

# Islamic Cosmology

## Lesson 4



# The Earth

- Conducive to living:

أَلَمْ نَجْعَلِ الْأَرْضَ مِهَادًا

*“Have We not made the earth a resting place?”* Quran 78:6

الَّذِي جَعَلَ لَكُمُ الْأَرْضَ فِرَاشًا وَالسَّمَاءَ بِنَاءً وَأَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجَ بِهِ مِنَ الثَّمَرَاتِ  
رِزْقًا لَكُمْ

*“[He] who made for you the earth a bed [spread out] and the sky a ceiling and sent down from the sky, rain and brought forth thereby fruits as provision for you.”* Quran 2:22

# The Earth

- In the following narration, Imam Al-Sajjad expounds on this verse:

جعلها ملائمة بطبائعكم موافقة لأجسادكم ولم يجعلها شديدة الحماء والحرارة فتحرقكم، ولا شديدة البرودة فتجمدكم

*“God has arranged the earth adapted to your nature and appropriate for your bodies. He made it neither very hot so that it roasts you, nor very cold so that it freezes you...”*

# The Earth

ولا شديد طيب الريح فتصدع هاماتكم ولا شديد النتن فتعطبكم، و لا شديدة اللين كالماء  
فتغرقكم، ولا شديدة الصلابة فتمتنع عليكم في دوركم وأبنيتم وقبور موتاكم،

*“He made it neither too aromatic so much so that its odor does not cause you headaches , nor too foul-smelling to cause your suffering. He planned it neither too soft so that you be drowned in it, like in water, nor too rigid and stable to enable you to build houses and make graves to bury the corpses of your men...”*

# The Earth

- Spherical:

فَلَا أُقْسِمُ بِرَبِّ الْمَشَارِقِ وَالْمَغَارِبِ

*“I swear by the Lord of the easts and the wests...”* Quran 70:40

- Sayid Al-Khoie writes:

“This verse indicates that the Sun rises and sets over the Earth at more than one point, therefore implying that the Earth is round. Accordingly, the rising of the Sun over any part of the globe coincides with its setting over the other.

# The Mountains

- Stabilizers:

وَالْجِبَالَ أَوْتَادًا

*“Did We not make the mountains into pegs?”* Quran 78:7

وَأَلْقَى فِي الْأَرْضِ رَوَاسِيَ أَنْ تَمِيدَ بِكُمْ

*“He cast into the earth firmly-fixed [mountains] to prevent it from quaking with you.”* Quran 31:10

# The Mountains

- The Quran does not say that mountains prevent earthquakes per se, but simply that they decrease their intensity to such an extent, that humans do not feel them. The earth still quakes – sure – but it doesn't "*quake with you*", meaning that you don't feel its effects as much as you otherwise might.
- Mountains don't just exist on the land surface; they also exist under the sea. In fact, since some 70% of the earth's surface is covered in water, the vast majority of mountains are actually out of sight, on the sea floor.

# Mountains

- The Quranic use of two separate terms for mountains correlates beautifully to this categorisation of two types of mountains – *jibaal* for land mountains and *rawaasiya* for mountains under the sea, also known as “seamounts” in Geology.
- Numerous researchers have come to the conclusion that seamounts play an important role in reducing earthquake activity. They posit that seamounts diffuse huge ‘megathrust’ earthquakes into much smaller earthquakes.



# Mountains

- Movement:

وَتَرَى الْجِبَالَ تَحْسَبُهَا جَامِدَةً وَهِيَ تَمُرُّ مَرَّ السَّحَابِ صُنِعَ اللَّهُ الَّذِي أَتَقَنَ كُلَّ شَيْءٍ إِنَّهُ خَبِيرٌ  
بِمَا تَفْعَلُونَ

*“You will see the mountains, thinking them to be stationary, while in fact they move like the clouds. This is done by God who has sturdily made everything. He is aware of whatever you do.” Quran 27:88*

# Wind

- Bearer of mercy:

