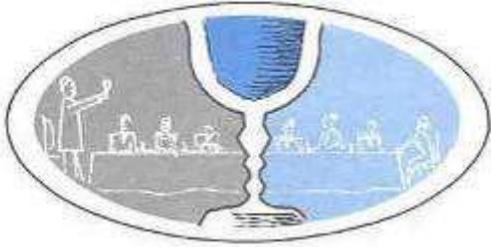


# THE MIRACLES OF PASSOVER



A Haggadah

**Welcoming**



**Kiddush**

Blessed art Thou, Lord our God, King of the Universe, Creator of the fruit of the vine.

Blessed art Thou, Lord our God, King of the Universe, who has chosen and exalted us above all nations and has sanctified us with Thy commandments. And Thou, Lord our God, has lovingly bestowed upon us appointed times for happiness, holidays and seasons for joy, this Feast of Matzot, our season of freedom, a holy convocation recalling the Exodus from Egypt. Thou did choose and sanctify us above all peoples. In Thy gracious love, Thou did grant us Thy appointed times for happiness and joy. Blessed art Thou, O Lord, who sanctifies Israel, and the appointed times.

Blessed art Thou, Lord our God, King of the Universe, who has granted us life and sustenance and permitted us to reach this season.

*Drink the wine while leaning to the left.*



**Washing the hands**

**Karpas**

*Everyone partakes of parsley, dips it into saltwater, and says:*

Blessed art Thou, Lord our God, King of the Universe, Creator of the fruits of the earth.

**Break the middle matzah**

*The leader takes the middle Matzah and tears it in two, leaving one half between the whole ones, and puts the other half in a safe place for the grand Afikomen hunt.*

♪ (→page 29)



*"What do you mean, you don't like it? It's the story of mankind."*

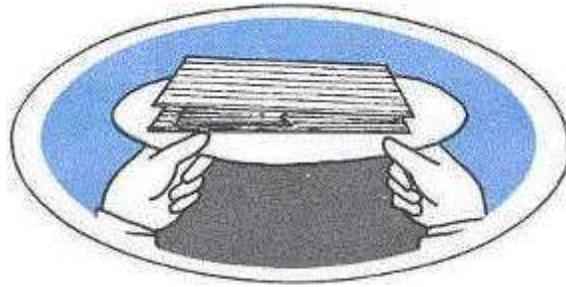


ברוך אתה יי, אלהינו מלך העולם, בורא פרי הגפן:  
ברוך אתה יי, אלהינו מלך העולם, אשר בחר בנו  
מכל-עם, ורוממנו מכל-לשון, וקדשנו במצותיו,  
ותתן-לנו יי אלהינו באהבה מועדים לשמחה, חגים  
וזמנים לששון את-יום חג המצות הזה. זמן חרותנו,  
מקרא קדש, זכר ליציאת מצרים. כי בנו בחרת ואותנו  
קדשת מכל-העמים. ומועדי קדשך בשמחה ובששון  
הנחלתנו ברוך אתה יי, מקדש ישראל והזמנים:  
  
ברוך אתה יי, אלהינו מלך העולם, שחננתו וקיימנו  
והגיענו לזמן הזה:



ברוך אתה יי, אלהינו מלך העולם,  
בורא פרי האדמה:





# מגיד

The leader raises the dish containing the matzot and says:

This is the bread of affliction which our ancestors ate in the land of Egypt. Let all who are hungry come and eat. Let all who are needy come and celebrate the Passover. Today we are here; next year may we be in Israel. Today we are slaves; next year may we be free people.

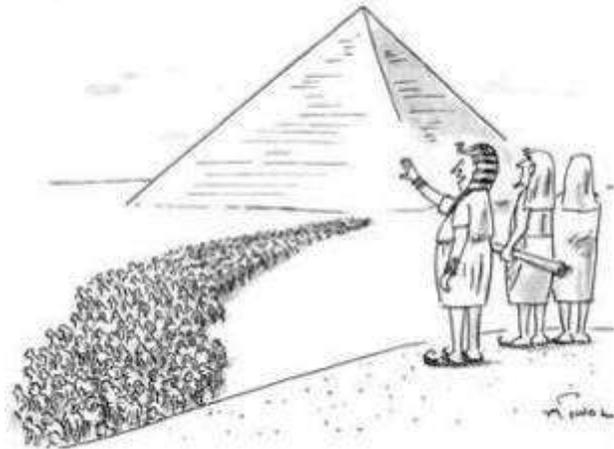
הא לחמא עניא די אכלו אבהתנא בארעא דמצרים.  
כל דכפין ייתי ויכול, כל דצריך ייתי ויפסח. השתא  
הכא, לשנה הבאה בארעא דישׂראל. השתא עבדי,  
לשנה הבאה בני חורין:

Everyone sits. The second cup of wine is poured and all enjoy some fun renditions of the Four Questions.

(→page 28)

Why is this night different from all other nights?  
On all other nights we eat chametz and matzah;  
tonight, we eat only matzah. On all other nights we eat  
any kind of herbs; tonight, we eat bitter herbs. On all  
other nights we do not dip even once; tonight, we dip  
twice. On all other nights we eat sitting or reclining;  
tonight, we recline.

מה נשתנה הלילה הזה מכל הלילות?  
שבכל הלילות אנו אוכלין חמץ ומצה. הלילה הזה בלע מצה.  
שבכל הלילות אנו אוכלין שׂאר ירקות. הלילה הזה מרור.  
שבכל הלילות אין אנו מטבילין אפילו פעם אחת. הלילה הזה שתי פעמים.  
שבכל הלילות אנו אוכלין בין יושבין ובין מסבין. הלילה הזה בלנו מסבין.



"Thanks, guys. Looks great!"

עבדים היינו לפרעה במצרים. ויוציאנו יי אלהינו  
משם, ביד חזקה ובזרוע נטויה, ואלו לא הוציא  
הקדוש ברוך הוא את אבותינו ממצרים, הרי אנו  
ובנינו ובני בנינו, משעבדים היינו לפרעה במצרים.  
ואפילו בלנו חכמים, בלנו נבונים, בלנו זקנים, בלנו  
יודעים את התורה, מצוה עלינו לספר ביציאת  
מצרים. וכל המרבה לספר ביציאת מצרים, הרי זה  
משבח:

The following reply is recited in unison:  
We were slaves to Pharaoh in Egypt, but the Lord  
our God took us out of there with a mighty hand  
and an outstretched arm. Why say "We were  
slaves"? Because the midrash is that all Jews  
alive today were enslaved in Egypt, all Jews alive  
today saw God's miracles, and all Jews were at  
Mount Sinai receiving the Torah.



Had not God taken our ancestors out of Egypt, then we, our children and grandchildren would still be enslaved to Pharaoh in Egypt. Even if we were all wise and perceptive, experienced, and versed in Torah, and who is implying we're not?, it is still our duty to tell about the Exodus from Egypt. The more we talk about the Exodus, the more praise we deserve.

### So, let's talk more about miracles. But first ...



Ancient peoples thought God controlled nature. Miracles and catastrophes (and plagues) were of the same form as regular events, just larger. Could science expand on this view? Could science provide a perspective on the Bible that is missed by Biblical scholars?

In most miracles described in the Bible, God works with nature. God is demonstrating her power. What happens time after time in Exodus is that miracles happen at *just* the right time, often at the last minute, like the crossing of the Red Sea when the Egyptians were about to destroy the Israelites. In effect, these are miracles of timing. Looking at miracles from a scientific basis can strengthen our faith, because the miracles become more believable. Tonight we're going to follow some scientific explanations described in a book by a Cambridge physicist, Colin Humphreys.<sup>1</sup> Much of this will not at all be surprising – most standard Bibles have science explanations for most of the miracles. Jews, in particular, are quite comfortable using science to "explain" miracles. But before we start, we're going to have a few words from some folks who couldn't come to our seder. 📖

### Burning bush

Let's start with the first miracle experienced by Moses, the burning bush. A possible scientific mechanism is a small volcanic vent opened up under the bush. A species of acacia, *Acacia seyal*, is a common bush in Midian, according to the explorer Georg Wallin.<sup>2</sup> He says instead of turning to ashes, this bush makes excellent charcoal when burned.

After the *Acacia seyal* catches fire, flames would come from the charred and glowing charcoal framework of the bush as long as gas was supplied, or until the bush disintegrated. The volcanic vent explanation fits well

1. *The Miracles of Exodus: A Scientist's Discovery of the Extraordinary Natural Causes of the Biblical Stories.* 2. *Travels in Arabia.*

with Exodus' description: "flames of fire from within the bush" and "though the bush was on fire, it did not burn up."<sup>3</sup> A good analogy is gas fireplace logs in living rooms: the logs seem to be burning, but they aren't consumed because it's the gas coming from below the logs that is burning. But what are volcanic vents doing in this story? Hold that thought for later.

### Water from a rock

Let's look at another miracle. "But there was no water for the people to drink. So they quarreled with Moses and said, 'Give us water to drink.' And God said 'Take in your hand the staff with which you struck the Nile, and go. I will stand there before you by the rock at Horeb. Strike the rock and water will come out for the people to drink.'" [Ex. 17:6].

The striking of the rock by Moses and the gushing of water in the desert sounds like a veritable miracle, but the writer Major Jarvis saw this. The Sinai Camel Corps were in a *wadi* digging loose gravel for water that was slowly trickling through the limestone. Their Sergeant, Bash Shawish, started vigorously digging. One blow hit the hard face of a weathered rock. Its surface cracked and fell away, and out of the rock came a great gush of clear water. The Sudanese Camel Corps hailed their officer with shouts of "What ho, the Prophet Moses!"

What happened here? Some rocks, like sandstone and limestone, are porous. They can absorb huge quantities of rain water. Rocks undergo a particular type of weathering due to desert sandstorms. Sand, dust and organic matter from decayed plants and animals are swept against the rocks by high speed winds. Over time this turns into a hard crust on the rock's surface, rather like cement. If the crust is broken by a sharp blow, water can flow out – an effect well known to hydro-geologists.

Moses' rock at Horeb might have been a very large porous rock, capable of holding lots of water. If the rock was of considerable height, water would have gushed out under pressure and made an impressive display, worthy of recording in Exodus. Scientific explanations, similar or identical to these, have long been applied to these two miracles.

3. *Other explanations have the oily residue of another type of bush being set afire.*

## Mount Sinai

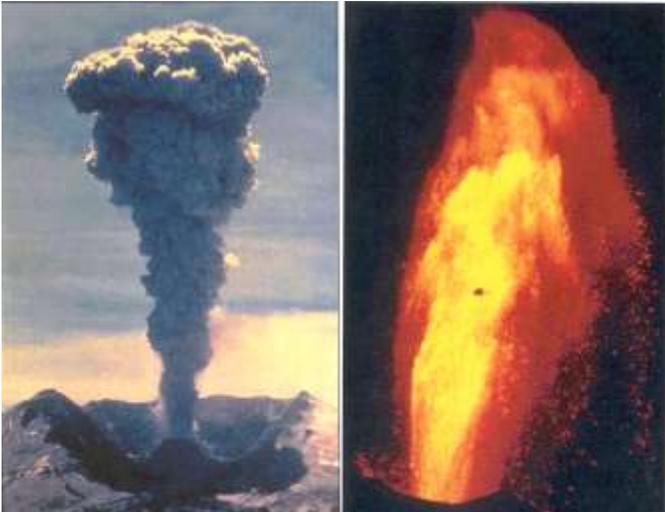
Let's turn our attention to Mount Sinai and the desert guide the Israelites had.

