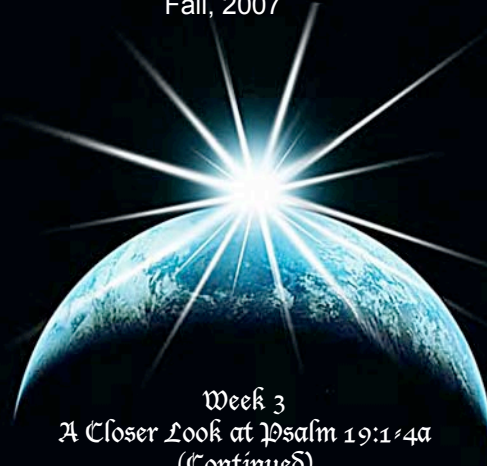


Science and the Bible

A Course of Study
by
Dr. David C. Bossard
Fall, 2007



Week 3
A Closer Look at Psalm 19:1-4a
(Continued)

This is week 3 in a course of study in Science and the Bible.

An Introductory look at Psalm 19

Verses 1-6: The Book of God's Works

"God" = El, Elohim = God the Creator
- The Name used in Genesis 1



Verses 7-13: The Book of God's Words

"God" = Yahweh = God the Redeemer
- The Name used in Genesis 2-3
(start of the redemption story)



Our study takes its cue from Psalm 19. It has two parts.

Verses 1-6 describe the Book of God's Works.

The word for God is "El" or its plural, "Elohim". This is God the Creator, the name used throughout Genesis 1. This is usually indicated in your Bibles by the name "God".

These are the verses which begin in the King James version with the glorious statement , "The heavens declare the glory of God, and the firmament sheweth his handiwork."

Verses 7-13 describe the Book of God's Words, using a number of descriptive terms: Law, Statutes, Precepts, Fear, Ordinances.

The word for God is "Yahweh" which is indicated in your text by "LORD" in capital letters. Older translations may use the word "Jehovah". This is God the Redeemer, the name used in Genesis 2-3 which describes the Fall and its consequences, ending in the promise of a redeemer in Genesis 3:17. It is appropriate that the redeemer is the giver of the law, which points the way to salvation -- something that the Book of God's Works could never do.

Let us now read Psalm 19.

Figures of Speech in vss. 1 to 4a ...

Last week we looked at the word translated "firmament", "expanse" or "skies" in verse 1 and concluded that the word refers to the atmosphere.



Last week we looked at the word translated "firmament", "expanse" or "skies" in verse 1.

We viewed Dr. Newman's Powerpoint show, "Does the Bible teach a hard sky?"

and saw that this word more appropriately refers to the atmosphere, rather than a solid dome or "vault" as one liberal translation has it. The words "expanse" or "sky above" which are favored in evangelical translations are a bit closer to Dr. Newman's suggestion.

Figures of Speech in vss. 1 to 4a ...

Consider Job 37:18 (another verse cited in favor of a "dome")

KJV: 18 Hast thou with him spread out the sky,
which is strong, and as a molten looking glass?

NASB: 18 Can you, with Him, spread out the skies,
Strong as a molten mirror?

NIV: 18 Can you join him in spreading out the skies,
hard as a mirror of cast bronze?

ESV: 18 Can you, like him, spread out the skies,
hard as a cast metal mirror?

Dr. Newman's Suggestion: "Can you, with Him, spread out the mighty clouds, with an appearance of being poured out?"

Dr. Newman also discussed Job 37:18, which is another verse used to promote the "dome" view.

He suggested that the verse actually refers to weather and not to something solid. This is consistent with the general weather theme of Job chapter 37.

Figures of Speech in vs. 1 to 4a ...

Q: If Dr. Newman is right, why don't evangelical translations (at least) follow his conclusions?

NIV: 18 Can you join him in spreading out the skies,
hard as a mirror of cast bronze?

Dr. Newman: "Can you, with Him, spread out the
mighty clouds, with an appearance of being
poured out?"

Possible Answers:

- The weight of long tradition?
- The writer of Job (or perhaps Elihu) accepted the cosmology of the contemporary surrounding nations?
- View that the Bible's cosmology doesn't matter?
(But it does! The Bible's view of science reflects its ultimate author -- the Creator.)

