takeaways is that these two groups were treated very differently from each other by people in authority. One group was expected to do well from the outset, and their faults in turn were brushed off. The other were expected to be trouble from the outset, and their faults were amplified. Labeling was one key factor which was identified in this case. However, the punishment cycle itself also played a clear and significant role in the outcomes observed.

²⁴ Child behaviorist do however suggest that many bad behaviors should be ignored (as long as they are not overly destructive or dangerous) on the basis that many of these are rooted in attempts to get attention (whether it is good or bad, kids crave attention, and so do many adults), and that rather than attend to each undesirable behavior, caretakers should focus on the wanted or good behaviors and rewarding these (mostly through positive emotional responses, not material bribes) (Citation information unavailable). Furthermore, reacting to every transgression can lead to a reduction in the child's sensitivity to such reactions, and even to overtly defiant behavior aimed at attracting such reactions in order to demonstrate to the caretaker that such reactions or sanctions will not work.

us try a thought experiment toward understanding how punishment might *lead* to crime. First, imagine that you have been raised in an environment where you are punished regularly for things which seem perfectly normal or even good to you (a situation which is not uncommon in households where the people in charge are lacking in certain relevant aspects of education or perhaps suffered abuse and humiliation in their own upbringing). Say for example you were sent to the store to purchase some grocery item and on the way you were mugged, or otherwise lost the money and were unable to complete your objective. Upon your return to home, empty-handed, your parental figures are unwilling to listen to, much less accept your story and either physically hurt you, ground you, or otherwise do something which hurts.

One can easily see how in such a household it would be unwise to let your failures-even ones beyond your control- be seen and why they might need to be concealed. Going a step further, let us imagine that you might be punished for things as arbitrary as how you tie your shoes. There is no limit to the strangeness and arbitrary nature of what might happen in an abusive household, and it can be understood in such a light how a person growing up in such an environment might begin to do things that are even worse than the things they fear punishment for in order to avoid such punishments. In the case above, one might imagine that the child who was mugged on the way to the store might decide to steal the things he or she was expected to bring home, rather than face punishment. At an adult level, one could see how this could translate to for example doing some crime to cover rent, in order to avoid eviction. While the latter could be argued is more a question of a failure in responsibility, it can be seen that the pattern might

come from some deeper dysfunction, rather than some innate recklessness, or otherwise that the circumstance might arise in the context of credible causes for desperation.

In other cases, this idea, instilled by authority, that people *should* be punished for doing bad things, could easily translate to a justification of violence *against* such a person, say for example by the property owner who is being stolen from. In terms of encouraging crime more directly, this idea that people *should* be punished for doing bad things, could easily translate into the idea that violence is the best way to get respect, or any number of emotional or tangible needs met. Taking this to its natural conclusion, we must come to terms with the fact that most violent crimes center on the perception of the person who has done the harm, that acting out violently, in the moment in which they acted, was their natural, if not just response to being wronged by another. In any of these scenarios, punishment becomes the *basis* for bad acts.

Thought experiments aside, it has been found, that a great deal, if not all people who grow up to commit violent crimes either endured violence during their youth or saw others employ violence to get what they wanted,²⁵ or to get back at

²⁵ While there is considerable public perception that violence in the media and video games has a similar effect. The evidence suggests that only real violence in real life has such effect. Generally, people seem to be able to compartmentalize the kind of violence they do in for example game play as being appropriate to fantasize about but not to actually do. While there are some statistically small number of people who do violent acts in real life which do certainly seem to copy behaviors reported in the media, such as is made evident in the various incidents of so-called copy-cat crimes, or those who might mimic scenes from movies in the details of the performance of their crimes. The people who do these things are typically also those who were exposed to real violence, or have other already manifest predispositions toward violent behaviors of their own. The indications are that prior to

someone who did them a bad turn. Furthermore, when the punishment is inflicted via the justice system, the outcome is equally predictable. Kids imprisoned or put on probation grow up to commit more crimes than their counterparts who were given more constructive attention to the same kinds of infractions in youth. Worse still, kids whose *parents* are imprisoned are more likely to wind up in prison themselves later in life.

Bad childhood experiences are not however the only contributor to violence, there are also things that can go wrong with the wiring in our brains which either prevent us from being able to feel empathy with, or compassion for other people and which can contribute to our likelihoods of abusing one another.²⁶ It has been found that in *one hundred percent* of all of the serial killers studied at this level to date, that each had profound brain damage or deficiencies in a specific area called the orbito-frontal cortex, which is located just above the eye socket, and that they

their acts, they were already primed to do something destructive. What they copy is the style of the act picked up from media, not the idea to do something tremendously destructive to begin with. The impulse and the follow through are actually rooted in what they have experience in real and personal terms.