“By day the Lord went ahead of them in a pillar of cloud to guide them on their way, and by night in a pillar of fire to give them light, so that they could travel by day or night. Neither the pillar of cloud by day, nor the pillar of fire by night, left its place in front of the people.” [Exod. 13:20-22]

There is a natural event that would perfectly fit the description of a “pillar of cloud by day and pillar of fire by night.”

The historian Pliny, described the appearance of a volcano by day: “I cannot give a more exact description than by resembling it to a pine tree, for it shot up a great height in the form of a trunk.” Pine trees are very tall and straight. In other words, Pliny described a pillar of cloud. By night, Pliny saw “towering flames.” In other words, a pillar of fire by night.

What is the scientific explanation? In a large volcanic eruption, huge towering flames leap out of a volcano surrounded by thick clouds of vapor. By day only the surrounding cloud is often visible, reflecting the light of the sun. But by night, the cloud is invisible (just as clouds in the sky are visible aren't visible at night), and the volcanic fire becomes visible.



*Pillar of cloud by day*

*Pillar of fire by night*

Think of a smoky bonfire seen from a distance: by day you mainly see smoke, and by night you mainly see flames.

Humphreys isn't the first person to suggest Mt Sinai was a volcano, but all leading Biblical scholars and historians reject the idea. There are three main reasons:

1. Some argue Moses could not have walked up an active volcano, as described in Exodus. However, there are many types of volcanoes, of varying intensity, and people do walk up even intensely active volcanoes like Vesuvius. The explorer Doughty described standing on top of Vesuvius during an eruption. If Doughty can do it, surely Moses could have as well, particularly if the lava flow was on the opposite site.
2. Most commentators argue the volcano image is metaphoric. Ancient literature sometimes uses poetic and metaphorical language, but usually it's obvious when this is happening (“I am a wall, and my breasts are as towers”). Humphreys believes an appropriate scientific approach is to tentatively see if a literal description makes sense and can fit the facts.
3. The final reason is there are no active volcanoes anywhere in the Sinai Peninsula. However, Humphreys shows that Mt Sinai may be in Arabia, where there are many volcanoes. (More on the path to Mt Sinai later.)

Apart from fire and clouds, which we all associate with volcanoes, look at two more details in the description: “On the morning of the third day, there was thunder and lightning ... and a very loud trumpet blast.” Lightning occurs in some eruptions, and it is due to the discharge of static electricity on ash particles within an eruption cloud. Two geologists, flying over Mount St Helens in 1980, saw lightning bolts shooting through the clouds that were tens of thousands of feet high. As for the trumpet blast, magma contains dissolved gases, such as water vapor and carbon dioxide. If these are forced through cracks in the solid rocks near the erupting zone, the sound of a very loud trumpet blast is indeed heard. (A historian of the Vesuvius eruption, Dio Cassius, reported hearing trumpets.)

The Bible contains no fewer than seven characteristic features of an explosive volcano: (1) it blazed with fire to the very heavens [Deut 4:11]; (2) smoke and clouds billowed up from it [Ex. 19:18]; (3) the thunderous noise of explosions [Ex. 19:16]; (4) lightning discharges in the eruption cloud

[Ex. 19:16]; (5) loud trumpet blast from hot escaping gases [Ex. 19:16]; (6) volcanic earthquakes – the whole mountain trembled violently [Ex. 19:18]; and (7) a summit cloud and darkness [Deut 4:11]. This is a description of an erupting volcano based on careful observation. Thus, Humphreys concludes the mountain of God, Mt Sinai, was a mountain of fire, a spectacular volcano.

Most biblical scholars are not scientists and are unaware of the powerful arguments that imply Mt Sinai was a volcano. Humphreys believes this illustrates why reading ancient texts through the lens of scientific knowledge is important: science can provide new insights into what the original authors intended.

Moses and the Israelites almost certainly had never seen a volcano before – there are no volcanoes in Egypt. Imagine being with Moses in Midian and seeing a volcano: a mountain that quakes and shakes, that emits noise like thunder, throwing huge flames of fire and clouds of smoke far into the sky. What a magnificent, awe-inspiring sight! What a setting to receive the Ten Commandments!<sup>4</sup>



*"If you've finished reading the tablets, please pass them back to the front."*

### **The Red Sea**

Perhaps the greatest miracle is the crossing of the Red Sea. It is an immensely dramatic event with perfect timing: saving of the trapped Hebrews and crushing of the Egyptian army.

4. Was this Santorini? There is a famous volcano in the Mediterranean called Santorini, but the likely date for its eruption is 1628 BCE (from tree-ring dating), hundreds of years before the Exodus, and in any case it is in the wrong direction to guide the Israelites.

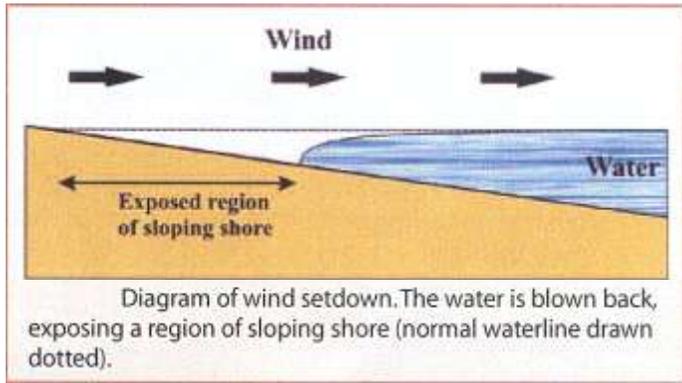


*"Of course it's damp underfoot. That strikes me as a very petty complaint to make at a time like this!"*

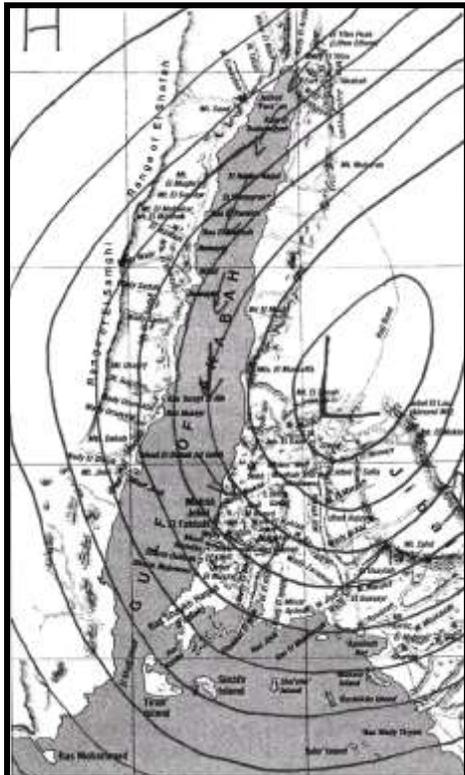
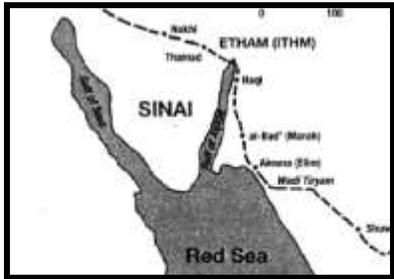
There are two classic explanations. The first is this was a huge tidal wave, a tsunami, caused by Santorini's eruption. There are two problems why this explanation doesn't work. The time period is wrong: the eruption occurred between 1650 to 1500 BCE. This is much earlier (by at least 300 years) than the likely dates for the Exodus (1250 to 1300 BCE). No serious archaeologist or volcanologist believes the great eruption of Santorini was that late. Also, a tsunami floods first, after which the waters retreat; this is the wrong order of events. A second, oft-quoted explanation, is the miracle was a very low tide followed by a very high tide. This isn't credible, as tides don't form walls. Also, although in some locations the tides can come rapidly because of how the land lies – people have been trapped and drowned – this is not the case in the Gulfs of Suez and Aqaba, where the tide comes in slowly.

Humphreys believes if there's a natural explanation of the Red Sea crossing, it must be different from those given above. First proposed by Professors Doron Nof and Nathan Paldor, a likely explanation is what oceanographers call a wind tide or wind setdown. A strong wind blowing across Lake Erie has created the lake's height at Toledo and Buffalo to differ as much as sixteen feet. There are reports that Napoleon, crossing shallow water near the Gulf of Suez, was almost killed by what turned out to be wind setdown.

The Biblical account contains all the elements necessary for this natural explanation. "All that night the Lord drove the sea back with a strong east wind and turned it into dry land" [Ex. 14:21]. This couldn't be a clearer description of wind setdown.



The direction (east wind) helps settle the location of the Red Sea crossing, a matter of great debate. Only the Gulf of Aqaba has the right orientation for an east wind, particularly from the northeast, to cause wind setdown. (An east wind would blow *across* the Gulf of Suez.) The high mountains on either side of Aqaba would funnel the wind along the Gulf of Aqaba. Strong winds are even fairly common on the Gulf of Aqaba, because they are mentioned by various explorers.



Possible natural wind pattern for a large wind setdown

Thus, the description in Exodus of the Red Sea being blown back by a strong east wind uniquely determines where the Red Sea crossing occurred: the Gulf of Aqaba.

But can even extraordinary winds create a wall of water, dry land for the Israelites, and drown the Egyptians?

Humphreys' calculations for wind setdown in the Gulf of Aqaba requires a strong hurricane-force wind. The sea would be pushed back nearly a mile. The sand would drain rapidly and the wind would dry the land up. A mile is adequate area for the Israelites to walk across. Women and children walking in a hurricane? Humphreys explains they could have been in the eye of a hurricane.

What about the wall of water described in Exodus? It depends upon the wind strength and atmospheric conditions, but a wind pushing the water back about a mile creates a wall of water anywhere from four to eight feet high. This is certainly high enough.

### Dry Bones SPLITSVILLE



Drowning the Egyptian army? "The Lord swept them into the sea." [Ex. 14:27]; "Pharaoh's chariots and his army he has hurled into the sea." [Ex. 15:4]. If the wind stopped suddenly, water returns as a fast-moving vertical wave called a bore wave.

Humphreys calculates that water at a height of eight feet would return at eleven miles an hour. It would cover the one-mile-wide area of shore in only five minutes. A wall of water, roaring back at eleven miles per hour – sixteen feet per second – would knock over a horse and rider and hurl them into the

sea, just as described in Exodus. The wall of water would travel up the dry sand, overshoot, and water would come rushing back, dragging the knocked-over horses and their riders back into the depths of the Gulf of Aqaba.

## The Plagues

We now turn to the plagues. And for those, we have a musical diversion.

🎵 **Miracles: The Musical.** (→page 27)

For nearly 100 years (since 1911), it's been observed that the plagues follow a natural, connected sequence. Many scholars tried to identify the scientific causes underlying each plague and show how one plague led to another. What follows are updated summaries from the most detailed study, by Greta Hort<sup>5</sup> and the most recent work, by Dr. John Marr & Curtis Malloy.<sup>6</sup>

**Blood:** The first plague was the Nile turning into blood. However, this wasn't the first time the water of the Nile had "turned into blood." An ancient Egyptian text<sup>7</sup> [FN *Admonitions of Ipuwer*] states "Lo, the Nile overflows yet none plough for it... Lo, the river is blood. As one drinks of it one ... thirsts for water." Most date the text well before the Exodus.



