

### Introduction

1. Rabbi Moses Maimonides (12<sup>th</sup> century Egypt), Mishneh Torah, Hilchot Teshuvah 1:1

Regarding every biblical mitzvah, commandment as well as prohibition: When one violates any of them, whether intentionally or in error, and he performs teshuvah and returns from his sin, he is obligated to admit it before G-d. It is written (Numbers 5:6-7), "When a man or woman performs [any human sin, trespassing against G-d, that soul shall bear guilt,] and they shall admit the sin they performed." This is verbal admission, and this verbal admission fulfills a commandment.

2. Deuteronomy 4:30-31

When you are in trouble, and all of these things befall you, at the end of days, and you shall return to HaShem your G-d, and you will heed His voice. For HaShem your G-d is a merciful Lord...

3. Leviticus 16:30

For on this day G-d will atone for you, to purify you from all of your sins; before G-d you will be purified.

4. Rabbi Moses Maimonides (12<sup>th</sup> century Egypt), Mishneh Torah, Hilchot Teshuvah 2:2

What is "teshuvah"? For the sinner to abandon his sin and remove it from his thoughts, and conclude in his heart that he will not commit it again, as it is written, "The wicked one will abandon his path." And he should regret the past, as it is written...

5. Rabbi Moses Maimonides (12<sup>th</sup> century Egypt), Mishneh Torah, Hilchot Teshuvah 2:4

Among the paths of repentance is for the penitent one to cry out perpetually before G-d in tears and pleas, and to give tzedakah according to his ability, and to distance himself greatly from that with which he sinned, and to change his name, as if to say, "I am another, I am not that man who performed those deeds." And he changes all of his deeds for the good...

### Temptation vs. Automation

6. Genesis 4:6-7, 6:5 and 8:21

And G-d said to Cain: Why are you outraged, and why has your face fallen? If you do good, will you not be rewarded? And if you do not do good, sin crouches at the entrance; it desires you, but you shall control it.

And G-d saw that Man's evil in the land was great, and the entire *yetzer* of the thoughts of his heart was only evil, all day.

And G-d said to Himself: No longer will I curse the land because of Man, for the *yetzer* of Man is evil from his youth, and no longer will I strike all life as I have done.

7. Talmud, Succah 52b

Rabbi Shimon ben Lakish said: One's *yetzer* rises over him daily and tries to kill him, as Psalms 37 says, 'The wicked one sees the righteous one and wishes to kill him.' Were G-d not to aid him, one could not defeat it; Psalms 37 continues, 'G-d will not abandon him in his hand...'

8. Talmud, Succah 52a

In the future, G-d will bring the *yetzer hara* and slaughter it before the righteous and the wicked. It will appear like a great mountain to the righteous, and a hair to the wicked. Each will cry; the righteous will cry and say, "How did we conquer this great mountain?" and the wicked will cry and say, "How did we fail to conquer this hair?"

Gd, too, will express shock, as it says, "So declares Gd: It will be shocking in the eyes of the remnant of this nation in those days, and in My eyes it will be shocking."

9. Chronicles I 21:1

And a Satan arose upon Israel, and he persuaded David to count Israel.

10. Rabbi Meir Leibush (Malbim, 19<sup>th</sup> century Eastern Europe), Commentary to Chronicles I 21:1

When [King David] saw that they had abandoned him, following Sheva ben Bichri, he no longer trusted them to gather at his command in a time of war. He wished to count them and to record the names of the warriors in the record books, so that each would be bound to enter the army in a time of war. This was the [deceptive] persuasion and urging [of Satan], for Israel truly were whole with him.

11. Talmud, Bava Batra 16a

He is the Satan, he is the *malach hamavet*, he is the *yetzer hara*.

12. Jerusalem Talmud, Berachot 2:4

One who prays and finds himself at '*shomeia tefillah*' may assume he had proper intent... Rabbi Chiya the Great said: I never concentrated properly; once I tried to concentrate, and then I began to wonder who goes before the king first, the officer or the exilarch. Shemuel said: I count clouds (other editions: birds). Rabbi Bun bar Chiya said: I count bricks. Rabbi Matiyah said: I am grateful to my head, for when I reach *Modim* it bows on its own!