²⁶ Though it should also be appreciated that a significant portion of the harms people do to one another stem not from indifference to the plight of others, but rather from the sense of overwhelming need or desire. It should be noted here that the distinction between need and strong desire is something that we may be able to distinguish intellectually, but which the brain itself has difficulty separating, thus, addictions, impulse control disorders and so forth. Furthermore, it has been observed that there are two basic motivators for crime, economic and psychological. The first centers on the perception of the person doing the harm that they could be put in a better condition by doing some act. Some portion of this might revolve around greed or prestige, but it is likely that most of it revolves around actual unmet needs (and in this light, the presence of greed or need for prestige are also indicative of unmet emotional needs). The second category is more complex and includes the above-mentioned things such as addiction, impulse control problems (often stemming from organic brain damage or deficits), delusions, hallucinations, and so forth (Goleman, *Destructive Emotions*, 2008).

were exposed to profound violence as children. While there are people who have one problem or the other and do not become serial killers, a particular combination of such factors seems to lead directly and perhaps even (somewhat) predictably to that consequence.²⁷

All of these things taken aside, there are those who would argue that punishment is an end unto itself, that the point is not so much whether or not punishment corrects bad behavior, but that it satisfies the bad feelings of the person who was harmed. This goes hand in hand with the idea of what some call the Leviathan (Pinker, 2013), the notion that in a democratic society, the state is given the sole right to act violently. This resignation of the right to personal vengeance allows the state to be the avenger and is credited with a major part of the reduction of interpersonal violence. The chief problems with this theory are that while there

²⁷ Likewise, not every person who grows up in a dysfunctional household will turn to crime later. It is combinations of factors that lead to these sorts of results. Some of these may be innate to the person, but without the environmental triggers or influences which exacerbate them, the problems are unlikely to arise (Citation information unavailable). It has been observed for example that one of the problems in twin studies, wherein two genetically identical people who were separated for adoption at birth, while there are a multitude of similarities typically found between the two people which are suggestive of genetic bases for preferences and behaviors, there is often the fact of similarity of upbringing which is taken for granted (Citation information unavailable). One example pointed to in the literature is the typical news story of male twins separated at birth who grew up to get into the same profession, develop the same tastes in cigars, marry women with the same name as each other and grow similar mustaches (Citation information unavailable). The problems pointed out by the researcher are that the two men grew up in the same area, with parents with similar socio-economic backgrounds, in places where certain trends had taken hold (such as mustaches, or cigar smoking), and wherein certain names were common (as was the case with the names of their spouses). The researcher pointed out that if however, one had been raised by the queen of England and the other a Zulu chieftain, they would likely grow up to have far less in common and may not even have both liked cigars much less the same varieties, nor had the option of marrying women with the same name, nor been as inclined this way or that to grow similar facial hair to one another.

may be research which confirms the notion that some people actually *do* feel better when they know that the person who harmed them or their loved one—or even a stranger—is being punished, there is no evidence that it helps to reduce the likelihood of a person being harmed by another in the first place. As has been demonstrated above, punishment does not correct the causes of destructive behavior, worse still it may deepen or further complicate them. The other problem is that it sends a mixed message to the public. On the one hand, the state says to its citizens "do no harm", on the other hand it says "*or else* (we'll do harm to you)". This, do as I say, not as I do, style of guardianship does not work in parenting and it does not work in statecraft. While an increasing number of people have resigned themselves to this *threat*, and agreed not to take the law into their own hands, this method has done nothing to elevate the kind of thinking which leads to violence in the first place. Those of us who subscribe to the notion that "rather than take matters into my own hands I will call the police." Have merely shifted the *tool* they use for aggression. Those who feel that the police will not champion their cause too often still take the law (sometimes that of the streets, sometimes that of personal honor) into their own hands, and as a result, violence is perpetuated.²⁸ So, while it is possible for a person who is committed to the notion that violence *is* the answer for complex social and personal problems to believe that criminals should be treated harshly, it is not consistent or honest to hold the idea that this person or that, should not have