*Admonitions of Ipuwer (late 13th C. BCE)*

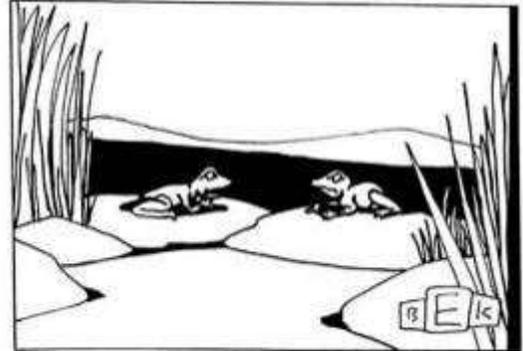
"Red tides" in saltwater seas are not uncommon and are due to algae blooms. Sometimes algae grow very fast, or "bloom," accumulating into dense patches near the surface of the water – there can be 240 million per gallon of water – and produce an intense red color. The actual location wouldn't have been the Nile River proper, because it's freshwater. But toxic algae are able to live in the Nile Estuary. The most likely time was September when the Nile flooded, and

5. Prof. at Aarhus University in Denmark, with consultation with scientists - published in 1957.

6. Dr. Marr was the principal epidemiologist for the NYC Department of Health. Malloy is research associate with the Medical and Health Research Assoc of NYC. Published in 1996.

nutrient-rich soil was brought down the Nile with the very hot weather. The resulting toxins killed the fish, and the dead fish caused the river to stink, just as described in Exodus. 🖐️

**Frogs:** "The Nile will teem with frogs. They will come up into your palace, your bedroom, and onto your bed, into the houses of your officials and on your people, and into your ovens and kneading troughs ..."



*"I miss that sense of fulfillment I had when I was part of a plague."*

The frog plague could be a natural consequence of the mass death of the fish: the decaying fish polluted the Nile Estuary, forcing the frogs ashore. Frogs are known to travel toward light and heat in search of insects to feed upon.



*"Frogs? Isn't that supposed to be some kind of warning?"*

**Vermin / Flies:** The plagues that follow – gnats or vermin and swarms of flies – were facilitated both by decaying fish and the mass death of frogs and toads. When alive, frogs and toads are natural predators of gnats and flies; when dead and decaying, they are the natural food for gnats and fly larvae.<sup>7</sup>

7. The translation of *arov* is unclear: it can be 'wild beasts' or 'flies'. The word only means 'swarm.'

Some have described the frogs as dying from anthrax, but that may not be necessary. If huge numbers of frogs left the polluted Nile and entered houses, they were unlikely to find enough insects to survive in the Egyptian's houses, away from their natural ecosystem. The frogs would have suffered mass extinction due to lack of food.

“Then the Lord said to Moses, ‘Stretch out your staff and strike the dust of the ground’ and throughout the land of Egypt the dust will become gnats ...” “I will send swarms of flies on you and your officials, on your people and into your houses. The houses of the Egyptians will be full of flies.”

The Hebrew word for gnats is a broad term that can mean varieties of insects as wide as mosquitoes, gnats, ticks, mites, midges and so forth. Marr & Malloy point out that midge larvae feed on microorganisms in decaying animals such as fish and frogs. The emergence of swarms of midges from “the dust of the ground” might well be how the ancients would have described a plague of midges swirling up, like a thick cloud of dust. Many midge species live in Egypt, but an analysis of the later plague that killed livestock helps Marr & Malloy identify the biting midge, *Culicoides*, as the most likely candidate.

Of the five main possibilities for flies – the housefly, blackfly, horsefly, tsetse fly and stable fly – we must find which of these swarms, breeds rapidly, and are common in Egypt's dry and arid climate. Only one candidate meets all those features (and is particularly unpleasant): the stable fly, *Stomoxys calcitrans*. The stable fly has a painful bite that punctures the skin and leaves behind an open wound, exposing the victim to infection. Stable flies also swarm and can breed very rapidly, with a female laying up to 500 eggs at a time. The stable fly admirably fits the description of the plague of flies given in Exodus.

Cattle Disease: “The hand of the Lord will bring a terrible plague on all your livestock in the field – on your horses and donkeys and camels and on your cattle and sheep and goats.”

There are many diseases that can kill livestock. Could anyone deduce after 3,000 years which particular disease killed those animals in Egypt? The first key is the disease killed a range of animals, yet there is no

mention of humans dying. This rules out bacterial infections such as anthrax, which would have caused substantial human deaths.

The second detail is that the disease was quite specific. Only certain animals are listed as being killed by the plague – horses, donkeys, camels, cattle, sheep and goats: these are all hooved mammals.

Two separate viruses (African horse sickness and bluetongue) are required to kill all the animals listed. Importantly, they are both spread by the same insect and can therefore be spread at the same time. The *Culicoides* midge is the main carrier of both viruses, so we can identify this as the most likely cause of the plague of Vermin (gnats).



Boils: “Then the Lord said to Moses and Aaron, ‘Take handfuls of soot from a furnace and have Moses toss it into the air in the presence of Pharaoh. It will become fine dust over the whole land of Egypt, and festering boils will break out on man and animals throughout the land.’ ”

There are various causes of boils and sores on the skin. Marr & Malloy analyzed these and concluded the most likely possibility is a bacterium called *Pseudomonas mallei*, which exists throughout Africa and the Middle East and is popularly known as glanders. Others have felt the cause could have been anthrax. Both are transmitted by fly bites.

The first six plagues are all biological. The logical sequence of these plagues, which occurred 3,300 years ago, appears to be faithfully preserved in the

ancient text of Exodus. For example, if plague three, biting midges, is interchanged with plague four, the death of livestock, then the scientific sequence is lost.

**Hail:** “When Moses stretched out his staff towards the sky, the Lord sent thunder and hail, and lightning flashed back and forth. It was the worst storm in the land of Egypt since it had become a nation.”

The first six plagues were all natural events, but of an unusually high intensity. The graphic account of the hailstorm in Exodus dramatically states this was the case for the seventh plague as well; it was the worst hailstorm in Egyptian history.

This hailstorm caused immense damage to crops. Exodus records: “The flax and barley were destroyed since the barley was in the ear, and the flax was in bloom. The wheat and spelt [a grass related to wheat], however, were not destroyed, because they ripen later.” As the flax was in bloom and barley being in ear, but not the wheat and spelt, we can deduce the plague of hail occurred in February-March. This fits well within the time span we’ll develop later for the plagues.

**Locusts:** “Never before had there been such a plague of locusts, nor will there ever be again. They devoured all that was left after the hail.” [Ex. 10:3-15]



*"You are seeing your first plague of locusts, son."*

Locusts have often overwhelmed farmers. In the summer of 2001, locusts devastated crops from Central Asia to the US Midwest. In the worst affected areas of Xinjiang (“shin-jiyang”) province, 10,000 locusts inhabited every 10 square feet. It is difficult to imagine what billions of locusts would have looked like. Newspaper reports said the modern plague was sending farmers back to Exodus for salvation.

Desert locusts usually fly with the wind. “The Lord made an east wind blow across the land all that day and all that night ... By morning the wind had brought the

locusts” [Ex. 10:13]. This is consistent with our knowledge of locust behavior. Invading swarms of locusts look for damp sand to lay their eggs and settle. “The thunder and the hail stopped, and the rain no longer poured down on the land” [Ex. 9:33]. So the land was very, very wet. It was ideal territory for locusts to lay their eggs in.

Thus, Exodus describes the two ingredients for a locust plague: a strong wind and wet soil, which attracts millions of overflying locusts to settle and lay their eggs.

**Darkness:** “... total darkness covered all Egypt ... darkness that can be touched. No one could see anyone else or leave his place for three days.”

Humphreys described an event he saw in Kuwait. Close to his hotel, a mass of people suddenly came running down the street. Behind them was a brown cloud from the ground to high into the sky. This cloud was also heading toward him. He ran back to his hotel, where the doorman said “Dust storm. Hurry, go to your room.” The brightly shining sun became totally blotted out by a thick cloud of sand. The darkness lasted several hours until the sandstorm subsided.

Sandstorms (called a *khamsin* in the Mideast) are common in Egypt in the spring. *Khamsins* can last two or three days. Humphreys believes the description in Exodus of a “darkness that can be touched” fits a *khamsin* perfectly. Some others have posited a solar eclipse, but that is neither local enough (“the Israelites enjoyed light in their dwellings”) nor lasts long enough (up to 7 minutes, not 3 days).

**Death of Firstborn:** “At midnight the Lord struck down all the firstborn sons in Egypt, from the firstborn of Pharaoh, who sat on the throne, to the firstborn of the prisoner, who was in the dungeon, and the firstborn of all the livestock as well.” [Ex. 12:29].



"We're pretty sure it's the West Nile Virus."

Can there possibly be a scientific explanation for a disease that affects only the male firstborn of both humans and animals?

The ancient Israelites regarded natural events as the hand of God. They knew hail was a natural event, but they believed God worked in, through and with natural events ("The Lord rained hail on the land of Egypt"). We therefore explore the possibility that the death of the firstborn might also have a rational, natural explanation, even though at first sight this appears highly unlikely.

Humphreys begins by suggesting the Egyptians were desperate to save whatever they could of their crops of barley and flax after its near-destruction by hail and locusts. They would have gathered what remained and stored the damp, contaminated harvest in their granary stores.

Even with good air circulation, wet grain can start to mold within a few hours in warm weather, but with poor air circulation the situation worsens dramatically. The *khamsin* storm would have covered entrances of the grain stores with sand and dust, preventing air circulation. The toxic spores and organisms from the feces of the locusts would have bred and multiplied in the damp and dark conditions of the three days of darkness.

What organisms in the locusts' feces thrive in damp storerooms? Marr & Malloy think they found the answer in mycotoxins. These are deadly poisons that are produced by fungi growing on organic substances such as crops. In 1961, over 100,000 turkeys died in Britain after being fed moldy peanut meal contaminated by mycotoxins. During World War II, thousands of people and animals in the USSR died from eating grain contaminated by mycotoxins.

But how could this only affect firstborn males? Humphreys has a tentative hypothesis. In many ancient societies, including Egypt and Israel, the firstborn sons were privileged and very special. They were fed first and often received a double portion. When the dust storm stopped, who would have been fed the first meal of mycotoxin-contaminated grain from the almost empty grain store? The firstborn son, of course. The firstborn sons would have died a rapid and sudden death, as described in Exodus.

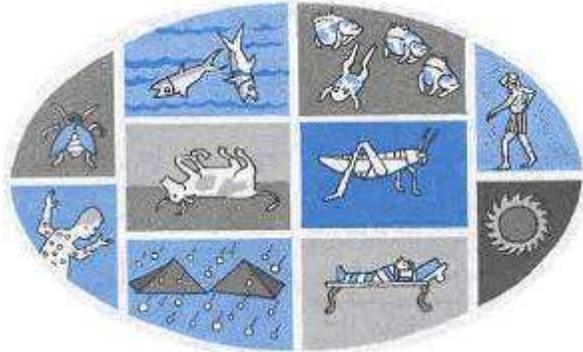
A more difficult problem is why firstborn male animals died as well as firstborn sons. Marr & Malloy suggest the first animals to feed at the feeding troughs full of grain would have been the most dominant and strongest ones, typically the eldest. Another possibility is the powerful Egyptian priests might have demanded food for the animals for sacrifice to appease their gods and to ward off yet more plagues. Humphreys believes the head of the family had no option but to feed precious grain to the special animals, the firstborn destined for sacrifice and then as food for the priests.<sup>8,9</sup>

Thus, we have a natural scientific explanation for all ten plagues, which follow a logical, connected sequence. The first plague, the Nile turned to blood, probably happened in September when the Nile was at a maximum and contained the most nutrients. The second plague, of frogs or toads, was in September-October. The third plague, of biting midges, arrived in October-November. The fifth plague, the death of livestock, would have followed rapidly from the biting midges and so was probably in November-December. The seventh plague, hail, took place in February-March; the eighth plague, locusts, also in February-March; the ninth plague, of darkness, in March; the tenth plague, the death of the firstborn, in March-April.

