

For September

<https://www.torontotorah.com/jonah>

See you there!

1. How Predictive Analytics Works, <https://www.mathworks.com/discovery/predictive-analytics.html>

Predictive analytics is the process of using data analytics to make predictions based on data. This process uses data along with analysis, statistics, and machine learning techniques to create a predictive model for forecasting future events. The term “predictive analytics” describes the application of a statistical or machine learning technique to create a quantitative prediction about the future. Frequently, supervised machine learning techniques are used to predict a future value (*How long can this machine run before requiring maintenance?*) or to estimate a probability (*How likely is this customer to default on a loan?*).

2. Daniel Munro, *The ethics of police using technology to predict future crimes*, McLeans.ca 6/18/17

Predictive policing involves the use and analysis of data to predict where crimes are most likely to occur in the future. Various kinds of data are used—including numbers, types and locations of past arrests, public reports of crime, requests for police assistance, neighbourhood features (such as bars and bus stops) and, in some cases, weather patterns and lunar cycles. Social media activity has also been incorporated... Based on the predictions, police agencies can increase patrols and allocate other resources to meet anticipated risks. Does it work? The evidence is mixed, but the future looks promising...

Still, a major concern is that predictive policing models will reinforce and exacerbate biases in crime data and police practice. When models draw on flawed or inappropriate data, they may recommend increasing police activity in neighbourhoods with higher proportions of ethnic or racial minorities—not because the risk of crime is higher, but because the input data are biased. If so, our expectation that citizens be treated with equal concern and respect would be in jeopardy.

A simulation study focused on drug offenses in Oakland found that a predictive policing model’s algorithm would recommend sending officers mainly to African American and Latino neighbourhoods, even though rates of drug use are essentially the same across Oakland neighbourhoods... The model uses data on previous arrests by location which are as, if not more, likely to capture patterns in *police activity* as they are the *actual prevalence* of drug-related offenses... Predictive policing can also influence the attitudes and behavior of officers assigned to high risk neighbourhoods in ways that heighten danger for both residents and police. An officer who witnesses a nervous 16 year-old cutting through a backyard in a neighbourhood deemed “low risk” might dismiss it as nothing more than a kid taking a short-cut to school. The officer is anchored to the predictive model’s conclusion that the neighbourhood is low-risk so views subsequent activity through a more positive lens. But in a neighbourhood labeled “high-risk” the same officer might assume that a 16 year-old backyard-cutter has committed a crime and that she needs to intervene... Mutual suspicion and tension between police and residents of certain neighbourhoods is not new, but predictive policing risks giving that tension and its consequences the undeserved appearance of scientific and statistical validity.

3. Rabbi Moshe Feinstein (1973, USA), Igrot Moshe Even haEzer 4:10

Since it is easy to check, one should realize that failure to check one's self would be like closing one's eyes before that which one could see. G-d forbid, such an event would cause the child's parents extraordinary pain, and so it would be appropriate for a man who wished to wed a woman to test himself. It would be good to publicize this in newspapers and other media, to alert people that there is such a test. It is clear that this must be done privately.

Issue #1: The Ethics of Pre-emptive Policing

4. Deuteronomy 21:18-20

When a man has a stubborn and rebellious son, who does not listen to the voice of his father and the voice of his mother, and they rebuke him but he does not listen to them. His father and mother shall take him and bring him out to the elders of his city and the gate of his place. And they shall say to the elders of his city: This son of ours is stubborn and rebellious, he does not listen to our voice, he is gluttonous and a drunkard.

5. Talmud, Sanhedrin 72a

Because this person ate a *tartimar* of meat and drank half a *log* of Italian wine, the Torah says he should go to the court to be stoned?! Rather, the Torah realized the end of the stubborn and rebellious son's path. In the end, he will finish his parents' property and seek to feed his habit, and he won't find it. He will go out to a fork in the road and steal from people. The Torah said, "Let him die innocent, and not die guilty."

6. Talmud, Chullin 133a

Anyone who teaches a student who does not behave properly will fall into Gehennom... Anyone who teaches a student who does not behave properly is like one who casts a stone to *Markolis*...

7. Exodus 22:1

If a thief is found in a tunnel, and he is struck and he dies, there is no blood.

8. Rabbi Shlomo Zalman Auerbach (20th century Israel), Minchat Shlomo 1:7

The fact that one may rise up against a Jewish invader on a weekday and kill him, and we don't say to let the invader take his money, is because killing a pursuer is entirely permitted even where his intentions are only uncertain. Anyone who tunnels in is not known with certainty to be a pursuer.

9. Genesis 21:17

And G-d heard the voice of the youth, and a messenger of G-d called to Hagar from the heavens and said, 'What troubles you, Hagar? Fear not; G-d has heard the voice of the youth, as he is there.'

10. Talmud, Rosh HaShanah 16b

One is judged only based on his deeds of that moment, as it is written, 'G-d has heard the voice of the youth, as he is there.'

11. Midrash, Bereishit Rabbah 53:14

The angels leapt to argue against his survival, saying, 'Master of the Universe! You would provide a well for this man who is going to murder Your children with thirst?'

G-d replied: What is he now – righteous or wicked?

They said: Righteous.

He told them: I only judge a man based upon his moment. Rise, and take the youth...

12. Talmud, Bava Batra 133b

One can write away his property to others, leaving his children, but the sages are displeased with him. Rabban Shimon ben Gamliel said: He is remembered for the good if his children were not behaving properly.

13. Talmud, Sanhedrin 71a

Because this person ate a *tartimar* of meat and drank half a *log* of Italian wine, his father and mother will take him out to stone him?! Rather, it never was and it never will be. Why is it recorded? Learn it and receive reward.

Issue #2: Omen-Reading

14. Leviticus 19:26; Deuteronomy 18:9-13

Do not eat blood; do not read omens or calculate propitious times.

For you are entering the land Hashem your G-d is giving you; do not learn to practice the abhorrences of those nations. There shall not be found among you one who passes his son or daughter through fire, or engages in sorcery, or calculates times or uses omens or magic. Or one who practices charms or inquires of *ov* or *yidoni*, or seeks the dead. For all who perform these deeds are abhorrent to G-d, and because of these abhorrences Hashem is eliminating them from before you. You shall be complete with Hashem your G-d.

15. Rabbi Moses Nachmanides (13th century Spain), Commentary to Deuteronomy 18:9

The blessed Creator, when He created everything from nothing, made the upper realms direct the lower realms which are beneath them. And He placed power over the land and all that is in it in the stars and constellations, according to their direction and gaze upon them, as has been tested by astrology.

16. Rabbi Moses Maimonides (12th century Egypt), Guide of the Perplexed 3:37, Friedlander edition

When you read the books which I mentioned to you, you will find that witchcraft, which will be described to you, is part of the customs of the Sabeans, Kasdim, Chaldeans, and to a higher degree of the Egyptians and Canaanites. They caused others to believe, or they themselves believed, that by means of these arts they would perform wonderful things in reference to an individual person, or to the inhabitants of a whole country, although no analogy and no reasoning can discover any relation between these performances of the witches and the promised result... It is the object and centre of the whole Law to abolish idolatry and utterly uproot it, and to overthrow the opinion that any of the stars could interfere for good or evil in human matters, because it leads to the worship of stars.

17. Rabbi Moses Maimonides (12th century Egypt), Mishneh Torah, Laws of Idolatry 11:16

All of these are words of falsehood and deception, which the early idolaters used to trick the nations to follow them, and Israel, who are wise and educated, should not follow these matters of emptiness or put the thought into their hearts that these are beneficial. As it says, "For there is no omen-reading in Jacob, and no sorcery in Israel."... Anyone who believes in these and similar matters, thinking in his heart that they are true and wise, and the Torah prohibited them, is only from among the fools and those who lack knowledge..

Issue #2a: Our Connection with Gd

18. Talmud, Berachot 10a

Isaiah replied: It is because you have not been involved in procreation.

Hezekiah explained: I saw in a Divinely inspired vision that I would have bad children!

Isaiah replied: What business do you have in the secrets of the Merciful One? You should do as you are instructed, and Gd will do whatever pleases Gd.

19. Talmud, Shabbat 156b

Rabbi Akiva had a daughter, and a Chaldean astrologer told Rabbi Akiva that she would be bitten by a snake, and she would die, on the day of her wedding. Rabbi Akiva was bothered by this.

On the night of her wedding, she removed a long pin from her hair, and placed it in the wall, incidentally pinning a snake to the wall. The next morning, when she took the pin from the wall, she found the snake on her hairpin.

Her father asked her, "What did you do?" She responded, "In the morning, a pauper came to the gate, and everyone was so busy preparing the meal that they didn't hear him, so I got him a cake myself and gave it to him." Rabbi Akiva responded, "The verse (Proverbs 10:2) says, 'Tzedakah saves from Death,' and this doesn't only refer to saving one from a bad death, but it saves one from death altogether."

20. Rabbi Moses Nachmanides (13th century Spain), Commentary to Sefer haMitzvot, Added Commandment 8

The eighth mitzvah: We are commanded that our hearts should be complete with Gd, as it says, "You shall be complete with Hashem your Gd." This command means that we should designate our hearts for Gd alone, and believe that He alone creates all, and He is the one who truly knows the entire future, and from Him alone should we seek the future... and we should not seek it from those who gaze at the heavens and others, or we should not trust that their words will come true. But if we hear something from them, we should say, "All is in the hands of Heaven," for He changes the arrangement of the stars and constellations at will... And Avraham received this command when [Gd] came to make a covenant with him and give him children, saying, "Walk before Me and be complete."

21. Rabbi Moses Nachmanides (13th century Spain), Challenges to Sefer haMitzvot, Commandment #5

And if the exegesis of prayer has a biblical root, we will count it in the Rambam's count and say that it is a mitzvah, in a time of troubles, to believe that Gd hears prayer and saves from troubles through prayer and crying out.