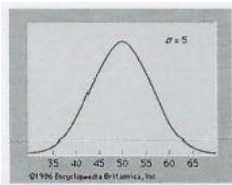
²⁸ It can be observed that much of gang violence is based on so-called street-justice. Gangs enforce their own codes of honor; likewise, they may regulate trade (primarily black market and grey market, but sometimes all local business), act as brokers of insurance (albeit sometimes against the threat of their own destructive actions), or provide private security services and so forth.

behaved badly, and therefore should in turn be treated badly. That is simply bad medicine. It ensures that the legacy of abusive behavior is stretched out over a greater length of time and comes to harm more of the undeserving people we claim we are trying to protect with the rule of law. Rather than continue to sacrifice all of our dignity and submit to the potential for abuse which a punitive surveillance state tends to devolve to, for the sake a false sense of security, we could make moves toward addressing the underlying problems which lead to the (actually statistically relatively small)²⁹ tendency for some of us to hurt the rest of

²⁹ While the television media since around the 1960s has grown ever increasingly focused on reporting an ever-more inclusive spectrum of the sorts of crimes which occur on a daily basis, the actual trend observed throughout the country (in fact throughout the world) is that both violent and property crimes have been in significant decline throughout human history, and particularly throughout the last century, and more still, throughout the last few decades (Pinker, 2013). Crime rates do fluctuate (World Almanac, 2016), and there are hot spots, such as the much reported problems in a small part of Chicago over the past few years, wherein homicide rates have risen. Overall however, the trend continues downward. Research on the causes of this demonstrates that tougher law enforcement and better policing are relatively insignificant factors in producing these results (Kahneman, 2011). In fact, some of the most heavily policed areas are the ones where crime rates have escalated, and often in apparent reaction to the increase in police presence and harshness of punitive measures employed. Perhaps, due to the perceptions (or realities) the presence of an adversarial force in one's home area which comes with such solutions. Fighting fire with fire seems to be a deeply imbedded reaction which we reach for when we feel threatened, but that does not mean that it is a good reaction. One thing which is certain is that all things which can be looked at through the lens of economics, including behaviors, have certain levels of optimal effectiveness, beyond which they cannot be pushed. In the case of policing, even if we want to ignore its inbuilt self-defeating aspects, can only make a positive difference toward effecting the outcome of crime reduction up to a certain number of officers on the street. If we look at crime reduction as a product of policing, then we can observe that where there are no police on the street in a given area there is a certain amount of crime on average. When we introduce one police officer, the number of crimes falls very slightly (that officer just can't do much alone), adding a second cop, the rate of impact is higher than double the effect of the first, another one does something more, then at some point the effect of reduction by adding one more unit begins to become steady. This pattern continues for a while, wherein by introducing one more cop, there is a corresponding drop in the crime rate. Then, just as you would see in a factory producing a product, there is a point where the amount of change produced by introducing one more

unit begins to flatten out, at the peak level, adding one more cop makes no statically significant difference to the crime rate. Then, as you continue along this line, according to a fundamental law of economics, which is observed in all situations wherein some process is used to produce some result, called the law of diminishing returns (diminishing returns, 2014), adding one more cop at a time, the opposite begins to happen, the crime rate actually begins to climb. There is actually some point where the number of officers on the streets could be high enough that the impact on the crime rate would be the same as if there were none (Kahneman, 2011). When the results of the many real-world chance experiments have occurred the results, if looked at on a graph tend to play out along the familiar bell-curve pattern seen throughout nature, as seen in figure one below:

Fig 1: A normal probability distribution with a mean (μ) of 50 and a standard deviation (σ) of 5. Source: Encyclopaedia Britannica Ultimate Reference Suite Version: 2014.00.00.000000000



The specific reason is somewhat speculative, but it can be gathered that there is some combination of factors within this arrangement which includes the fact that when there are too many officers for the number of people they are charged with serving and protecting, they wind up idle and, as the saying goes, "idle hands do the devil's work", meaning there is some increase in corruption which contributes either directly or indirectly to increased crime. Also, as suggested above, overly policed people, might tend towards increased hostility toward police and their mission of stopping crime in general. Whatever the reason, policing can definitely be overdone, to the point of being as damaging as its absence. Beyond this, as suggested in the discussion above, when compared to those things which actually address the underlying problems which policing responds to, policing itself contains within its tactics perpetuation through example of the basic impulses which it is meant to address.

