

## The Super Importance Of Water

“...the earth was formed out of water and by water”

2Pet 3:5b

Third in the Science In Light Of Scripture Series

Richard Balogh

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Scientific American says “...Understanding how water arrived on Earth is a key part of understanding how and when life evolved here... But we don’t even know how or where it came from...”

We will discover that Scripture has answers!

### Review

All ten topics in the SILOS series overlaps science and the Holy Scriptures. Since the God of the Bible is both Creator of everything (Gen 1:1) and also Author of the Bible (John 1:1), we will more completely understand each topic by examining the scientific as well as Biblical sources. Science discovers through observation of natural processes and revelation is discovered in the Scriptures. Since we believe the Law of Cause and Effect is true (defined as everything with a beginning or has been changed must have been caused to do so), we will likely discover causes for what God has done as we examine the Scriptures. Even Einstein appreciated that scientific discovery implies a supernatural source when he said "I want to know how God created this world. I am not interested in this or that phenomenon, in the spectrum of this or that element. I want to know his thoughts. The rest are details".. (The Expanded Quotable Einstein, Princeton University Press, 2000 p.202) .

God may reveal directly, as He has with light (our last topic) and water (today’s topic). He may also reveal indirectly as we will see when we cover fossils which is not a Biblical topic but certainly a reasonable consequence of Noah’s Flood.

Unfortunately we have been conditioned to view science as an adversary to our faith. As a believer in our Lord, Savior and Creator Jesus Christ, I use this rule of thumb. When any scientific explanation fails to glorify God, there must be at least one error in my thinking. A fundamental reason why God is usually not glorified is found in 1Cor 2:14. Paul reminds us that the natural man thinks the things of God are foolishness so he will not seek insight from Scripture. But Paul also says that the Spiritual man appraises everything. To the Spiritual man science is just another lens by which we can appreciate our awesome God. Recall how Sir Francis Bacon reminded us that God has written two books: the written Word and creation. And while many people may never open a Bible, they will likely turn the pages of Scientific American with anticipation of learning something new. Such people - and I believe there are many - need the Holy Spirit to convict them of ignoring the God of creation, for not thanking Him for making all things (Romans 1:21). Behind every scientific discovery is the God of the Bible who made all that man has

"discovered" . He is also the One who has given the Spiritual man the Holy Spirit by which he can see and appreciate all the evidence, thereby able to reach Godly conclusions. The Spiritual man believes the following truths:

For from Him and through Him and to Him are all things. To Him be the glory forever. Amen.  
Romans 11:36 (NASB1995)

For by Him all things were created, both in the heavens and on earth, visible and invisible, whether thrones or dominions or rulers or authorities—all things have been created through Him and for Him. Colossians 1:16 (NASB1995) [Where “through” is the same Greek word meaning “first cause”]

The natural man is blinded to God's revelation. Though he may try to use his five senses to understand God, he cannot because he is Spiritually blind.

Review of our last topic: Light

Examine the verses in **bold** below. Genesis 1:1-5 (NASB1995) [1] In the beginning God created the heavens and the earth. [2] The earth was formless and void, and darkness was over the surface of the deep, and the Spirit of God was moving over the surface of the waters. [3] **Then God said, “Let there be light”; and there was light. [4] God saw that the light was good; and God separated the light from the darkness. [5] God called the light day, and the darkness He called night. And there was evening and there was morning, one day.**

The four major concepts we covered were

1. God created light and separated light from darkness.
2. God created the parts of a clock by which the length of a day is defined.

The rotating earth is the one moving part

Light from one direction is the other part

The circle of illumination is like the hands of this clock, changing position to measure time. The Sun took over as the source of daylight on day 6

3. Physical light and Spiritual light serve similar purposes of removing darkness allowing us to see what is true in our physical world and also in our Spiritual world.
4. Since light behaves like particles and also behaves like waves perhaps science does not really understand the nature of light.

God created order and function out of disorder and chaos

Consider Isaiah 45:18 (NASB1995)

[18] For thus says the LORD, who created the heavens (He is the God who formed the earth and made it, He established it and did not create it a waste place, but formed it to be inhabited), “I am the LORD, and there is none else.