13. Professor Daniel Kahneman, *Thinking, Fast and Slow*, pp. 41-43

A series of surprising experiments by the psychologist Roy Baumeister and his colleagues has shown conclusively that all variants of voluntary effort - cognitive, emotional, or physical - draw at least partly on a shared pool of mental energy. Their experiments involve successive rather than simultaneous tasks....

The most surprising discovery made by Baumeister's group shows, as he puts it, that the idea of mental energy is more than a mere metaphor. The nervous system consumes more glucose than most other parts of the body, and effortful mental activity appears to be especially expensive in the currency of glucose. When you are actively involved in difficult cognitive reasoning or engaged in a task that requires self-control, your blood glucose level drops.

14. Guthrie, Rachlinski & Wistrich, *Inside the Judicial Mind*, 86 Cornell L. Rev. 778 (2000-2001)

In one early study of anchoring, Professors Amos Tversky and Daniel Kahneman asked participants to estimate the percentage of African countries in the United Nations. Before asking for this estimate, they informed the participants that the number was either higher or lower than a numerical value identified by the spin of a "wheel of fortune." Tversky and Kahneman had secretly rigged this "wheel of fortune" to stop either on ten or sixty-five. When the wheel landed on ten, participants provided a median estimate of 25%; when the wheel landed on sixty-five, participants provided a median estimate of 45%. Even though the initial values were clearly irrelevant to the correct answer, the initial values had a pronounced impact on the participants' responses.

15. Rabbi Daniel Z. Feldman, *False Facts and True Rumors*, pg. 68

This [anchoring] effect is blamed for all kinds of irrational impacts on thinking. For example, participants in a wine auction who were asked to write down the last two digits of their Social Security numbers before bidding were found to bid higher numbers if the Social Security numbers were higher.

16. Clay Jones, *Outcome Bias in Clinical Decision-Making*, Science-Based Medicine Dec. '14

Most doctors have their own personal lucky catch or "great call" story... A patient presents with an unusual symptom or syndrome, and in a seeming flash of inspiration a particular lab or imaging modality is requested that

reveals the rare or unlikely diagnosis. What tends to follow is some degree of awe at the clinical acumen of the ordering physician, and in some cases more than a bit of hindsight bias. ("Well of course that's what the guy had! The clues were right in front of them the whole time.") In reality, medical mystery-type lucky catches like this are the exception rather than the norm. The much more common version, but one less likely to achieve legend status in a physician's personal narrative, tends to occur when we've dusted off the diagnostic shotgun. Shotguns disperse multiple pellets in a wide pattern in order to increase the likelihood of making contact with the target. So does an ordering physician when they request a large number of tests thoughtlessly.

### Dealing with Temptation-Driven Sin

17. Talmud, Berachot 5a

One should always stir up his *yetzer tov* over his *yetzer hara*, as Psalms 4:5 says, "Be stirred, and do not sin."

If he wins, good. If not, he should immerse himself in Torah, as the verse continues, "Say in your hearts."

If he wins, good. If not, he should recite Shema, as the verse continues, "Upon your beds."

If he wins, good. If not, he should remember the day of death, as the verse concludes, "And be silent, selah."

18. What is OCD?

Obsessions: Recurrent, persistent thoughts, impulses or images that are experienced as intrusive and inappropriate, causing marked anxiety or distress. They are excessive and unreasonable, not grounded in reality, and a product of one's own mind rather than someone else's conditioning.

Compulsions: Repetitive behaviours that a person feels driven to perform in response to the obsession, to resolve and quiet the worries by preventing some dreaded event or situation, but that are an unrealistic or excessive response to the situation.

19. Talmud, Sanhedrin 107a

Rav Yehudah said citing Rav: One should never bring himself to a test, for David, king of Israel, brought himself to a test and stumbled. He said, "Master of the universe! Why do they say, 'Gd of Abraham, Gd of Isaac and Gd of Jacob,' and they don't say, 'Gd of David'?" Gd replied, "They were tested for Me, you have not been tested for Me." He said, "Master of the universe, test me!" As Psalms 26:2 says, "Test me, Gd!"