8. Although male firstborn Hebrew livestock were regarded as holy and were set apart for religious sacrifices, no one is sure if Egyptians had similar practices.

9. The Israelites ate food prepared and eaten very quickly, which would have made it less likely to be infected.

The only plagues for which the timing is uncertain are the plagues of flies and of boils. Thus the ten plagues spanned a time frame of about seven months: from September to March-April in the following year.<sup>10</sup>



דָּם. צְפַרְדֵּי. פְּנִים. עָרֹב. דָּבָר. שְׁחִין.  
בָּרָד. אֲרָבָה. חֲשָׁד. מַכַּת בְּכוֹרוֹת:

Instead of reciting The Ten Plagues, we use drops of wine to commemorate The Ten Causes:

1. Harmful Algae Blooms
2. Polluted Nile
3. Decaying Fish ...
4. ... and Decaying Frogs
5. Bluetongue & African Horse Sickness Viruses
6. Stable Fly (*Somoxys calcitrans*)
7. Severe Hailstorm
8. Wind and Damp Sand
9. Severe *Khamsin* (dust storm)
10. Mycotoxins on Grain (*macrocylic tricothecenes*)

The numerous miracles in Exodus can be attributed to acts of God's control over the timing and magnitude of natural processes in a way that appears utterly miraculous (as indeed they were). The description in the text is one of natural phenomena under God's control and as we saw with the plagues brought upon the Egyptians, these miracles are integrally related to each other.

<sup>10</sup> How were the Israelites spared from the effects of the plagues? The slaves lived in their own separate geographical location, the land of Goshen, which almost certainly was not in prime property area. The Egyptians would have kept for themselves the highly desirable areas near the waters of the Nile. The Israelites were probably living a few miles away from the Nile and its main branches – close enough to where the Egyptians lived to walk into work, but far enough away to be a distinct community. We therefore have a coherent scientific story of why the Israelites escaped the plagues, the key coming from Biblical records that the Israelites lived in a different location from the Egyptians.

Here's how miracles were introduced at one Seder: 

### Which mountain is Mt Sinai?

No one has convincingly identified Mt Sinai. Why? As we've seen, Mt Sinai was a volcano. *Volcanoes of the World*, written by leading volcanologists, contains comprehensive data about all volcanoes active in the past ten thousand years anywhere in the world. There are 1,511 such volcanoes. The entire Sinai Peninsula has none. If we believe Mt Sinai was a volcano, we must look to Arabia, east of the Sinai Peninsula. But the few people who believe Mt Sinai was a volcano have hundreds to choose from there.

Humphreys starts his identification of Mt Sinai (also called Mt Horeb) with this verse: "It takes eleven days to go from Horeb to Kadesh Barnea by the Mount Seir road" [Deut. 1:2]. Various 18th-19th century explorers found that pilgrim marches along Arabian trade routes averaged between 28 to 38 miles a day. Locating Kadesh Barnea on a modern map as 'Ain Qudeis, Humphreys circumscribes a circle representing the longest of 11-day journeys. In this circle reside only three volcanoes listed in *Volcanoes of the World*. All the other volcanoes active in the last ten thousand years are too far away.

Of these three candidates, two are far too small. A volcano in Harrat Rahah is a small volcanic tuff cone, an unimpressively small hill that couldn't fit the description of Mt Sinai. The other, called *Hala-l-'Ishqua*, has the lowest index of volcanic explosivity, a "gentle" eruption that had a cloud less than 300 feet high. Such a low cloud pillar wouldn't be visible many miles away; this too can be ruled out.

But the third candidate, Hala-l'-Bedr, or Mount Bedr, has requisites in spades. *Volcanoes of the World* indicates it had an explosive cloud at least 3 miles high. Out of the 1,511 historically active volcanoes, only three are within eleven day's journey from Kadesh Barnea, and only one of these emitted a high pillar of cloud and fire: Mount Bedr.



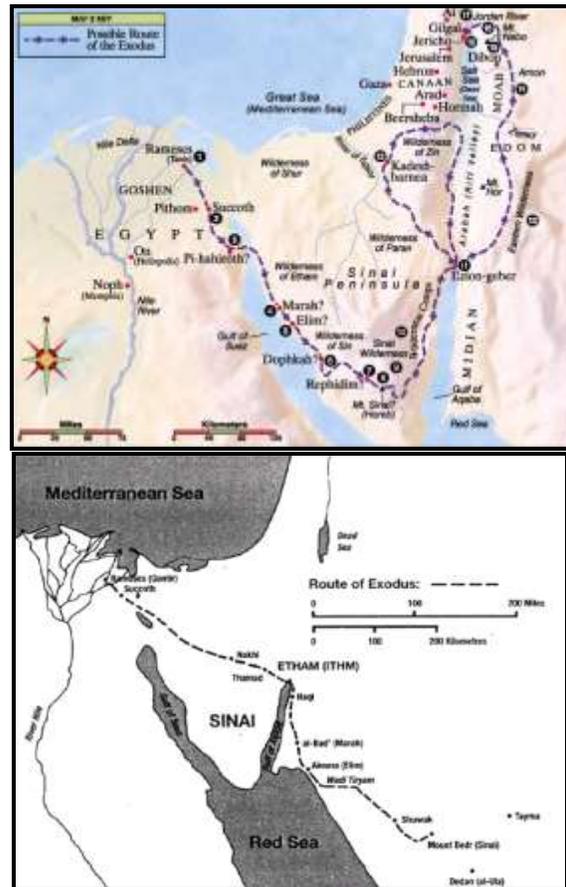
In fact, back in 1911, the explorer Musil first identified Mount Bedr as a possible Mt Sinai in his book *The Northern Hegaz*. He found that Mt Bedr is entirely isolated from the surrounding hills. “Put limits for the people around the mountain and tell them, ‘Be careful that you do not go up the mountain or touch it.’” The solitary cone of Mt Bedr is consistent with putting limits around the mountain. Bedr stands on a flat tabletop, which would have provided a public square for the Israelites to camp around the Tabernacle. There is adjacent, plentiful water supply plus the stream down the mountain, just as described in Exodus. The location must provide water and vegetation for tens of thousands of Israelites for eleven months. The fertile plain around Mt Bedr provides the best pasturage and watering place for many miles around.



Picture a huge, flat table mountain six miles across. Cape Town’s famous Table Mountain is less than two miles long. The table mountain on which Bedr stands is

over three times as long. What a staggering spectacle! And on top of this huge gray table is the black volcanic cone of Bedr, rising about 500 feet above. Its isolated volcanic cone is atop one of the largest table mountains in the world. Imagine it erupting!

Musil was asked to construct a plausible route from Egypt to Mt Bedr in order to justify his belief that Mt Sinai was Mt Bedr. He spent the next fifteen years of his life trying to do this, and failed. Building from different logic, Humphreys has developed a plausible path<sup>11</sup>, which he believes fits the biblical account like a glove.



Comparison of Humphreys’ route to traditional route

11. Humphreys’ tentative time scale for the journey is set out below, with estimated distances and time for the Israelites’ need to rest and regroup:

Rameses to Gulf of Aqaba	8 days
Cross Gulf of Aqaba and camp	2 days
From Gulf of Aqaba to Marah	3 days
Camp at Marah	2 days
Marah to Elim and camp	3 days
Elim to Red Sea (Wadi Tiryam) and camp	2 days
To Desert of Sin/Plain of Hisma	<u>10 days</u>
TOTAL	30 days

Proposed travel time of the Israelites from Rameses to the Desert of Sin is consistent with the month recorded in Exodus for this journey.

He shows that if Mt Sinai was an active volcano as described in Exodus, then there is one, and only one, possible mountain that could be Mt Sinai, which is Mt Bedr. No one has used these arguments before.<sup>12</sup>



Google Maps image of Mt Bedr

Now that we have arrived at the true Mt Sinai (at least according to one Cambridge physicist), let's enjoy the fruits of the Torah that hath been given to us, and the fruits of our now scientifically described celebration of freedom.

### Let's show some gratitude, people!

How many abundant favors has the Omnipresent given us!

Had He brought us out of Egypt, and not executed judgments against the Egyptians, it would have been enough--Dayyenu!

Had He executed judgments against them, and not split the Sea for us, it would have been enough--Dayyenu!

Had He satisfied our needs in the desert for forty years, and not fed us manna, it would have been enough--Dayyenu!

Had He brought us into Israel, and not built the Temple for us, it would have been enough--Dayyenu!

The song Dayenu is over a thousand years old:

### Sing Dayenu

אלו הוציאנו ממצרים, דינו:  
 Ilu hotzi- hotzianu,  
 Hotzianu mi-Mitzrayim,  
 Hotzianu mi-Mitzrayim, Dayenu.  
 אלו נתן לנו את השבת, דינו:  
 Ilu natan, natan lanu,  
 Natan lanu et ha-Shabat,  
 Natan lanu et ha-Shabat, Dayenu.  
 אלו נתן לנו את התורה, דינו:  
 Ilu natan, natan lanu,  
 natan lanu et ha-Torah,  
 Natan lanu et ha-Torah, Dayenu.  
 אלו הוציאנו ממצרים, ולא עשה בהם שפטים,  
 דינו:  
 אלו עשה בהם שפטים, ולא עשה באלהיהם,  
 דינו:  
 אלו עשה באלהיהם, ולא הרג את בכוריהם,  
 דינו:  
 אלו הרג את בכוריהם, ולא נתן לנו את ממונו,  
 דינו:  
 אלו נתן לנו את ממונם, ולא קרע לנו את הנג,  
 דינו:  
 אלו קרע לנו את הנג, ולא העבירנו  
 בתוכו בחרבה, דינו:  
 אלו העבירנו בתוכו בחרבה, ולא שקע  
 צרנו בתוכו, דינו:  
 אלו שקע צרנו בתוכו, ולא ספק צרנו  
 במדבר ארבעים שנה, דינו:  
 אלו ספק צרנו במדבר ארבעים שנה,  
 ולא האכילנו את חמנו, דינו:  
 אלו האכילנו את חמנו, ולא נתן לנו  
 את השבת, דינו:  
 אלו נתן לנו את השבת, ולא קרבנו  
 לפני הר סיני, דינו:  
 אלו קרבנו לפני הר סיני, ולא נתן לנו  
 את התורה, דינו:  
 אלו נתן לנו את התורה, ולא הכניסנו  
 לארץ ישראל, דינו:  
 אלו הכניסנו לארץ ישראל, ולא בנה  
 לנו את בית הבחירה, דינו:

How much more so, then should we be grateful to God for the numerous favors that She bestowed upon us: She brought us out of Egypt, and punished the Egyptians; She smote their gods, and slew their firstborn; She gave us their wealth and split the Sea for us; She led us through it on dry land, and sunk our foes in it; She sustained us in the desert for forty years, and fed us manna; She gave us the

12. Can additional evidence confirm this new/old proposal that Mt Sinai was the volcanic Mount Bedr? The main test would be to scientifically determine if Mount Bedr erupted at the time of the Exodus, 1300-1250 BCE. How long before the Saudi's allow such an investigation??