God's purpose in creation is to make a place for habitation. Genesis chapter 1 records how He went about doing this. Starting with something that was dark, formless and void (Gen 1:2) by first structuring it and secondly by filling it. Another way to state this is that the Creator formed the formless and filled the empty.

Formless is Strong's 8414. תֹהוֹת tōhû: A masculine noun meaning formlessness, confusion. It represents chaos, confusion, and disorder, all things that are opposed to the organization, direction, and order that God has demonstrated.

Even though we have read the following verses before, let us read them again with the goal in mind of creating a habitable earth...wisdom and prudence are speaking here...qualities of Jesus Christ, the Creator (Colossians 1)

Prov. 8:12 *"I, wisdom, dwell with prudence, And I find knowledge and discretion.*

(Webster defines prudence as " skill and good judgment in the use of resources" and wisdom is defined as "The faculty of making the best use of knowledge, experience or understanding."

*13 The fear of the LORD is to hate evil; Pride and arrogance and the evil way and the perverted mouth, I hate.*

*14 "Counsel is mine and sound wisdom; I am understanding, power is mine."*

Prov. 8:22 *"The LORD possessed me at the beginning of His way, Before His works of old.*

*23 "From everlasting I was established, From the beginning, from the earliest times of the earth.*

*24 "When there were no depths I was brought forth, when there were no springs abounding with water.*

*25 "Before the mountains were settled, Before the hills I was brought forth;*

*26 While He had not yet made the earth and the fields, Nor the first dust of the world.*

*27 "When He established the heavens, I was there, When He inscribed a circle on the face of the deep,*

*28 When He made firm the skies above, When the springs of the deep became fixed,*

*29 When He set for the sea its boundary So that the water would not transgress His command, When He marked out the foundations of the earth;*

*30 Then I was beside Him, as a master workman; And I was daily His delight, Rejoicing always before Him,*

*31 Rejoicing in the world, His earth, and having my delight in the sons of men."*

So we know that Jesus (the Creator) demonstrated wisdom and prudence while He created. If you were given the task of constructing something exceedingly complex, would you first seek wisdom? Would you make use of wisdom as you constructed?

I like to use this acronym for **ORIGINS**

**O**bservation and  
**R**evelation  
 Identifies  
**G**od  
 Initiating  
**N**atural  
**S**ystems

The two critical words in Gen 1:2 that are used to describe the earth are:

תהו (tohu) = formless

בהו (bohu) = empty

With the earth formless and empty, God proceeds to give form and then fill as follows:

Days 1-3 - Forming or more accurately, separating, notice water is present

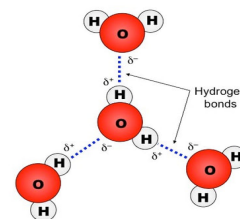
Day 1 – both water and darkness appear without the “and God said...” With the description of “formless and empty” Light is then created and separated from darkness. Similarly, day is separated from night.

Day 2 - Waters above separated from waters below. Firmament is Strong's 7549. רָקִיעַ *rāqiyā`*: A masculine noun meaning an expanse, the firmament, an extended surface. Literally, this word refers to a great expanse and, in particular, the vault of the heavens above the earth. It denotes the literal sky that stretches from horizon to horizon (Ge 1:6-8); where frost (Job 38:29), snow (Isa 55:10), hail (Jos 10:11), and rain occur; the heavens above that contain the sun, moon, and stars (Ge 1:14).j

Day 3 - Dry land separated from seas/waters.

The enormous importance of water in the atmosphere:

1. Water exists in 3 forms: solid ice, liquid and invisible vapor
2. When liquid water evaporates to vapor the liquid cools and the vapor stores 540 calories/gram of latent (“asleep or stored”) heat
3. Wherever the wind takes the water vapor it carries this latent heat which is changed to sensible heat when the “humidity reaches 100% (condensation)
4. This sensible heat is the source of energy in all storms and is the way heat at the equator is taken to the poles, producing global winds.