وَهُوَ الَّذِي يُرْسِلُ الرِّيَّاحَ بُشْرًا بَيْنَ يَدَيْ رَحْمَتِهِ حَتَّىٰ إِذَا أَقْلَّتْ سَحَابًا ثِقَالًا سُقَّتْهُ لِبَلَدٍ مَّيِّتٍ  
فَأَنْزَلْنَا بِهِ الْمَاءَ فَأَخْرَجْنَا بِهِ مِنْ كُلِّ الثَّمَرَاتِ

*“And it is He who sends the winds as good tidings before His mercy until, when they have carried heavy rainclouds, We drive them to a dead land and We send down rain therein and bring forth thereby [some] of all the fruits...” Quran 7:57*

# Wind

- Pollinator:

وَأَرْسَلْنَا الرِّيحَ لَوَاقِحَ فَأَنْزَلْنَا مِنَ السَّمَاءِ مَاءً فَأَسْقَيْنَاكُمُوهُ وَمَا أَنْتُمْ لَهُ بِخَازِنِينَ

*“And We have sent the pollinating winds and sent down water from the sky and given you drink from it. And you are not its retainers.”* Quran 15:22

# Wind

- Propeller of Ships:

إِنْ يَشَاءُ يُسَكِّنِ الرَّيْحَ فَيُظَلِّلْنَ رَوَاقِدَ عَلَى ظَهْرِهِ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِّكُلِّ صَبَّارٍ شَكُورٍ

*“If He wished he would make the wind go still whereat the ships would languish on the sea’s surface. In this there are signs for everyone patient and grateful.” Quran 42:33*

# Lightning

هُوَ الَّذِي يُرِيكُمُ الْبَرْقَ خَوْفًا وَطَمَعًا

*“He is the one who shows you lightning to instill fear and hope...”* Quran  
13:12

- Lightning balances the earth's electricity and helps fertilize the soil.

# Seas and Oceans

وَهُوَ الَّذِي سَخَّرَ الْبَحْرَ لِتَأْكُلُوا مِنْهُ لَحْمًا طَرِيًّا وَتَسْتَخْرِجُوا مِنْهُ حِلْيَةً تَلْبَسُونَهَا وَتَرَى الْفُلْكَ  
مَوَازِرَ فِيهِ وَلِتَبْتَغُوا مِنْ فَضْلِهِ وَلِعَلَّكُمْ تَشْكُرُونَ

*“He is the one who subjugated the sea so that you may eat fresh meat from it and extract from it ornaments to wear. And you see the ships cutting through it so that, among other things, you may seek of his bounty and so you may be grateful.” Quran 16:14*

# Vegetation

وَمِنْ كُلِّ الثَّمَرَاتِ جَعَلَ فِيهَا زَوْجَيْنِ اثْنَيْنِ

*“...and of every kind of fruit [tree] he made a pair.”* Quran 13:3

- Here the word “pair” refers the male and female counterparts
- Sex in animals has been known for at least ten thousand years, and this knowledge was exploited during animal domestication in the Neolithic period. In contrast, sex in plants wasn't discovered until the late seventeenth century.

# Vegetation

وَأَنْبَتْنَا فِيهَا مِنْ كُلِّ زَوْجٍ بَهِيجٍ

*“...and we made grow on earth every delightful plant.”* Quran 50:7

- The term بهجة refers to something that brings happiness when it is seen.

وَلَمْ يَرَوْا إِلَى الْأَرْضِ كَمْ أَنْبَتْنَا فِيهَا مِنْ كُلِّ زَوْجٍ كَرِيمٍ

*“Do they not regard the earth and how we made grow on it every valuable plant.”* Quran 26:7



# Animals

وَاللَّهُ خَلَقَ كُلَّ دَابَّةٍ مِنْ مَّاءٍ

*“And God created every animal from water...”*

- Possible meanings of the verse:
  - (1) water is an essential component in all organisms
  - (2) all organisms originated in water