Question: If Dr. Newman is right, why don't evangelical translations reflect his view? I see three possible answers to this question:

- The weight of tradition. Perhaps, but the translations changed long tradition in their translation of Psalm 19:1 and the Genesis references to the "Firmament"
- The speaker (or writer of Job) accepted the surrounding cosmology. Well, certainly if Elihu spoke out of ignorance, a truthful account would have to repeat his error, and so this is a possible reason.
- The view that the Bible's cosmology doesn't matter. This is commonly believed by many -- even by theologians who consider themselves to be evangelicals. If this is the reason, then I strongly object, because it gets to the heart of the question of Divine authorship.

No speech or Words

NIV - 3 There is no speech or language
where their voice is not heard.^a

^a Or, *They have no speech, there are no words;
no sound is heard from them.*

ESV - 3 There is no speech, nor are there words,
whose voice is not heard.

--- Remark: This is ambiguous!

NASB - 3 There is no speech, nor are there words;
Their voice is not heard.

→ I believe that NASB is correct:

One commentary (Perowne) has a footnote on the verse:
"Lit: it is inaudible."

Cf. **Rom. 1:20** (NIV) "For since the creation of the world God's invisible qualities -- his eternal power and divine nature -- have been clearly seen, being understood from what has been made, . . ."

Well, let's leave the question of the "firmament" and go on to other figures of speech in Psalm 19.

Consider verse 3.

Their *line* is gone out through all the earth.



NIV - 4 Their **voice** goes out into all the earth,
their words to the ends of the world. (follows Septuagint)

ESV - 4 Their **measuring line** goes out through all the earth,
and their words to the end of the world. (follows Hebrew)

Gesenius *Hebrew Lexicon* (876a):

קָו (Kav) = line, measuring-line, "their chord = music ψ 19:5"

Image of a stretched line on a stringed instrument.
As David composed this psalm, he looked down at
his harp. The strings are stretched, and make music
under the hands of a skillful player.

In verse 4, the NIV as well as the King James and others follow the Septuagint, which translates the Hebrew word "Kav" by "voice".

The ESV follows the Hebrew, using "measuring line" which is another way to say it is taut or stretched out. In my view Gesenius' Hebrew Lexicon hits closest to the intended meaning, that of a stretched harp string. As David composed this psalm, he looked down at his harp. The strings are stretched, and make music under the hands of a skillful player.

I believe that is what this Psalm talks about.

=====

The word "where" in verse 3 is supplied in the translation. The word translated "voice" in verse 4 is literally a "line". The word is used elsewhere for a stretched-out measuring line. In this context the image is that of a tuned harp string. In my mind I picture David composing this Psalm with his harp in hand. As he composes the words and music,

The Silent Speech of God's Book of Works

- I believe that God deliberately put into his creation a testimony to Himself. As Romans 1:20 states, this "silent speech" testifies to his "eternal power and his divine nature".

- I believe that this record is *Truthful* because truthfulness is part of God's divine nature.

- I believe that this record is *much more* than just the awesome display of His Handiwork that can be seen "Day after day and night after night."

- I believe that this record includes the deep silent testimony to His greatness that can be discovered by the work of skillful scientists who investigate His created world. God loves and rewards the person who studies his creation.

==> The witness that God has put into his creation.

The Silent Speech of God's Book of Works

- God designed his creation so that the careful observer can learn truth about his creation. He did not have to do this.
 - the universe might have been made so that it is impossible to probe into its hidden treasures.
 - the Creation might have proceeded in a way that is deceptive
 - creating things "old" with an apparent, but false history.
- **I believe that God's determination to display truth in his creation placed significant constraints on how he proceeded.

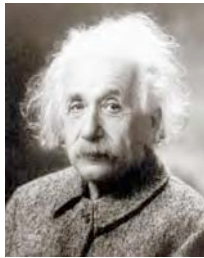


** this is the answer to a question of St. Augustine,
"Why did God create in time -- why not instantaneously?"
Answer: God created in time so that his creation would truthfully record how he proceeded. He did this because he wants us to discover how he did what he did.