5. The earth is a giant heat engine. The cohesion property of water allows water to do this...why is water “sticky”?
6. Most of earth’s population lives at coastlines due to mild climate caused by water’s high specific heat
7. Coastal winds caused by water/land

### Days 3-6 - Filling and Populating, notice water is essential

Day 3 – “...the earth brought forth vegetation...”

1. Photosynthesis requires water  $6\text{CO}_2 + 6\text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 + 6\text{H}_2\text{O}$   
 (Carbon dioxide) (Water) (Glucose) (Oxygen) (Water)
2. But how does the water get to the leaves or needles that are high above the ground? Capillary action is vital for plant life and is the result of adhesion and cohesion. The adhesion or stickiness of water (water molecules are charged + and – at opposite ends so water sticks to anything charged) to vessels inside a plant allows water to travel throughout a plant. Cohesion (water molecules stick to themselves) holds the water together so all of the liquid is dragged upward into the plant against gravity as water evaporates from the plant.  
 ...a giant sequoia tree evaporates 1000 gallons of water every day during summer so that 1 gallon can be 350ft above ground for photosynthesis.

Day 4 - lights placed in the firmament of the day and night. Requires a firmament from Day 2.

The search for life outside earth must also involve the search for water.

*But one question has always been at the forefront of space exploration. Scientists generally regard the presence of water as one of the prerequisites of any kind of life similar to what we have on Earth. As a result, any probe or lander is always equipped to analyze the surface of a moon or planet in search of water molecules. Is there water in space? The recent discovery of water on the Moon has revolutionized current theories on the satellite’s potential, especially in terms of drinking water in space. And now, scientists have found an enormous cloud of water vapor floating in space. Located 30 billion miles away in a quasar – a massively powerful cosmic body – the water cloud is estimated to contain at least 140 trillion times the amount of water in all the seas and oceans here on Earth.*

<https://roboticsandautomationnews.com/2021/01/20/scientists-have-found-more-water-in-space-than-they-ever-knew-possible/>

Day 5 - fish placed in the sea and birds in the heavens. Requires water.

Day 6 - animals placed on the land and man created to work the land. Requires water.

Water is the main component of the body and represents approximately 76% of muscle mass. About 70 percent of the human body is made up of water and, coincidentally, more than 70 percent of Earth is covered in water. Water creates an environment that sustains and nurtures plants, animals and humans, making Earth a perfect match for life in general.

<https://www.nasa.gov/vision/earth/everydaylife/jamestown-water-fs.html>

From a science article about the importance of water to living organisms:

*In conclusion, water is vital for all life. Its versatility and adaptability help perform important chemical reactions. Its simple molecular structure helps maintain important shapes for cells' inner components and outer membrane. No other molecule matches water when it comes to unique properties that support life. Excitingly, researchers continue to establish new properties of water such as additional effects of its asymmetrical structure. Scientists have yet to determine the physiological impacts of these properties. It's amazing how a simple molecule is universally important for organisms with diverse needs.*

<https://sitn.hms.harvard.edu/uncategorized/2019/biological-roles-of-water-why-is-water-necessary-for-life/>

Science has more questions than answers on the origin of Earth's water. From this Scientific American article

<https://www.scientificamerican.com/article/how-did-water-get-on-earth/>  
we read

"...water is necessary for life....But how did that water get here? Water is a defining characteristic of our planet and it plays such an important part of our daily lives. Understanding how water arrived on Earth is a key part of understanding how and when life evolved here as well. But we don't even know how or where it came from..."

Thus, the progress of the six days of the creation week follows the simple plan of Gen 1:2, At the conclusion of each day's activity, God pronounces the work (so far) as "good". However, only when the process is complete at the end of the 6th day does God say that it is "very good".

2 Peter 3:3-7 (NASB1995)

[3] Know this first of all, that in the last days mockers will come with their mocking, following after their own lusts, [4] and saying, "Where is the promise of His coming? For ever since the fathers fell asleep, all continues just as it was from the beginning of creation." [5] **For when they maintain this, it escapes their notice that by the word of God the heavens existed long ago and the earth was formed out of water and by water,** [6] through which the world at that time was destroyed, being flooded with water. [7] But by His word the present heavens and earth are being reserved for fire, kept for the day of judgment and destruction of ungodly men.