# Animals

وَاللَّهُ خَلَقَ كُلَّ دَابَّةٍ مِنْ مَّاءٍ فَمِنْهُمْ مَنْ يَمْشِي عَلَى بَطْنِهِ وَمِنْهُمْ مَنْ يَمْشِي عَلَى رِجْلَيْنِ وَمِنْهُمْ مَنْ يَمْشِي عَلَى أَرْبَعٍ يَخْلُقُ اللَّهُ مَا يَشَاءُ إِنَّ اللَّهَ عَلَى كُلِّ شَيْءٍ قَدِيرٌ

*“God created animals from water. Among them are those that move on their bellies, and among them are those that move on two legs, and among them are those that move on four. God creates what he wishes. God is able to do all things.” Quran 24:45*

# Animals

وَمَا مِنْ دَابَّةٍ فِي الْأَرْضِ وَلَا طَائِرٍ يَطِيرُ بِجَنَاحَيْهِ إِلَّا أُمَّمٌ أَمْثَالُكُمْ مَا فَرَّطْنَا فِي الْكِتَابِ مِنْ شَيْءٍ ثُمَّ إِلَىٰ رَبِّهِمْ يُحْشَرُونَ

*“Every animal on earth and every bird that flies with wings are in communities like yours. We have not forsaken anything in the book. In the end, they will be gathered before their Lord.” Quran 6:38*

# Animals

وَأَنْزَلَ لَكُمْ مِنَ الْأَنْعَامِ ثَمَانِيَةَ أَزْوَاجٍ

*“He sent down for you eight livestock in pairs..”* Quran 39:6

- The eight refer to the pairs of camels, cows, goats and sheep as mentioned in Quran 6:143-144

# Animals

وَالْأَنْعَامَ خَلَقَهَا لَكُمْ فِيهَا دِفْءٌ وَمَنَافِعُ وَمِنْهَا تَأْكُلُونَ

*“He created cattle in which there is warmth for you and other uses and from them you eat.” Quran 16:5*

وَلَكُمْ فِيهَا جَمَالٌ حِينَ تُرِيحُونَ وَحِينَ تَسْرَحُونَ

*“There is in them beauty for you when you bring them home for rest and when you drive them forth to pasture.” Quran 16:6*

# Animals

وَتَحْمِلُ أَثْقَالَكُمْ إِلَىٰ بَلَدٍ لَّمْ تَكُونُوا بِالْغَيْهِ إِلَّا بِشِقِّ الْأَنْفُسِ إِنَّ رَبَّكُمْ لَرَوْفٌ رَّحِيمٌ

*“And they bear your burdens to towns which you could not have reached except by exerting yourselves. Indeed your Lord is kind and merciful.” Quran 16:7*

وَالْخَيْلَ وَالْبِغَالَ وَالْحَمِيرَ لِتَرْكَبُوهَا وَزِينَةً وَيَخْلُقُ مَا لَا تَعْلَمُونَ

*“And horses, mules and donkeys for you to ride and for adornment. And he creates what you do not know.” Quran 16:8*

# Animals

وَوَرِثَ سُلَيْمَانُ دَاوُودَ وَقَالَ يَا أَيُّهَا النَّاسُ عَلَّمْنَا مَنْطِقَ الطَّيْرِ وَأُوتِينَا مِنْ كُلِّ شَيْءٍ إِنَّ هَذَا لَهُوَ الْفَضْلُ الْمُبِينُ

*“Solomon succeeded David. He told his people, “We have been taught the language of birds, and we have been given every kind of blessing. This is certainly a clear advantage.” Quran 27:16*

# Animals

حَتَّىٰ إِذَا أَتَوْا عَلَىٰ وَادِي النَّمْلِ قَالَتْ نَمْلَةٌ يَا أَيُّهَا النَّمْلُ ادْخُلُوا مَسَاكِنَكُمْ لَا يَحْطِمَنَّكُمْ سُلَيْمَانُ  
وَجُنُودُهُ وَهُمْ لَا يَشْعُرُونَ

*“They marched until they reached a valley inhabited by a colony of ants. An ant cried out, “O ants! Take cover in your mounds. Let Solomon and his army not trample you without knowing.” Quran 27:18*