Sabbath, and brought us to Mt Sinai; She gave us the Torah, and brought us to Israel; She built the Temple for us, to atone for all our sins.

Rabbi Gamliel said whoever doesn't mention three things on Passover has not fulfilled his duty, namely: the sacrifice of Pesach, the unleavened bread, and the bitter herbs.

## פסח

Why was The Paschal Lamb eaten by our ancestors at the Temple? Because the Omnipresent passed over the houses of our ancestors in Egypt: "You shall say it is a sacrifice of the Passover unto the Lord, who passed over the houses of the children of Israel in Egypt, when he smote Egyptians and spared our houses, and the people bowed themselves and worshipped."

## Dry Bones



Show the unleavened bread and say:

## מַצָּה זֶה

What is the meaning of the Unleavened Bread, which we now eat? It is because the Holy one redeemed our ancestors before their dough had time to ferment: "They baked the dough which they had brought out of Egypt into unleavened cakes; they were driven out of Egypt and could not delay, nor had they prepared any provision for their journey."

Show the bitter herbs and say:

## מְרוֹר זֶה

This bitter herb, which we eat, what does it mean? It is eaten because the Egyptians embittered the lives of our ancestors in Egypt: "They embittered their lives with hard bondage, in mortar and brick, and in all manner of labor in the field. All labor was imposed upon them with rigor."

In every generation each individual is bound to regard himself as though he personally had come out of Egypt, as it is said: "You shall tell your daughter on that day: This is

on account of what the Eternal did for me when I came out of Egypt." It was not only our ancestors whom the Holy One redeemed from slavery; we, too, were redeemed with them: "He took us out from there in order to bring us in, that He might give us the land which He had sworn to our ancestors."

🎵 בְּכַל-דּוֹר וְדוֹר חַיֵּב אָדָם לִרְאוֹת אֶת-עֲצָמוֹ,  
כִּי-לֵבֵנו הוּא יָצָא מִמִּצְרַיִם, שְׁנֵאֲמַר: וְהִגְדַּתְּ לְבִנְךָ

Raise the cup of wine and say in unison:

Therefore it is our duty to thank and praise, pay tribute and glorify, exalt and honor, bless and acclaim the One who performed all these miracles for our ancestors and for us. She took us out of slavery into freedom, out of grief into joy, out of mourning into a festival, out of darkness into a great light, out of slavery into redemption. We will recite a new song before Her! Halleluyah!

Psalm 114

בְּצֵאת יִשְׂרָאֵל מִמִּצְרַיִם, בֵּית יַעֲקֹב מֵעַם לֵעֹ: הִתְהַוָּה  
יְהוָה לְקֹדֶשׁ. יִשְׂרָאֵל מִמְּשֻׁלֹתָיו: הַיָּם רָאָה וַיָּנֶס,  
הַיַּרְדֵּן יָסַב לְאַחֲזֹר: הַהַרִים רָקְדוּ כְאֵילִים. גְּבְעוֹת  
כְּבְנֵי-צֹאן: מַה-לָּךְ הַיָּם כִּי תִנּוּס. הַיַּרְדֵּן תִּסַּב לְאַחֲזֹר:  
הַהַרִים תִּרְקְדוּ כְאֵילִים. גְּבְעוֹת כְּבְנֵי-צֹאן: מִלִּפְנֵי אֲדוֹן  
חַיְלֵי אֶרֶץ. מִלִּפְנֵי אֱלֹהֵי יַעֲקֹב: תִּהְפְּכֵי הַצּוּר  
אֶגְס־מָיִם. חֲלָמִישׁ לְמַעֲיְנוֹ-מָיִם.

When Israel went out of Egypt, Jacob's household from a people of strange speech, Judah became God's sanctuary, Israel His kingdom. The sea saw it and fled; the Jordan turned backward. The mountains skipped like rams, and the hills like lambs. Why is it, sea, that you flee? Why, O Jordan, do you turn backward? You mountains, why do you skip like rams? You hills, why do you leap like lambs? O earth, tremble at the Lord's presence, at the presence of the God of Jacob, who turns the rock into a pond of water, the flint into a flowing fountain.

Blessed art Thou, Lord our God, King of the Universe, who hast redeemed us and our ancestors from Egypt and enabled us to reach this night that we may eat matzah and maror. So Lord our God and God of our ancestors, enable us to reach also the forthcoming holidays and festivals in peace, rejoicing in the rebuilding of Zion thy city, and joyful at thy service. There we shall eat of the offerings and Passover sacrifices which will be acceptably placed upon thy altar. We shall sing a new hymn of praise to Thee for our redemption and for our liberation. Blessed art Thou, O Lord, who hast redeemed Israel.

## The second cup

## כּוֹס שְׁנִי

בְּרוּךְ אַתָּה יְיָ, אֱלֹהֵינוּ מֶלֶךְ הָעוֹלָם,  
בוֹרֵא פְּרֵי הַגֶּפֶן:

*Over the second cup of wine, one recites:*

Blessed art Thou, Lord our God, King of the Universe,  
who createst the fruit of the vine.

*Wash hands for the meal:*

## רְחִצָּה

בְּרוּךְ אַתָּה יְיָ, אֱלֹהֵינוּ מֶלֶךְ הָעוֹלָם, אֲשֶׁר  
קִדְּשָׁנוּ בְּמִצְוֹתָיו, וְצִוָּנוּ עַל נְטִילַת יְדָיִם:

Blessed art Thou, Lord our God, King of the Universe,  
who hast sanctified us with thy commandments, and  
commanded us concerning the washing of the hands.



*Take the whole matzahs and the broken one and say:*

בְּרוּךְ אַתָּה יְיָ, אֱלֹהֵינוּ מֶלֶךְ הָעוֹלָם, הַמוֹצִיא  
לֶחֶם מִן הָאָרֶץ:

בְּרוּךְ אַתָּה יְיָ, אֱלֹהֵינוּ מֶלֶךְ הָעוֹלָם, אֲשֶׁר  
קִדְּשָׁנוּ בְּמִצְוֹתָיו וְצִוָּנוּ עַל אֲכִילַת מַצָּה:

Blessed art Thou, Lord our God, King of the Universe,  
who brings forth bread from the earth.

Blessed art Thou, Lord our God, King of the Universe,  
who hast sanctified us with thy commandments, and  
commanded us concerning the eating of unleavened bread.



**A musical interlude about bitter herbs (aka charain).**

♪ (→page 26)

*Take some bitter herbs, dip them in Charoseth and say:*

בְּרוּךְ אַתָּה יְיָ, אֱלֹהֵינוּ מֶלֶךְ הָעוֹלָם,  
אֲשֶׁר קִדְּשָׁנוּ בְּמִצְוֹתָיו וְצִוָּנוּ עַל אֲכִילַת מָרוֹר:

Blessed art Thou, Lord our God, King of the Universe,  
who hast sanctified us with thy commandments, and  
commanded us concerning the eating of the bitter herbs.



*Break the undermost matzah and distribute it with some bitter herbs  
and charoset, and say:*

זָכַר לְמִקְדָּשׁ כְּהִלֵּל: כֵּן עָשָׂה הִלֵּל בְּזִמְנוֹ שְׁבִית  
הַמִּקְדָּשׁ הָיָה קָיָם. הָיָה כּוֹרֵךְ פֶּסַח מַצָּה וּמָרוֹר  
וְאוֹכֵל בְּיַחַד. לְקַיֵּם מָה שֶׁנֶּאֱמָר: עַל-מִצּוֹת  
וּמָרוֹרִים יֹאכְלֶנּוּ:

Thus did Hillel during the existence of the holy temple: he  
took matzah and bitter herbs, and ate them together, in  
order to perform the Law: "With unleavened bread and  
bitter herbs shall they eat it."

## The Festive Meal

## צִפּוֹן

**Partake of the Afikoman אוֹכְלִים אֶת הָאֶפִיקוֹמָן**

*The assembled have to find it first!*

## Grace after meals

## ברכת המזון



Psalm 126

שיר המעלות בשׁוֹב יי אֶת שִׁיבַת צִיּוֹן הֵינּוּ כְּחֹלְמִים: אִזּוּ וּמָלֵא  
 שְׁחוֹק פִּינוּ וּלְשׁוֹנֵנוּ רִנָּה אִזּוּ לֵאמָרוּ בְּגוֹיִם הִגְדִּיל יי לַעֲשׂוֹת עִם  
 אֱלֹהֵי: הִגְדִּיל יי לַעֲשׂוֹת עִמָּנוּ הֵינּוּ שְׂמֵחִים: שׁוֹבָה יי אֶת שְׁבִיתָנוּ  
 כְּאֶפְיָקִים בְּנֶגֶב: תִּזְרְעִים בְּדִמְעָה בְּרִנָּה יִקְצְרוּ: הַלֹּדֶף יִלְדֵּף וּבָכָה  
 נִשְׂא מִשָּׁף הַזָּרַע בָּא יָבֵא בְרִנָּה נִשְׂא אֶלְמֹתָיו:

**Leader:** רְבוּתֵי נְבָרְךָ!  
**Assembled:** יְהִי שֵׁם יי מְבָרְךָ מֵעַתָּה וְעַד עוֹלָם.  
**Leader:** יְהִי שֵׁם יי מְבָרְךָ מֵעַתָּה וְעַד עוֹלָם. בְּרָשׁוֹת מָרְנָן וּרְבָנָן  
 וּרְבוּתֵי, נְבָרְךָ שְׂאֲכָלְנוּ מִשְׁלוֹ.  
**Assembled, then Leader:** בְּרוּךְ שְׂאֲכָלְנוּ מִשְׁלוֹ וּבְטוֹבוֹ הֵינּוּ.