20. Talmud, Berachot 60b

And do not bring me to sin or transgression or tests or shame...

21. Talmud, Succah 38a

Rav Acha bar Yaakov would bring [the four species of Succot] back and forth and say, 'This is an arrow in the eye of the Satan.' But this is wrong; this could cause it to attack him.

### Dealing with Automation-Driven Sin

22. Danziger, Levav, Avnaim-Pesso, *Extraneous Factors in Judicial Decisions*, Proc Natl Acad Sci U S A. 2011 Apr 26;108(17):6889-92

We test the common caricature of realism that justice is "what the judge ate for breakfast" in sequential parole decisions made by experienced judges. We record the judges' two daily food breaks, which result in segmenting the deliberations of the day into three distinct "decision sessions." We find that the percentage of favorable rulings drops gradually from 65% to nearly zero within each decision session and returns abruptly to 65% after a break.

23. Dr. Pat Croskerry, *Diagnostic Failure: A Cognitive and Affective Approach*, pg. 248

The brain functions at its best when it is well rested. Fatigue may occur independently of sleep deprivation and sleep debt, but these invariably lead to fatigue. Optimal perception, attention, vigilance, memory, and reasoning all depend on being well-rested and having an adequate amount of sleep. Yet, long hours of work, sleep

deprivation, and an accumulated sleep debt are common in the medical workplace. Generally, the longer people stay awake, the sleepier they become, and the more their cognitive and psychomotor performance is impaired. Clinical decisionmaking reaches its nadir at about 3–4 a.m.; cognitive performance at this time is equivalent to being legally intoxicated.

24. Rabbi Moses Maimonides (12<sup>th</sup> century Egypt), *Mishneh Torah*, Hilchot Deiot 4:1

Having a healthy, whole body is from the paths of Gd, as one can neither understand nor know anything about Gd when ill. Therefore, one must distance himself from anything which damages the body, and one must accustom himself to behaviours which increase health and strength...

25. Dr. Pat Croskerry, *Diagnostic Failure: A Cognitive and Affective Approach*, pp. 250-251

[P]erform a cognitive and affective autopsy, a form of cognitive and affective root cause analysis, as soon as possible after the event. The physician should perform this autopsy when well-rested and after having an adequate amount of sleep. There is usually a rapid decay of detail—especially when the event has been an unpleasant experience—and, therefore, it is important to go through a process of active recall of every possible aspect of the case, however trivial they might appear...

26. Rabbi Bahya ibn Paquda (11<sup>th</sup> century Spain), *Chovot haLevavot*, Sha'ar Cheshbon haNefesh 3:11

The eleventh aspect: To calculate with one's self that which has already happened in his life; has he served Gd, or served his own *yetzer*?

27. Cohen & Knetsch, *Judicial Choice*, *Osgoode Hall Law J.* 30:3 (1992)

A further illustration of the differing valuations of gains and losses is provided by responses to recent automobile insurance legislation in two American states. In both jurisdictions people are given a choice between cheaper policies, which limit rights to subsequent recovery of further damages, and a more expensive policy permitting such actions. Importantly, the default option differs: the reduced rights policy is offered in New Jersey unless it is given up; and full rights policy is given in Pennsylvania unless the less expensive option is specified. Given the minimal costs in both states of choosing either option and the large amounts of money at issue, the results have been dramatic. At last count over 70 per cent of New Jersey automobile owners have adopted the reduced rights policy, but fewer than 25 per cent of Pennsylvanians have done so.

28. Dr. Pat Croskerry, *Diagnostic Failure: A Cognitive and Affective Approach*, pg. 250

Develop mental rehearsal, "cognitive walkthrough" strategies for specific clinical scenarios to allow CDRs and ADRs to be made and their consequences to be observed. Construct new scenarios or clinical training videos contrasting incorrect (biased) approaches with the correct (debiased) approach.