==> The witness that God has put into his creation
Cite Einstein's remark.

The Silent Speech of God's Book of Works

- There are many things that testify to the fact that God deliberately designed His creation so that it could be investigated.
- "Coincidences" such as:
 - Sun and Moon have same "size" as viewed from earth, so that solar eclipses can teach us important facts in science (proof of general relativity in 1919, and modern investigations of the solar corona)
 - Position of the Earth in the Milky Way galaxy so that we can observe the universe.



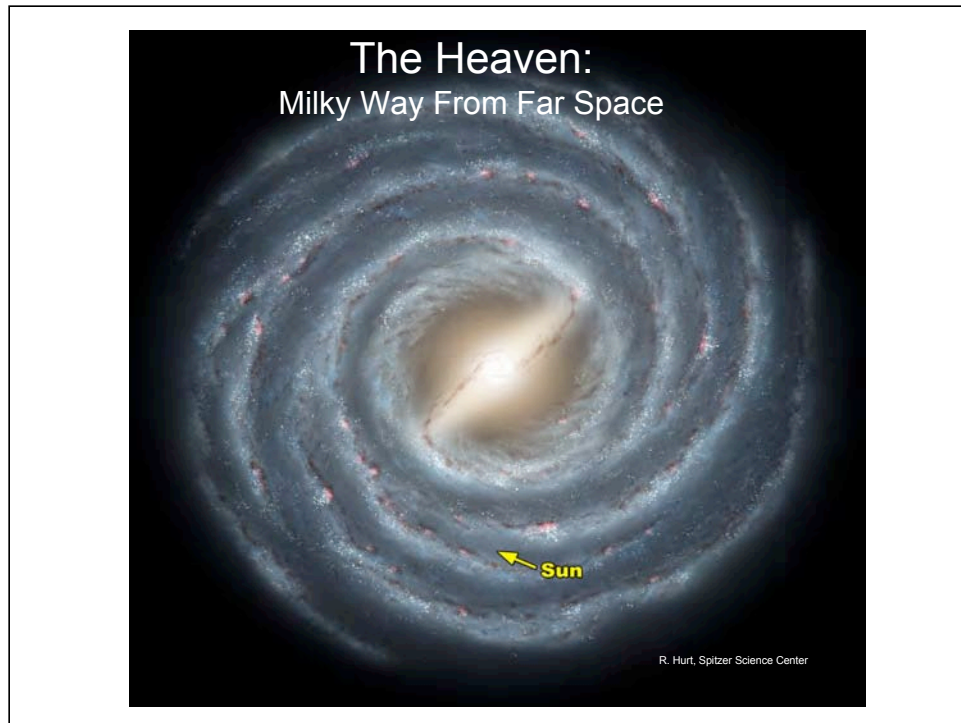
Einstein: "The most incomprehensible thing about the world is that it is at all comprehensible."

==> The witness that God has put into his
creation
[Example of the wavelength of light]

The Silent Speech of God's Book of Works

- Astronomy
 - The deep universe can be seen
 - we can witness the expanding universe and its past history
 - The light from the stars tells us the stars' chemical composition
 - the Comté error
 - the regularity of physics throughout the universe
 - The planets reveal the secrets of physics
 - law of gravitation
 - speed of light, etc.

==> The witness that God has put into his creation



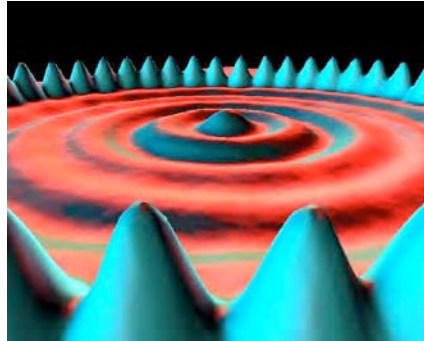
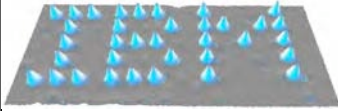
Our Sun and its planets are in the Milky Way. We see the Milky Way as a milky-colored band across the sky. It is a spiral galaxy made up of about 175 billion stars. The philosopher Democritus correctly judged that the Milky Way is "a cluster of small stars very close together." He wrote this around 400 BC. He is also the earliest person to write that all matter is made up of atoms, which he named, appropriately, "atoma"

Our Sun is on the edge of one of the spiral arms.