**Assembled:** בְּרוּךְ הוּא וּבְרוּךְ שְׁמוֹ:  
 בְּרוּךְ אַתָּה יי, אֱלֹהֵינוּ מֶלֶךְ הָעוֹלָם, חָנֵן אֶת הָעוֹלָם כְּלוֹ בְטוֹבוֹ  
 בְּחוֹן בְּחֶסֶד וּבְרַחֲמִים הוּא נוֹתֵן לָחֵם לְכֹל בֶּשֶׂר כִּי לְעוֹלָם חֶסֶד.  
 וּבְטוֹבוֹ הַגְּדוֹל תִּמְיֵד לֹא חֶסֶר לָנוּ, וְאֵל יִחְסַר לָנוּ מִזֶּן לְעוֹלָם וְעַד.  
 בְּעֵבוֹר שְׁמוֹ הַגְּדוֹל, כִּי הוּא אֵל זֶן וּמְפָרֵס לְכֹל וּמְטִיב לְכֹל, וּמְכִין  
 מִזֶּן לְכֹל בְּרִיּוֹתָיו אֲשֶׁר בָּרָא. בְּרוּךְ אַתָּה יי, חָנֵן אֶת הַכֹּל:

נוֹדָה לָךְ יי אֱלֹהֵינוּ עַל שֶׁהִנְחַלְתָּ לְאַבּוֹתֵינוּ, אֶרֶץ חֹמֶדָה טוֹבָה  
 וּרְחֹבָה, וְעַל שֶׁחֻצְאַתָּנוּ יי אֱלֹהֵינוּ מֵאֶרֶץ מִצְרַיִם, וּפְדִיתָנוּ, מִבֵּית  
 עַבָדִים, וְעַל בְּרִיתְךָ שֶׁחֲתַמְתָּ בְּבִשְׂרָנוּ, וְעַל תּוֹרַתְךָ שֶׁלְּמַדְתָּנוּ, וְעַל  
 חֻקֶּיךָ שֶׁהוֹדַעְתָּנוּ וְעַל חַיִּים חוֹן וְחֶסֶד שֶׁחֻנַּנְתָּנוּ, וְעַל אֲכִילַת מִזֶּן  
 שֶׁאַתָּה זֶן וּמְפָרֵס אוֹתָנוּ תִּמְיֵד, בְּכֹל יוֹם וּבְכֹל עֵת וּבְכֹל שְׁעָה:  
 וְעַל הַכֹּל יי אֱלֹהֵינוּ אֲנַחְנוּ מוֹדִים לָךְ, וּמְבָרְכִים אוֹתְךָ, יְתִבְרַךְ  
 שְׁמֶךָ בְּפִי כָל חַי תִּמְיֵד לְעוֹלָם וְעַד. בְּכַתּוּב, וְאָכַלְתָּ וּשְׂבַעְתָּ, וּבְרַכְתָּ  
 אֶת יי אֱלֹהֶיךָ עַל הָאֶרֶץ הַטּוֹבָה אֲשֶׁר נָתַן לָךְ. בְּרוּךְ אַתָּה יי, עַל  
 הָאֶרֶץ וְעַל הַמִּזֶּן:

רחם נא יי אלהינו, על ישראל עמך, ועל ירושלים עירך, ועל ציון  
 משכן כבודך, ועל מלכות בית דוד משיחך, ועל הבית הגדול  
 ומקדוש שנקרא שמך עליו. אלהינו, אבינו, רענו, זוננו, פרנסנו,  
 וכלכלנו, וחרוחנו, וחרוננו לנו יי אלהינו מהרה מכל צרותינו, ונא,  
 אל תצריכנו יי אלהינו, לא לידי מתנת בשר נדס, ולא לידי  
 הלואתם. כי אם לך המלאה, המפותחה, המקדושה והרחבה,  
 שלא נבוש ולא נפלם לעולם ועד:

לשבת רצה ומחליצנו יי אלהינו במצותך ובמצות יום השביעי  
 השבת הגדול ומקדוש הזה. כי יום זה גדול וקדוש הוא לפניך,  
 לשבת בו ולנוח בו באהבה כמצות רצונך וברצונך הניח לנו יי  
 אלהינו, שלא תהא צרה ונגון ואנחה ביום מנוחתנו. וחראנו יי  
 אלהינו בנחמת ציון עירך, ובבגן ירושלים עיר קדשך, כי אתה  
 הוא בעל הישועות ובעל הנחמות:

אלהינו ואלהי אבותינו, יעלה ויבא ויגיע, ויראה, וירצה, וישמע,  
 ויפקד, ויזכר זכרוננו ופקדוננו, וזכרון אבותינו, וזכרון משיח בן  
 דוד עבדך, וזכרון ירושלים עיר קדשך, וזכרון כל עמך בית  
 ישראל לפניך, לפליטה לטובה לחן ולחסד ולרחמים, לחיים  
 ולשלום ביום חג המצות הזה. זכרנו יי אלהינו בו לטובה.  
 ופקדנו בו לברכה. והושיענו בו לחיים, ובדבר ישועה ורחמים,  
 חוס וחסד, ורחם עלינו והושיענו, כי אלקי עינינו, כי אל מלך חנון  
 ורחום אתה:

ובנה ירושלים עיר הקדש במהרה בזמנינו. ברוך אתה יי, בונה  
 ברחמי ירושלים. אמן

ברוך אתה יי אלהינו מלך העולם, האל אבינו, מלכנו, אדירנו  
 בוראנו, גואלנו, יוצרנו, קדושנו קדוש יעקב, רוענו רועה ישראל.  
 המלך הטוב, והמטיב לכל, שבכל יום ויום הוא הטוב, הוא  
 מטיב, הוא ייטיב לנו. הוא גמלנו, הוא גומלנו, הוא יגמלנו לעד  
 לחן ולחסד ולרחמים ולרחוץ הצלה ומחילה ברכה וישועה,  
 נחמה, פרנסה וכלכלה, ורחמים, וחסד ושלום, וכל טוב, ומכל  
 טוב לעולם אל יחסרנו:

הרחמן, הוא ימלוך עלינו לעולם ועד.  
 הרחמן, הוא יתברך בשמים ובארץ.  
 הרחמן, הוא ישפח לדור דורים, ויתפאר בנו לעד ולנצח ונצחים,  
 ויתחדר בנו לעד ולעולמי עולמים.  
 הרחמן, הוא יפרנסנו בכבוד.  
 הרחמן, הוא ישבור עלנו מעל צנארנו והוא יוליכנו קוממיות לארצנו.

הַרְחֵמוּ, הוּא יִשְׁלַח לָנוּ בְּרָכָה מְרֻבָּה בְּפִיַּת הַזֶּה, וְעַל שְׁלַחוֹ זֶה  
 שְׂאֵבְלָנוּ עָלָיו.  
 הַרְחֵמוּ, הוּא יִשְׁלַח לָנוּ אֶת אֱלֹהֵינוּ הַנְּבִיא זְכוּר לְטוֹב, וַיִּבְשֹׁר לָנוּ  
 בְּשׁוּרוֹת טוֹבוֹת יְשׁוּעוֹת וְנִחְמוֹת.  
 הַרְחֵמוּ, הוּא יִבְרָךְ אֶת (אָבִי מוֹרִי) בְּעַל הַפִּיַת הַזֶּה, וְאֶת  
 בְּעַל הַפִּיַת הַזֶּה,

הַרְחֵמוּ, הוּא יִבְרָךְ אֶת בְּעַל הַפִּיַת הַזֶּה, וְאֶת אֲשֵׁרֵנוּ בְּעַל הַפִּיַת הַזֶּה.

אוֹתָם וְאֶת בֵּיתָם וְאֶת זֶרְעָם וְאֶת כָּל אֲשֶׁר לָחֵם אוֹתָנוּ וְאֶת כָּל  
 אֲשֶׁר לָנוּ, כְּמוֹ שְׁנֵתְבָרְכוּ אֲבוֹתֵינוּ, אֲבִרְהֵם יִצְחָק וְיַעֲקֹב: בְּכָל,  
 מִכָּל, כָּל. כֵּן יִבְרָךְ אוֹתָנוּ כְּלָנוּ יַחַד. בְּבְרָכָה שְׁלֵמָה, וְנֹאמֵר אָמֵן:

בְּמֵרוֹם יִלְמְדוּ עֲלֵיהֶם וְעֲלֵינוּ זְכוֹת, שְׁתֵּחַא לְמִשְׁמֶרֶת שְׁלוֹם, וְנִשְׂא  
 בְּרָכָה מֵאֵת יי וְצִדְקָה מֵאֱלֹהֵי יִשְׂרָאֵל, וְנִמְצָא חֵן וְשִׂכָּל טוֹב בְּעֵינֵי  
 אֱלֹהִים וְאָדָם:

לשבת הַרְחֵמוּ, הוּא יְנַחֵלְנוּ יוֹם שְׂכָלוֹ שֶׁבֶת וּמְנוּחָה לְחַיֵּי  
 הָעוֹלָמִים.

הַרְחֵמוּ, הוּא יְנַחֵלְנוּ יוֹם שְׂכָלוֹ טוֹב.

הַרְחֵמוּ, הוּא יִזְכְּנוּ לִימֹת הַמְּשִׁיחַ וְלְחַיֵּי הָעוֹלָם הַבָּא.  
 מְגִדוֹל יְשׁוּעוֹת מְלָכוֹ, וְעֵשָׂה חֶסֶד לְמַשִּׁיחוֹ לְדוֹד וּלְזָרְעוֹ עַד עוֹלָם:  
 עֵשָׂה שְׁלוֹם בְּמֵרוֹמָיו, הוּא יַעֲשֶׂה שְׁלוֹם, עֲלֵינוּ וְעַל כָּל יִשְׂרָאֵל,  
 וְנֹאמְרוּ אָמֵן:

יֵרָאוּ אֶת יי קִדְשָׁיו, כִּי אֵין מְחֻסָּר לִירְאָיו: כְּפִירִים רָשׁוּ וְרָעִבוּ,  
 וְדוֹרְשֵׁי יי לֹא יִחְסְרוּ כָּל טוֹב: הוֹדוּ לַיי כִּי טוֹב, כִּי לְעוֹלָם חֶסֶד:  
 פּוֹתַח אֶת יְדָד, וּמִשְׁבִּיעַ לְכָל חַי רְצוֹן: בְּרוּךְ הַגִּבּוֹר אֲשֶׁר יִבְטַח בְּיֵי,  
 וְהִיָּה יי מְבִטְחוֹ: נַעַר הַיִּתִּי גַם זְקֵנֵנוּ וְלֹא רְאִיתִי צָדִיק נֶעְזֵב, וְזָרְעוֹ  
 מִבְּקֵשׁ לָחֵם: יי עַז לְעַמּוֹ יִתֵּן, יי יִבְרָךְ אֶת עַמּוֹ בְּשְׁלוֹם:

## The third cup

## כוס שלי



"Don't just sit there—recline!"

ברוך אתה יי, אלהינו מלך העולם,  
בורא פרי הגפן:

*Over the second cup of wine, one recites:*

Blessed art Thou, Lord our God, King of the Universe,  
who createst the fruit of the vine.

### Elijah's cup.

A cup of wine is poured in honor of the Prophet Elijah.  
After the door is opened and Elijah's song is sung,  
the Hallel continues.

♪ (→page 25)

## Hallel הלל

Nor for our sake, O Lord, not for our sake, but for thy name's sake give glory, because of thy kindness and thy truth. Our God is in the heavens. Their idols are silver and gold, the work of human hands. They have a mouth, but they cannot speak; they have eyes, but they cannot see; they have ears, but they cannot hear; they have a nose, but they cannot smell; they have hands, but they cannot feel; they have feet, but they cannot walk; nor can they utter a sound with their throat. Those who make them shall become like them. O Israel, trust in the Lord! He is their help and shield. You who revere the Lord, trust in the Lord! He is our help and shield.

The Lord who has remembered us will bless; He will bless the house of Israel; He will bless the house of Aaron; He will bless those who revere the Lord, the small with the great. May the Lord increase you, you and your children. You are blessed by the Lord, who made the heaven and earth. We will bless the Lord from this time forth and forever. Halleluyah!