The main factors which have been cited by researchers as the apparent underlying causes for the reduction of violence are improved education, improved mental health (though we still tend to stigmatize overt mental health disorders, jail people for mental health related offences, and ignore some of the many subtler forms of mental dysfunction which have been historically seen as personality quirks or even signs of greatness [for example the corporate or political leader who is ruthless, self-centered and manipulative (Beauchamp, n.d.) , (Gamble, 2019)]), improved material security (fewer people go hungry today than in previous times, and the trend toward improved base status continue albeit much slower than they have the potential to do if we act with more determination),

us. To do this, we need to look at how human behavior really works, and what really works to deal with the destructive aspects of that. *This* is far different than resigning ourselves to the *false dichotomy* which says that we must choose between being tough on crime and being lenient. We need to work smarter, not harsher.

Human Behavior

To be clear at the outset, I will not be getting too far into what is or is not desirable behavior. What a given society or community finds right or wrong for people to do, and to what degree, is something which is highly variable. Certainly, *correction* of human behaviors, can be a pretty sticky subject. The PCJ model, rests on the concepts of nonviolence and helping people function healthily and in-community with others. How specific communities want to fine tune that is beyond the scope of this paper. To be clear, I believe that PCJ must aim to prevent people from tangibly harming each other, whether that is on a physical or material level, and probably also should aim at least to mitigate or lessen the intangible psychological sorts of harm. I will also assume that most of us can agree that there is value in encouraging people to put others' interests at least on level with their own, if not perhaps ahead of their own, especially wherein harms have already been inflicted.

We will also assume that dealing with addictions in some meaningful way is a worthy goal. Whether this means aiming to make all addicts non-addicts, or

and a greater reliance on cooperation between groups and individuals (while capitalism has some aspects which may encourage selfishness, markets have a strong reliance on cooperation) (Pinker, 2013).

helping them to simply function better in community and work out what they want to do is debatable, but I would tend toward the latter. Other sorts of things which might find their way into law I am choosing to leave out of this discussion. Behaviors, or customs communities believe need to be honored may or may not have a place in PCJ, this is something which will have to be looked at more closely by each community. It is my hope however, that any decisions made in this area will remain in harmony with the basic principles of PCJ and in-line with the spirit of documents such as the US constitution and the Universal Declaration of Human Rights (Universal Declaration of Human Rights (UDHR), 2014).

The above points acknowledged, the conditions and events which can *lead to* various kinds of behaviors—*good or bad*—are perhaps best understood through the model used by behaviorism, known as operant conditioning, which comes to us from Harvard researcher B.F. Skinner, who discovered its workings in the 1950s. Under this model, we are looking at what *reinforces* a given behavior (conditioning, 2014). What has been shown in countless experiments is that a behavior which reliably produces a given result, near to 100% of the time, is relatively easy to modify, for example, if one is accustomed to getting water from the faucet and then one day the faucet stops working (aside from calling the plumber) the person is able easily to *adapt* to the idea that they must go elsewhere for water and will not keep trying the faucet (until its fixed). In short their behavior is changed.

The most difficult behaviors to change are those wherein the operant (behavior) produces *inconsistent* results, i.e. producing either *rewards* (e.g. with the faucet above, clean water) or *punishments* (e.g. sludge) *inconsistently*. This is most easily

appreciated in trying to assess why slot machines are so addictive. Each time a person plays, there is some chance of a win, and a (more likely) chance of a loss). This keeps it enticing, and keeps the person trying, the potential for a big win, makes the (perhaps much greater in accumulation) gradual smaller losses acceptable-in greater or lesser degree-to a given player. While in the lab, Skinner was able to engineer results to change behaviors, in real life, *the environment* is not so cooperative, and that is why the only place for real wiggle room is in developing an alternative behavior (or operant) to put into action when a given unconditioned stimulus (the slot machine in the above example) presents itself. In short, the would-be player—if she wants not to play—must *do something* other than play, perhaps, turn around and walk away, but if she is stuck in the room with a pocket full of tokens perhaps, this person needs a much stronger *replacement* behavior to distract her from the urge to play the slot. This is the way that all the successful behavior modification models have come to settle on as being the most effective strategy (Duhig, 20 12).