The stars we can see with the naked eye are all from the Milky Way. The Andromeda galaxy, which is itself billions of stars, is faintly visible to the naked eye in the Andromeda constellation. It is, I believe the only visible (to the naked eye) night sky object that is outside the Milky Way in the Northern Hemisphere. In the Southern Hemisphere the Magellanic clouds include two visible nearby galaxies.

The Silent Speech of God's Book of Works

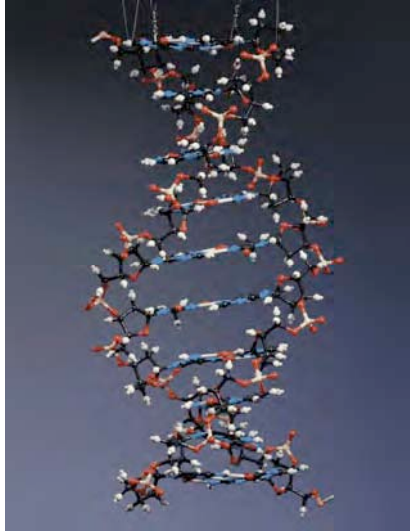
- The microscopic world
 - The ability to probe far deeper than the microscope
 - in 1900 the limit was about 1000x
 - the "protoplasm" was featureless jelly
 - today we can see individual molecules



Quantum Corral - xenon molecules

==> The witness that God has put into his creation

The Silent Speech of God's Book of Works



- The genetic code
 - in 1900 genetics was a mystery (thought to be simple!)
 - today we can investigate the very source -- DNA
- The "Central Dogma" of genetics

==> The witness that God has put into his creation

The Silent Speech of God's Book of Works

- The geological record
 - The record of the past history of the earth
 - The record of how God created life on earth.

==> The witness that God has put into his
creation

Figures of Speech in vss. 4b to 6 ...

•Do verses 4-6 say *anything* about David's "cosmology?"

-- No ... they are poetic descriptions of the marvels of God's heavens.



Sun God Helios



Orion, Taurus and Canis

Did the Greeks really believe that their constellation maps or their pantheon were "real"? Not likely!

Consider next the imagery in verses 4b to 6.

Should we assume that David had a primitive notion of the Sun, or is it just a poetic description?

Along a similar vein, what are we to make of the elaborate Greek myths about the gods? What about their fanciful construction of the constellations?

It is likely that these were mostly fanciful, poetic images used to describe "unworldly" things.

Today we use descriptive terms that do not imply anything about our scientific understanding of things -- the sun rising and setting. The leaden skies.

We often personify inanimate objects -- "the computer is being stubborn today."

When referring to such things as this Psalm, it is best to just understand what the poetic intention is, without reading into it a statement of their understanding of how things are.

Figures of Speech in Psalm 19:4b-6

Verse 4b:

Verse 5:

Verse 6:

Returning to Psalm 19, let's first go through it verse by verse and consider the figures of speech used in the Psalm.

For now, let's include possible figures, and later we may prune down the list somewhat.

Verse 4b:

Verse 5:

Verse 6:

Figures of Speech in Psalm 19:7-11

Verse 7:

Verse 8:

Verse 9:

Verse 10:

Verse 11:

Returning to Psalm 19, let's first go through it verse by verse and consider the figures of speech used in the Psalm.

For now, let's include possible figures, and later we may prune down the list somewhat.

Verse 7:

Verse 8:

Verse 9:

Verse 10:

Verse 11:

Figures of Speech in Psalm 19:12-14

Verse 12:

Verse 13:

Verse 14:

Returning to Psalm 19, let's first go through it verse by verse and consider the figures of speech used in the Psalm.

For now, let's include possible figures, and later we may prune down the list somewhat.

Verse 12:

Verse 13:

Verse 14: