

Rabbi Jonathan Roos
"Turn, Turn, and Make a New Course (DART)"
Rosh Hashanah Morning, 5783
Temple Sinai, Washington, DC, Main Sanctuary

Something incredible is about to happen. If all goes well, tonight at 7:14, seven million miles away from here, a spacecraft called DART will crash into an asteroid and change its course. This is a test to see if we can deflect an asteroid in case one is heading towards earth – like the comet in *Don't Look Up*. There is no asteroid about to destroy us, but NASA wants to see if they can stop one... just in case. You can actually watch the livestream of DART's final approach and impact tonight. Just search "DART APL" (that's the Applied Physics Lab) and on the mission homescreen you'll find the links to the video stream.ⁱ

DART was launched last November year and heading towards an asteroid called Dimorphos that will be about half way between here and Mars when we intercept it. It's a coincidence that DART's impact happens on Rosh Hashanah but could there be a better allegory for teshuva than this? This holiday reminds us that you and I have been on our own collision course with powerful forces and it is time to act deliberately to change paths.

First, let's explore what is teshuva? Teshuva is "repentance" or "atonement" but literally is from the Hebrew word "to turn" - "*La-shuv*." We associate teshuva with this time of year and with our hope to gain forgiveness on Yom Kippur 10 days from now. In Jewish mindfulness trainings, the teachers of the Institute for Jewish Spirituality speak about returning to our intentions any time of year and for any intention we have set. They use this in meditation for example, when your mind wanders and you want to refocus on your breath or your mantra, that is teshuva - returning to your intended goal. This is hard enough to do while meditating for 5-10 minutes and a significant challenge when considering the ways we may have strayed off course from the higher goals we set for ourselves over the past year. If we adopt teshuva as part of a Jewish spiritual

practice and apply some principles from our tradition, we may find ourselves better able to turn and adjust our way when needed.

It takes some advance work to change course. NASA and APL officially began designing DART in 2017 but this kind of mission had been the subject of both science and fiction for decades (remember the 1998 movie *Armageddon*?). It took four years to get to the launch pad and nearly a year to reach the target.

I'm sure you know some expressions about the futility of making plans. I just sent you all a letter citing the Yiddish phrase, "Mann Tracht, Un Gott Lacht – Man Plans, And God Laughs."ⁱⁱ Anyone who tried to travel this summer is, no doubt, familiar with the difficult truth of that expression.ⁱⁱⁱ

There is a difference, however, between plans and preparations. Even if all of your plans go awry, you still have growth and opportunity that comes through preparation. Dwight Eisenhower liked to say, "Plans are useless but planning is everything." He used that quote in telling the story of US military planning at the turn of the twentieth century. In those years, they used maps of northwestern France to teach map skills. Education reformers soon determined that using maps of American localities would be more effective and the army adopted that new practice. A few years later, World War I erupted and many of those soldiers found themselves deployed to, where else, northwestern France. The plans of those educational experts were a failure – soldiers needed to navigate Alsace–Lorraine, not Milwaukee. But the preparation was still incredibly valuable because the soldiers had what they really needed – orienteering skills they could use in any location.

Judaism teaches us a similar lesson. In the same year DART began, 2017, the Reform movement published *Mishkan HaLev*, a special prayer book for Shabbat and other services held during the month of Elul - the four weeks before Rosh Hashanah. We use it here at Temple Sinai [hold up a copy of *Mishkan HaLev*]. Why do we need a special prayerbook when we already have this one [hold up a copy of *Mishkan T'filiah*]? Because teshuva requires significant preparation and Judaism has long set aside the month before Rosh Hashanah as a time to reflect on the past year and think ahead to the new one; to identify the ways in which we have strayed from our goals and to start preparing for a course adjustment. The editors of the Elul prayerbook point out "the

unique character of these high holy days” is an opportunity to address “the tests and trials that confront us” and to be inspired with “hope and faith and courage” in the lead up to this day.

Judaism and DART also both teach us that we can not succeed in this important task by working alone. DART has been flying with an Italian partner on board called LICIA Cube, a smaller satellite that split off from DART ten days ago and is now trailing alongside as a mini-photographer to broadcast DART's impact so we can know the results and after effects. It is part of a larger partnership with European and Japanese Space Agencies. DART itself is a collaboration - conceived and funded by NASA, designed and built by Johns Hopkins APL, launched on a SpaceX rocket from a Space Force launch pad at a California military base.

Teshuva is a personal exercise for each individual but it is not purely a Do-It-Yourself activity. The goal of the high holy days is not collective repentance or societal change. Yet, our liturgy speaks in the plural, in the voice of "we": *Ashamnu* - WE are guilty; *Al Chet Sheh-chatanu* - For the sins WE have committed, *Avinu Malkeinu shema koleinu* - OUR Father, OUR King, hear OUR voice. It's not just the prayers. Your personal teshuva requires the involvement of other people. Among the steps Maimonides outlined for teshuva is the need to acknowledge to other people, especially the people affected, that we understand we have gone off course. So, silent prayer or meditation between you and God or your conscience is not teshuva. We are also required to fix whatever we've broken or make restitution - emotionally or materially - directly with the ones we've harmed or otherwise affected. Unlike the giving of tzedakah, anonymity has no place in teshuva. We all need love and support in order to put ourselves out there in the teshuva process. So at this season especially, give each other and receive love, support, and encouragement - along with honesty and critical feedback - as you make teshuva. It's too hard and sometimes too painful to do it alone.

Finally, it's important to remember that you do not have to destroy the thing you want to change nor do you have to do a full 180 or a complete stop to effect teshuva. As DART will demonstrate, a slight nudge can be enough, especially if you've gotten in front of the problem before it's a crisis. Over the long term, a small change can become a lasting transformation.

DART is not going to destroy the asteroid. The collision should impart enough kinetic energy to change the asteroid's course very slightly. We don't need to obliterate an object heading toward us in order to solve the problem. We just need to move it – or ourselves – out of the way.

The same principle holds true for teshuva. The slightest change can make all the difference. A critical line from the Book of Ezekiel is cited in our prayers over the course of the holidays - we just sang this in *Unetaneh Tokef*. God says: "It is not the death of sinners that I seek but that they should turn from their ways and live." And then, using the imperative verb for teshuva, God says: "*Shuvu, Shuvu*, Turn, Turn from your harmful ways," and then asks: "Why would you let yourselves die instead? Turn already." (Ezekiel 31:11)

The Talmud teaches us to make minor adjustments to our spiritual practices in the face of difficulties. In the gevurot prayer, which we sang earlier, it describes God as, "*Ha-el ha-gadol, v'ha-gibbor, v'ha-norah*" - "great, mighty and awesome." That line is taken directly from the Torah (Deuteronomy 10:17) from the mouth of Moses and it also used by Ezra and Nehemia when they dedicated the Second Temple. But there are two cases where other prophets dropped one of the adjectives. The prophet Jeremiah witnessed the destruction of Jerusalem and calls God, "great and mighty" but not awesome (Jeremiah 32:18). So the Talmud imagines him explaining: "Given what I just saw, what divine awesomeness is there to speak of?!"

Daniel has a similar story. He lives in exile and sees fellow prisoners hurt and killed. He, himself, was famously thrown into the lion's den. He calls God, "Great and Awesome," but not "mighty," (Daniel 9:4). So the Talmud has him saying, "After what I've been through, I don't see divine might!"

After tellings these stories, the talmudic sages don't hold up Moses, Ezra, and Nehemia as the models of spiritual practice. They say that God likes honesty and not lies and therefore celebrates Jeremiah and Daniel's model.^{iv} This passage demonstrates that good Jewish spiritual practice involves starting, when possible, with small adjustments rather than destroying or eliminating a component entirely. Like

DART and like the prophets, our response to *averot* and shortfalls from the past year can build from small steps to reach transformative results.

Hallelujah! Something amazing is about to happen. In a few hours you can live stream the moment when DART reaches its intended target and the asteroid will be turned to a new path. If we, too, follow its example and the resonant lessons from Judaism, we can turn and start a new - or renewed - path towards something better than we had before.

WATCH THE VIDEO:

https://dart.jhuapl.edu/Gallery/media/videos/NASA_s_DART_Mission_2022_DART_Trailer_2.mp4

Cantor & Choir, Psalm 150, as video ends

ⁱ <https://dart.jhuapl.edu/> Disclosure: my son Ariel works at the Johns Hopkins Applied Physics Lab Space Sector, the lead agency for this project, though not on DART specifically. After impact, you can find images and videos under the "gallery" tab of DART's website.

ⁱⁱ Sunday morning, September 25, Senior Cantor Laura Croen tested positive for Covid-19 and Cantorial Soloist Robyn Helzner had still not recovered from a long case of the virus. I sent an email announcing the cancellation of services in the Bet Am Chapel and the re-assignment of our clergy team to the other locations in order to cover services. For the record to future readers: it went off beautifully in both BCC and Sanctuary locations thanks to the musical talents of Cantor Rebecca Robins, Rabbi Noah Diamondstein, Rabbi Hannah Goldstein, and our choir and musicians.

ⁱⁱⁱ Summer 2022 had record levels of airline delays and cancellations. It was a mess.

<https://www.nytimes.com/2022/08/17/podcasts/the-daily/airlines-summer-travel-delay-cancellations.html>

^{iv} BT Yoma 69b; David Hartman's book "The God Who Hates Lies" draws its title and main message from this sugya; see also <https://www.anscheched.org/the-great-mighty-and-awesome-god/> the blog entry by Rabbi Jeremy Kalmanofsky from May 14, 2019, accessed on Sept. 18, 2022.