One might like to imagine his or herself immune to such conditioning, but all of us experience it, without probably noticing or knowing what it is. For example, the change in feelings one gets in anticipation of a pending good or bad event. The elated anticipation a child might feel on the night before Christmas, or the nervousness one might experience on the eve of a test, on a first date, before a job interview, a public appearance, or a day in court are examples of these. Each of these, under the foundational Pavlovian model of behaviorism (which Skinner's model builds from) is an example of an unconditioned response (UR) to either

some kind of stimulus (US), or conditioned stimulus (CS).³⁰ Our responses to these can be wide and varied and they range from physical reactions—sweaty palms, hairs rising on the back of the neck, salivating in anticipation of a tasty treat, butterflies in the stomach a headache—to complex behaviors (perhaps as much motivated by subtle physical reactions as the outside stimulus)—reaching for a drink, your wallet, the door, a gun. We can learn to live with these feelings and not be overwhelmingly controlled by them, but we can't wish them away or otherwise decide our way out of them. They are fundamental to how we make decisions (Damasio, 1994). And, beyond these, we each (excluding those of us with specific types of profound brain damage) have a host of subtle, but measurable stimuli to which we respond automatically. We identify these responses in everyday language as likes, dislikes, loves, hatreds, and so forth.

Our preferences are therefore a big part of what goes into what we call a decision. The moral part, which many of us take for granted as either a basic quality of a person, i.e. their essential goodness or meanness, or their adherence to a given moral code, is also based on some set of environmentally or socially presented stimuli and how each of us react to them at an automatic level, or that is, as our *responses*. Somewhere in that mix, there is a lot of complex learning going on. These environmental cues, and our hardwired reactions to them,

³⁰ The distinction between these two sorts of stimuli is basically irrelevant to the current conversation, but in the case of Pavlov's dog, the US would be the food, and the CS would be the bell. Both acted as environmental cues for a pending reward (consumption of the food). The things different models call triggers, or cues are simply the various instances of US and CS offered by the environment without regard to the motivations that put them there. We could say, in the case of a cigarette company, the cigarette is the US, the package or add is the CS, but either of these, or various other things which make us think of these are cues/triggers.

explain our impulses. Our behaviors (operants), are our *routines* for dealing with our automatic reactions. Bad feelings generate responses which aim to make the bad feeling go away, good feelings generate responses which aim to intensify make or the good feeling stay. We cannot do much about those basic impulses, they are related to the same fundamental ones which keep us alive.

Most of us have some capacity for resistance to impulses, this is perhaps why some find the addictions of others so hard to comprehend. The problem is that this resistance, what we call willpower, works something like a muscle (Duhig, 2012). We each have some variable amount to begin with, but whatever that amount, like any other strength related capacity, is finite. The more it is taxed, the more it runs down in a given set of circumstances or over a given day. It does respond to something like a workout program, it is possible to improve one's ability to resist impulses, but nobody can resist all impulses all day, otherwise, as in the case of water, we could easily put off drinking it for something we thought was more important and then drop dead as a result. This is perhaps why addictions are so tough, they hijack our survival mechanisms.

Another more recent model for looking at these things comes to us from UC San Diego Larry researcher Squire in the 1990s. His research uncovered the patterns which underlie habit formation. In this model, there is some kind of cue from the environment or the social sphere, which after some period of learning wherein the subject responds to that cue in different ways, a routine is developed toward attaining some reward. As long as there is some apparent connection between the cue and the reward, and a sufficiently basis for craving the reward, a person will tend to develop some routine to get that reward. These patterns become our

habits and explain most of what we do on a day-to-day basis, from brushing our teeth, to driving to McDonald's, to going to work, to robbing someone for money. Arising from this body of research we find what has been dubbed the Golden Rule of habit change, which is that you cannot extinguish a bad, you can only change it (Duhig, 2012). So for example, a person could learn to change from smoking cigarettes to doing pushups, or modify their career path from robbery to something more socially acceptable. No matter which model we chose to examine these things, the conclusions come out the same.

To change our behaviors in meaningful ways—ways which align with begin fully onboard with the changes and not just those which suppress taking action on some desire in order to avoid a bad consequence or allow time for planning to avoid detection (and thereby avoid the consequence)—we need to actually *replace* the operant/routine/behavior whatever you want to call it, and to do that, we need to be onboard with making those changes, or they won't take. To do that, we have to *want* to change. Provoking that desire within a person who is not seeing the need would have to be the first order of business in anything one might venture to call corrections.

Once the desire to change is there, change can happen. This takes work, but it is in *most cases* doable. The reason it is not *always* doable is that most of our impulses are central to or hijack mechanisms related to the workings of the body, for example, one will never get rid of the impulse that we call thirst, at least not as long as our brains are mostly functioning, nor, short of the introduction of an intravenous tube, we will find a behavior which suppresses our desires to drink water in response to that impulse. However, as a counter example, the impulse to

drink *alcohol*, can literally be taken away from the brain surgically- though it is important to recognize how deeply ingrained this suggest the habit can be- and in conjunction with this, the other behavioral components which makeup the drinking habit can be changed through therapy and effort (Duhig, 2012).³¹

Nonetheless, it is to be certain that not all people will be on-board with all changes, no matter how apparent their need is from the outside. Also, to be certain, not all people can muster the strength to make the changes they would like to make all on their own. These things acknowledged, we are getting better at working out what can be done to better encourage people to make changes that the social order requires, that health providers recommend, or that they themselves recognize that they need a helping hand in achieving. Sadly, we are rarely applying this understanding to helping people within those segments of society where it is most needed. This is much of what PCJ would aim to remedy, in its initial phases.

How changeable each individual is in respect to her responses to given stimuli—assuming she is on-board with such changes and is given all the right kinds of tools, influences and assistance—so far, still looks to be variable, but the success rates for good treatment programs continue to climb. Furthermore, as is

³¹ To be clear, I am not advocating that we should tamper with people's brains to change their behaviors, at least not without their express consent. That said, this has been done as mentioned above. In these cases, however, it was found that while the brain mechanism directly associated to the impulse to consume alcohol can be interrupted by the placement of an electrode which actively interferes with this function, the other forces within the individual which drove him or her to drink were not affected, and so without therapy, the person would still wind up drinking.

demonstrated by the millions of people who *do not* engage in some given behavior which some other number of people *do* engage in under similar circumstances, most of our behaviors are probably subject to modification.³² The

³² Contrary to the earlier belief that the human brain stops changing after a certain age, a growing body of research indicates that it is capable of rewiring itself under a wide variety of conditions. This so-called *neuroplasticity* is what allows a person to learn new skills, recover from a stroke, increase her or his capacity for retaining certain kinds of information and so forth, throughout his or her adult life. The areas responsible for putting the brakes on destructive impulses or even learning to empathize with people or develop compassion for others, where this capacity seemed previously to be absent (as in the level of being a character flaw, or potentially dangerously anti-social trait) have been demonstrated to be among the features of brain function which are responsive to neurological change. This kind of change can occur in both directions, as was already noted historically in cases such as the famed case study subject Phineas Gage discussed above.

On the opposite end of the equation, it has been shown that people who practice mindfulness meditation develop stronger connections between their prefrontal cortices and central (emotional reaction and impulse dictating) areas of their brains, and, along with these changes, become better able to resist impulses (i.e. in the case of addictions or other complex behaviors). Furthermore, it has been shown that increases in brain matter, interconnectivity between brain areas and changes in corresponding *pro-social* behaviors and reactions have resulted from activities such as mindfulness and other compassion building practices. Researchers have indicated that even psychopaths respond to treatment in ways so significant that (outside of any social reaction against so doing), they could be rehabilitated to the levels of conscientiousness which would render them harmless (Goleman, *Destructive Emotions*, 2008).

The specific organic brain problems which underlie all of what we call crime are growing increasingly measurable through improved brain imaging technology, and the changes which would be required to elicit meaningful behavior or even personality changes are becoming more and more evident. Based on what we currently know about behavior, brain activity and changes in brain architecture, it is the author's opinion that with proper ongoing brain imaging conducted on treatment participants, we are well into the stage of technological development where we could literally see the transformation of a person from destructive and anti-social to constructive and pro-social. The current dominant strain of conversation on this subject falls far short of this. We tend to discuss peering into people's brains to see how dangerous they are, and discussions have even come into the public sphere around the potential of committing people for their *potentials to commit crimes in the future* ala Minority Report (Blume, 2016). This is not only disturbing; it is deeply misguided. While we cannot assert that a person will commit a crime at some future point, due to some kind of brain damage (for example, Phineas Gage, while

question, where *corrections* are concerned is how to influence or *incentivize* a person to want to make the change being demanded by the social environment. If you cannot do that, you cannot do something called corrections. In fact, if we are to look at prisons as *businesses*, and assume that their mission is to modify behaviors, then from the point of view of strategic planning (OpenStax, 2019), the strategies employed by them would have to be scrapped as ineffective.

becoming exceedingly anti-social and destructive never graduated beyond bar fights to murder, or from blowing his fortune to theft), we *can*, beyond a reasonable level of certainty, make assertions about who will *not* be likely to commit a future crime, by examining features of their brains and reactions to certain kinds of stimuli. We already know what healthy brains look like, we should be focusing on using technology to help people develop such brains and get people through treatment as rapidly and efficiently as possible.