Give thanks to the Lord, for He is good,  
כי לעולם חסדו: (His kindness endures forever)  
Give thanks to the God above gods,  
כי לעולם חסדו:  
Give thanks to the Lord of lords,  
כי לעולם חסדו:  
To Him who alone does great wonders,  
כי לעולם חסדו  
To Him who made the heavens with understanding,  
כי לעולם חסדו  
To Him who stretched the earth over the waters,  
כי לעולם חסדו  
To Him who made the great lights,  
כי לעולם חסדו  
The sun to reign by day,  
כי לעולם חסדו  
The moon and the stars to reign by night,  
כי לעולם חסדו  
To Him who smote Egypt in their firstborn,  
כי לעולם חסדו

And took Israel out from among them,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 With strong hand and outstretched arm,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 To him who parted the Red Sea,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 And caused Israel to pass through it,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 And threw Pharaoh and his host in the Red Sea,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 To Him who led His people through the wilderness,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 To Him who smote great kings,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 And slew mighty kings,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 Sihon, king of the Amorites,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 And Og, king of Bashan,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 And gave their land as an inheritance,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 An inheritance to Israel His servant,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 Who remembered us in our low state,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 And released us from our foes,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 Who gives food to all creatures,  
 כִּי לְעוֹלָם חֲסִדוֹ  
 Give thanks to God of all heaven,  
 כִּי לְעוֹלָם חֲסִדוֹ

### The fourth cup

### כוס רביעית

בְּרוּךְ אַתָּה יְיָ, אֱלֹהֵינוּ מֶלֶךְ הָעוֹלָם, בּוֹרֵא פְּרִי הַתְּגָפֹן:

Blessed art Thou, Lord our God, King of the Universe, who creates the fruit of the vine.

Blessed, art Thou, Lord our God, King of the Universe, for the vine and its fruit, and for the produce of the field, for the beautiful and spacious land which Thou gave to our fathers as a heritage to eat of its fruit and to enjoy its goodness. Have mercy, Lord our God, on Israel thy people, on Jerusalem thy city, on Zion the abode of thy glory, on thy altar and thy Temple. Rebuild Jerusalem, the holy city, speedily in our days. Bring us there and cheer us with its restoration; may we eat of its fruit and enjoy of its goodness; may we bless Thee for it in holiness and purity. Grant us happiness on this Feast of Matzot; For Thou, O Lord, are good and beneficent to all, and we thank Thee for the land and the fruit of the vine. Blessed art Thou, O Lord for the land and the fruit of the vine.

## Acceptance נרצה

חסל סדור פסח בהלכותו, ככל משפטו וחקתו. באשר זכינו  
לסדר אותו, כן נזכה לעשותו. דך שוכן מעונה, קומם קהל צדק  
מי מנה. בקרוב נחל וטעי בנה, פדוים לציון ברנה.

The prescribed order of the Passover Service is now complete. We have retold the ancient story of Israel's liberation. We have partaken of the traditional foods, symbols of the struggle for human freedom. As we have been privileged to observe the Seder tonight, may all of us be privileged to celebrate it, together, again next year. May it be God's Will to preserve us in life and in good health. May the spirit of this festival remain with us throughout the coming year, and may we be imbued, at all times, with its lofty and exalted teachings, expanded by Professor Colin Humphreys and his varied interests.

## NEXT YEAR IN JERUSALEM : לשנה הבאה בירושלים

♪ L'shana haba'ah, b'yerushalayim. L'shana haba'ah, b'yerushalayim ha'bnyua!

This year we are here, next year in Jerusalem.

Recite on the second night:

Thy wondrous powers didst Thou display on Pesach; Chief of all feasts didst Thou make Pesach;  
Thou didst reveal Thyself to Abraham on the midnight of Pesach.

(All:) And you shall say: It is the Pesach sacrifice.

To his door didst Thou come at noon on Pesach; With matzot he served angels on Pesach; To the herd  
he ran for the ox recalling Joseph on Pesach.

(All:) And you shall say: It is the Pesach sacrifice.

The men of Sodom were burned in wrath on Pesach; Lot was saved, he baked matzot at the end of Pesach;  
Thou didst sweep and destroy Egypt when passing on Pesach.

(All:) And you shall say: It is the Pesach sacrifice.

♪ Ki Lo Na'eh

כי לו נאה, כי לו נאה

אדיר במלכותה, בחור בהלכה, גדוהו לאמרו לו:  
לך ולך, לך כי לך, לך אף לך, לך ?? חממלכה.  
כי לו נאה, כי לו נאה.

דגול במלכותה, הדור בהלכה, ותיקיו לאמרו לו:  
לך ולך, לך כי לך, לך אף לך, לך ?? חממלכה.  
כי לו נאה, כי לו נאה.

זכאי במלכותה, חסין בהלכה, טפסריו לאמרו לו:  
לך ולך, לך כי לך, לך אף לך, לך ?? חממלכה.  
כי לו נאה, כי לו נאה.

♪ Adir Hu

אדיר הוא

אדיר הוא, יבנה ביתו בקרוב, במחנה במחנה, בימינו בקרוב. אל  
בנה, בנה ביתך בקרוב.

בחור הוא, גדול הוא, דגול הוא, יבנה ביתו בקרוב, במחנה  
במחנה, בימינו בקרוב. אל בנה, אל בנה ביתך בקרוב.

קדוֹר הוּא, נְתִיֵק הוּא, זָפֵאי הוּא, חֲסִיד הוּא, יִבְנֶה בֵּיתוֹ בְּקִרְוֹב,  
בְּמַהְרָה בְּמַהְרָה, בְּזִמְיֵנוּ בְּקִרְוֹב אֵל בְּנֵה, אֵל בְּנֵה, בְּנֵה בֵּיתְךָ  
בְּקִרְוֹב.

טְחוֹר הוּא, יָחִיד הוּא, פְּבִיר הוּא, לְמוֹד הוּא, מְלֶכֶךְ הוּא, נוֹרָא הוּא,  
סְגִיב הוּא, עֲזוּז הוּא, פּוֹדֵה הוּא, צְדִיק הוּא, יִבְנֶה בֵּיתוֹ בְּקִרְוֹב,  
בְּמַהְרָה בְּמַהְרָה, בְּזִמְיֵנוּ בְּקִרְוֹב אֵל בְּנֵה, אֵל בְּנֵה, בְּנֵה בֵּיתְךָ  
בְּקִרְוֹב.

קְדוּשׁ הוּא, רְחוּם הוּא, שְׂדֵי הוּא, תְּקִיף הוּא, יִבְנֶה בֵּיתוֹ בְּקִרְוֹב,  
בְּמַהְרָה בְּמַהְרָה, בְּזִמְיֵנוּ בְּקִרְוֹב אֵל בְּנֵה, אֵל בְּנֵה, בְּנֵה בֵּיתְךָ  
בְּקִרְוֹב.

## ♪ Echad Mi Yodea?

### אֶחָד מִי יוֹדֵעַ?

אֶחָד מִי יוֹדֵעַ? אֶחָד אֲנִי יוֹדֵעַ: אֶחָד אֱלֹהֵינוּ שְׁבַשְׁמִים וּבְאֶרֶץ.  
שְׁנַיִם מִי יוֹדֵעַ? שְׁנַיִם אֲנִי יוֹדֵעַ: שְׁנֵי לְחוֹת הַבְּרִית, אֶחָד אֱלֹהֵינוּ  
שְׁבַשְׁמִים וּבְאֶרֶץ.

שְׁלֹשָׁה מִי יוֹדֵעַ? שְׁלֹשָׁה אֲנִי יוֹדֵעַ: שְׁלֹשָׁה אַבּוֹת, שְׁנֵי לְחוֹת הַבְּרִית,  
אֶחָד אֱלֹהֵינוּ שְׁבַשְׁמִים וּבְאֶרֶץ.

אַרְבַּע מִי יוֹדֵעַ? אַרְבַּע אֲנִי יוֹדֵעַ: אַרְבַּע אִמּוֹת, שְׁלֹשָׁה אַבּוֹת,  
שְׁנֵי לְחוֹת הַבְּרִית, אֶחָד אֱלֹהֵינוּ שְׁבַשְׁמִים וּבְאֶרֶץ.

חֲמִשָּׁה מִי יוֹדֵעַ? חֲמִשָּׁה אֲנִי יוֹדֵעַ: חֲמִשָּׁה חוּמְשֵׁי תוֹסֵרָה, אַרְבַּע  
אִמּוֹת, שְׁלֹשָׁה אַבּוֹת, שְׁנֵי לְחוֹת הַבְּרִית, אֶחָד אֱלֹהֵינוּ שְׁבַשְׁמִים  
וּבְאֶרֶץ.

שֵׁשׁ מִי יוֹדֵעַ? שֵׁשׁ אֲנִי יוֹדֵעַ: שֵׁשׁ סְדְרֵי מִשְׁנָה, חֲמִשָּׁה חוּמְשֵׁי  
תוֹרָה, אַרְבַּע אִמּוֹת, שְׁלֹשָׁה אַבּוֹת, שְׁנֵי לְחוֹת הַבְּרִית, אֶחָד  
אֱלֹהֵינוּ שְׁבַשְׁמִים וּבְאֶרֶץ.

שִׁבְעָה מִי יוֹדֵעַ? שִׁבְעָה אֲנִי יוֹדֵעַ: שִׁבְעָה יְמֵי שַׁבָּת, שֵׁשׁ סְדְרֵי  
מִשְׁנָה, חֲמִשָּׁה חוּמְשֵׁי תוֹרָה, אַרְבַּע אִמּוֹת, שְׁלֹשָׁה אַבּוֹת, שְׁנֵי  
לְחוֹת הַבְּרִית, אֶחָד אֱלֹהֵינוּ שְׁבַשְׁמִים וּבְאֶרֶץ.

שְׁמוֹנֶה מִי יוֹדֵעַ? שְׁמוֹנֶה אֲנִי יוֹדֵעַ: שְׁמוֹנֶה יְמֵי מִילָה, שִׁבְעָה יְמֵי  
שַׁבָּת, שֵׁשׁ סְדְרֵי מִשְׁנָה, חֲמִשָּׁה חוּמְשֵׁי תוֹרָה, אַרְבַּע אִמּוֹת,  
שְׁלֹשָׁה אַבּוֹת, שְׁנֵי לְחוֹת הַבְּרִית, אֶחָד אֱלֹהֵינוּ שְׁבַשְׁמִים וּבְאֶרֶץ.

תְּשַׁע מִי יוֹדֵעַ? תְּשַׁע אֲנִי יוֹדֵעַ: תְּשַׁע יְרַחֵי לְדָת, שְׁמוֹנֶה יְמֵי  
מִילָה, שִׁבְעָה יְמֵי שַׁבָּת, שֵׁשׁ סְדְרֵי מִשְׁנָה, חֲמִשָּׁה חוּמְשֵׁי תוֹרָה,  
אַרְבַּע אִמּוֹת, שְׁלֹשָׁה אַבּוֹת, שְׁנֵי לְחוֹת הַבְּרִית, אֶחָד אֱלֹהֵינוּ  
שְׁבַשְׁמִים וּבְאֶרֶץ.

עֲשֶׂה מִי יוֹדֵעַ? עֲשֶׂה אֲנִי יוֹדֵעַ: עֲשֶׂה דְבָרָא, תִּשְׁעָה יְרַחֵ לְדָה, שְׂמוֹנָה יְמֵי מִלָּה, שְׁבַעַה יְמֵי שְׁבַתָּא, שְׁשָׁה סְדָרֵי מְשָׁנָה, חֲמִשָּׁה חוּמְשֵׁי תוֹרָה, אַרְבַּע אֲמָהוֹת, שְׁלֹשָׁה אָבוֹת, שְׁנֵי לְחוֹת הַבְּרִית, אֶחָד אֱלֹהֵינוּ שְׁבַשְׂמִים וּבְאֲרָךְ.

אֶחָד עֲשֶׂר מִי יוֹדֵעַ? אֶחָד עֲשֶׂר אֲנִי יוֹדֵעַ: אֶחָד עֲשֶׂר כּוֹכְבֵיָא, עֲשֶׂה דְבָרָא, תִּשְׁעָה יְרַחֵ לְדָה, שְׂמוֹנָה יְמֵי מִלָּה, שְׁבַעַה יְמֵי שְׁבַתָּא, שְׁשָׁה סְדָרֵי מְשָׁנָה, חֲמִשָּׁה חוּמְשֵׁי תוֹרָה, אַרְבַּע אֲמָהוֹת, שְׁלֹשָׁה אָבוֹת, שְׁנֵי לְחוֹת הַבְּרִית, אֶחָד אֱלֹהֵינוּ שְׁבַשְׂמִים וּבְאֲרָךְ.

שְׁנַיִם עֲשֶׂר מִי יוֹדֵעַ? שְׁנַיִם עֲשֶׂר אֲנִי יוֹדֵעַ: שְׁנַיִם עֲשֶׂר שְׁבַטֵיָא, אֶחָד עֲשֶׂר כּוֹכְבֵיָא, עֲשֶׂה דְבָרָא, תִּשְׁעָה יְרַחֵ לְדָה, שְׂמוֹנָה יְמֵי מִלָּה, שְׁבַעַה יְמֵי שְׁבַתָּא, שְׁשָׁה סְדָרֵי מְשָׁנָה, חֲמִשָּׁה חוּמְשֵׁי תוֹרָה, אַרְבַּע אֲמָהוֹת, שְׁלֹשָׁה אָבוֹת, שְׁנֵי לְחוֹת הַבְּרִית, אֶחָד אֱלֹהֵינוּ שְׁבַשְׂמִים וּבְאֲרָךְ.

שְׁלֹשָׁה עֲשֶׂר מִי יוֹדֵעַ? שְׁלֹשָׁה עֲשֶׂר אֲנִי יוֹדֵעַ: שְׁלֹשָׁה עֲשֶׂר מִדְּבָא, שְׁנַיִם עֲשֶׂר שְׁבַטֵיָא, אֶחָד עֲשֶׂר כּוֹכְבֵיָא, עֲשֶׂה דְבָרָא, תִּשְׁעָה יְרַחֵ לְדָה, שְׂמוֹנָה יְמֵי מִלָּה, שְׁבַעַה יְמֵי שְׁבַתָּא, שְׁשָׁה סְדָרֵי מְשָׁנָה, חֲמִשָּׁה חוּמְשֵׁי תוֹרָה, אַרְבַּע אֲמָהוֹת, שְׁלֹשָׁה אָבוֹת, שְׁנֵי לְחוֹת הַבְּרִית, אֶחָד אֱלֹהֵינוּ שְׁבַשְׂמִים וּבְאֲרָךְ.

## ♫ Chad Gadya

## חַד גַּדְיָא, חַד גַּדְיָא

חַד גַּדְיָא, חַד גַּדְיָא  
דְּזַבִּין אַבָּא בְּתַרֵי זַיִזֵי, חַד גַּדְיָא, חַד גַּדְיָא.

וְאַתָּא שׁוֹנְרָא, וְאַכְלָה לְגַדְיָא, דְּזַבִּין אַבָּא בְּתַרֵי זַיִזֵי, חַד גַּדְיָא, חַד גַּדְיָא.

וְאַתָּא כְּלָבָא, וְנִשְׁדָּה לְשׁוֹנְרָא, דְּאַכְלָה לְגַדְיָא, דְּזַבִּין אַבָּא בְּתַרֵי זַיִזֵי, חַד גַּדְיָא, חַד גַּדְיָא.

וְאַתָּא חוּטְרָא, וְחִפָּה לְכְלָבָא, דְּנִשְׁדָּה לְשׁוֹנְרָא, דְּאַכְלָה לְגַדְיָא,  
דְּזַבִּין אַבָּא בְּתַרֵי זַיִזֵי, חַד גַּדְיָא, חַד גַּדְיָא.

וְאַתָּא נוֹרָא, וְשָׂרְף לְחוּטְרָא, דְּחִפָּה לְכְלָבָא, דְּנִשְׁדָּה לְשׁוֹנְרָא,  
דְּאַכְלָה לְגַדְיָא, דְּזַבִּין אַבָּא בְּתַרֵי זַיִזֵי, חַד גַּדְיָא, חַד גַּדְיָא.

וְאַתָּא מַיָּא, וְכַבָּה לְנוֹרָא, דְּשָׂרְף לְחוּטְרָא, דְּחִפָּה לְכְלָבָא, דְּנִשְׁדָּה  
לְשׁוֹנְרָא, דְּאַכְלָה לְגַדְיָא, דְּזַבִּין אַבָּא בְּתַרֵי זַיִזֵי, חַד גַּדְיָא, חַד גַּדְיָא.

וְאַתָּא תוֹרָא, וְשַׁתָּא לְמַיָּא, דְּכַבָּה לְנוֹרָא, דְּשָׂרְף לְחוּטְרָא, דְּחִפָּה  
לְכְלָבָא, דְּנִשְׁדָּה לְשׁוֹנְרָא, דְּאַכְלָה לְגַדְיָא, דְּזַבִּין אַבָּא בְּתַרֵי זַיִזֵי, חַד גַּדְיָא, חַד גַּדְיָא.

וְאַתָּא מְשׁוּחַט, וְשַׁחַט לְתוֹרָא, דְּשַׁתָּא לְמַיָּא, דְּכַבָּה לְנוֹרָא, דְּשָׂרְף  
לְחוּטְרָא, דְּחִפָּה לְכְלָבָא, דְּנִשְׁדָּה לְשׁוֹנְרָא, דְּאַכְלָה לְגַדְיָא, דְּזַבִּין  
אַבָּא בְּתַרֵי זַיִזֵי, חַד גַּדְיָא, חַד גַּדְיָא.

## Hey There Elijah

To tune of *Hey There Delilah* by The Plain White T's  
 By Barry Kling (Scansion adjustments by Randi & Murray Spiegel)  
 © 2008 Permission granted for private use

**Hey there Elijah**  
**What's it like at all those seders**  
**You will drink a lot of wine tonight**  
**But tonight you're permitted yes you are**  
**We can't continue without you,**  
**Oh yes its true**

**Hey there Elijah**  
**We believe you'll be here someday**  
**And will bring the world together**  
**Give us hope for what the future will provide**  
**Hear our prayers and our cries,**  
**You're by our side**

**Chorus: Oh it's what you mean to us (4 times)**  
**What you mean to us.**

**Hey there Elijah**  
**Share your vision of the world to be**  
**Where G-d is one for everyone**  
**And seders 'round the world are being done**  
**Next year may we all celebrate,**  
**In Jerusalem**

**Hey there Elijah**  
**With our friends and fam'ly gathered here**  
**Just as they do year after year**  
**Now we have only one task left to do,**  
**You know it's all because of you,**  
**We open our door to welcome you,**  
**Hey there Elijah, here's to you,**  
**This cup's for you**

**Repeat Chorus**

## Tune of "If I only had a brain" - Martin Eiger

We are sitting at the seder,  
More food is coming later,  
But now I am in pain.  
It would help my digestion,  
I could get through all four questions  
If I only had some chrain.

The hosts would speed it up if they knew,  
We'd get through the Dayenu  
And not do each refrain.  
It would ease my neurosis,  
I'd enjoy all this charosis  
If I only had some chrain.

Oh I would tell the tale,  
I'd recount the plagues and parting of the sea.  
How glorious and wondrous it would be.  
We'd drink some wine  
And then we'd dine.

But now my stomach is off-kilter.  
The fish is too gefilte.  
The parsley sprigs seem plain.  
I'd be happy eating lotsa  
Food. I'd chow down all the matza  
If I only had some chrain.

## The Ten Plagues - The Musical!

by Johanna Drickman; modifications by Randi and Murray Spiegel

### **BLOOD:** "Old Man River"

Hebrew slaves work by the old Nile River,  
 Hebrew slaves work while the Pharaoh plays.  
 Pullin' those stones from the dawn til sunset,  
 Gettin' no rest til Redemption Day.  
 Don't look up and don't look down,  
 You don't dare make Egyptians frown.  
 Bend your knees and bow your head,  
 And pull that rope until you're dead.  
 Let me go way from the big Nile River,  
 Let me go way from the slave man boss,  
 Show me the way through the Red Sea water,  
 That's the one stream that I long to cross.  
 Ol' Nile River, that Ol' Nile River,  
 To blood it's turnin', It keeps on churnin'  
 It keeps on spewin', It just keeps flowin' a-long.

### **FROGS:** "Jeremiah was a Bull Frog"

Jeremiah was a bull frog, Had a lot of friends you know  
 He called every one, said, "Let's go have some fun  
 We'll crawl right out of the Nile, and Egypt we'll defile.

Singing Frogs of the world, all the boys and girls now  
 Forget all the fishes of the deep blue sea  
 No one's slimier than you and me.

### **LICE:** "To Life"

The Lice, The Lice, I gottem  
 I gottem, I gottem, the Lice  
 Pharaoh, O, Pharaoh, O, please give in  
 We want to save our skin  
 Lice - I gottem, the Lice.

### **WILD BEASTS:** "Music of the Night"

Daylight's fading, night's almost upon us  
 Creature's waiting, maul and stomp, upon us  
 Try to run away, but without the light of day  
 They can smell and see us with nocturnal sight  
 The power of the wild beasts of the night!

### **CATTLE DISEASE:** "Ticket to Ride"

The Pharaoh's gonna be sad, I think it's today,  
 Our cows are gonna be mad, and dying away.  
 It's not due to the fleas,  
 They're falling down on their knee-ee-ees \*  
 They've got Mad Cow Disease,  
 And we're all scared!

<p>* Alternate verse:          It's not due to the fleas,          They've got Mad Cow Disee-ee-ease,          They're walking in B.V.D's,          And we're all scared!</p>
---

### **BOILS:** "Go away little girl"

Go away little boils, Go away little boils,  
 It's hurting me more each minute that you delay.  
 When you are on me like this,  
 You're much too hard to resist.  
 So go away ugly boils,  
 And never come back to stay.

### **HAIL:** "Hello, Dolly"

Hailstones Dolly, well, Hailstones Dolly  
 They are falling fast and hard upon your head  
 You don't look well, Dolly, I can tell, Dolly  
 Your face has several bruises, you should be in bed  
 I feel the room swaying, for as I was saying  
 We have all sustained a lot of head trauma, so  
 Children, dads, and mothers,  
 Quick we have to duck and cover  
 Make these Hailstones go away,  
 Make these Hailstones go away,  
 Make these Hailstones go away, for good.

### **LOCUSTS:** "Super-cali ..."

Super-cali-fragilistic-expiali-locusts.  
 Even though the sound of them is something  
 quite atrocious,  
 When you hear them loud enough you'll know  
 they are ferocious.  
 Super-cali-fragilistic-expiali-locusts!

### **DARKNESS:** "Night and Day"

Day and night, they're all the same.  
 Night and day, our Pharaoh's to blame.  
 Because he won't let the Hebrews go,  
 We're suffering with the sun's warm(ing) glow.  
 For three whole days, and nights.

### **DEATH OF FIRSTBORN:** "Tonight, Tonight"

Tonight, tonight, won't be just any night  
 Tonight there will be blood in the air  
 Tonight, tonight, first-borns will die tonight  
 The Egyptians will be unprepared.

Tonight, the angel will descend on  
 The Pharaoh and his people  
 And no one will be spared.

Oh moon, grow bright,  
 And let God show his might  
 End our plight, tonight!



