



ATHEISM CHALLENGE

Science-Technology-Engineering-Mathematics

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Lionhart Ministries

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CHALLENGE OF ATHEISM

We live in a time, early 21st century, when the influence of God in the culture, education, business, politics is waning. Many people openly declare they are atheist. Others, who are doubtful about God's existence and influence, declare they are agnostics. Is there merit to these views?

Human history is filled with suffering, violence, immorality, deceit and other ills that seem to exist without ceasing or consequence. Is this the total story? Consider the following passage from Romans:

Romans 1:18-20 (NKJV)

18 For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who suppress the truth in unrighteousness,

19 because what may be known of God is manifest in them, for God has shown it to them.

20 For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse,

Let's focus on the words, "For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made". My undergraduate degree is in Chemistry. From an early age I have been fascinated by nature and how things are designed and work. This fascination has led me to a lifetime career in technology.

Science-Technology-Engineering-Mathematics (STEM) are viewed as keys to modern life. It is curious that knowledge of science and technology is often used to justify rejecting God outright or to at least doubt His existence and influence. In this presentation we will explore some examples from STEM that demonstrate God's divine presence in the universe, planet earth and life itself. Furthermore, we will expand the context of these verses in Romans with a solemn warning to those who dismiss or doubt God.

Full context:

Romans 1:18-32 (NKJV)

18 For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who suppress the truth in unrighteousness,

19 because what may be known of God is manifest in them, for God has shown it to them.

20 For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse,

21 because, although they knew God, they did not glorify Him as God, nor were thankful, but became futile in their thoughts, and their foolish hearts were darkened.

22 Professing to be wise, they became fools,

23 and changed the glory of the incorruptible God into an image made like corruptible man—and birds and four-footed animals and creeping things.

- 24 Therefore God also gave them up to uncleanness, in the lusts of their hearts, to dishonor their bodies among themselves,
- 25 who exchanged the truth of God for the lie, and worshiped and served the creature rather than the Creator, who is blessed forever. Amen.
- 26 For this reason God gave them up to vile passions. For even their women exchanged the natural use for what is against nature.
- 27 Likewise also the men, leaving the natural use of the woman, burned in their lust for one another, men with men committing what is shameful, and receiving in themselves the penalty of their error which was due.
- 28 And even as they did not like to retain God in their knowledge, God gave them over to a debased mind, to do those things which are not fitting;
- 29 being filled with all unrighteousness, sexual immorality, wickedness, covetousness, maliciousness; full of envy, murder, strife, deceit, evil-mindedness; they are whisperers, 30 backbiters, haters of God, violent, proud, boasters, inventors of evil things, disobedient to parents,
- 31 undiscerning, untrustworthy, unloving, unforgiving, unmerciful;
- 32 who, knowing the righteous judgment of God, that those who practice such things are deserving of death, not only do the same but also approve of those who practice them.

SUPPRESSION OF TRUTH

Romans 1:18 (NKJV)

- 18 For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who suppress the truth in unrighteousness,

This begins with a warning for those who suppress the truth of God. At this time, spring 2021, this is a huge issue in our culture and politics. Social media companies practice censorship against views contrary to their own. Truth is key, as spoken by Jesus Christ, Himself.

John 8:32 (NKJV)

- 32 And you shall know the truth, and the truth shall make you free.”

What is the truth that produces the freedom that Christ gives?

John 17:14–19 (NKJV)

- 14 I have given them Your word; and the world has hated them because they are not of the world, just as I am not of the world.
- 15 I do not pray that You should take them out of the world, but that You should keep them from the evil one.
- 16 They are not of the world, just as I am not of the world.
- 17 Sanctify them by Your truth. Your word is truth.
- 18 As You sent Me into the world, I also have sent them into the world.
- 19 And for their sakes I sanctify Myself, that they also may be sanctified by the truth.

Our education systems, for the most part, seek to suppress God's truth, His Word. Over the years the United States Supreme Court has ruled that prayer and display of the Ten Commandments in public schools are unconstitutional. See:

- <https://www.oyez.org/cases/1961/468>
- <https://www.oyez.org/cases/1962/142>
- <https://www.oyez.org/cases/1980/80-321>

Furthermore, the teaching of the theory of evolution in public schools has long been a controversy most notably symbolized by the Scopes Monkey Trial in Tennessee in 1925. For details see, <https://www.livescience.com/43126-creationism-vs-evolution-6-big-battles.html>. We will address the basis of the theory of evolution later.

Colleges and universities have become extreme examples of the suppression of not only Godly education, but also expressions of conservative opinions. This approach has also spilled into the larger society.

We observe groups, like ANTIFA, which roughly means "Anti-Facist", attacking people with whom they disagree on the street, in restaurants and even in their homes. ANTIFA has exhibited extreme anti-Christian views. The irony is that while ANTIFA denounces Facism they use Facist tactics.

The movement to suppress Christianity has been growing in recent years in the media, the culture, education and by some political leaders. The promotion of so called politically correctness acts to intimidate and suppress those who hold Biblical views. This scriptural context shows the effects this suppression and how it progresses.

MIRACLE OF WATER

When I was in college I took a course entitled, Modern Physics. The professor came to class one day gave us a strange assignment to write an essay explaining the freezing of a lake. The entire class failed to correctly explain the mechanism of a freezing lake; we had never given it any thought. Before completing this discussion I will give a description, but first some background.

Water, the most common substance

Water without doubt is the most common substance on earth. Three quarters of the surface of the earth is covered by the oceans. The chemical and physical properties of water are very different from other substances with similar chemical structures. It is the variation of these properties that enables life as we know it to exist. It is well established that when looking at other planets and the possibility of life on these planets is strongly related to the presence of water.

Chemical Bonds

All matter, material things, is composed of atoms. An atom is the smallest unit of matter. An atom is composed of a nucleus containing protons (positively charged particles) and neutrons (particles with no charge) and an electron cloud containing

negatively charged electrons. The number of protons and electrons are equal. Electrons are positioned in layers or shells.

One of the first things you learn in chemistry is there are two kinds of substances, elements and compounds. Elements are composed of only one kind of atoms. Examples of elements are oxygen, hydrogen, nitrogen and carbon. As of September, 2018 there are 118 known elements. Compounds are composed of two or more kinds of atoms.

The atoms in compounds are bound together by chemical bonds. Chemical bonds are formed by behavior of electrons in the outer layer or the valence shell of the constituent atoms.

From Wikipedia, https://simple.wikipedia.org/wiki/Electron_shell

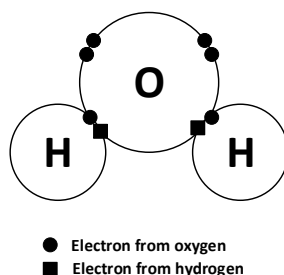
The valence shell is the outermost shell of an atom in its uncombined state, which contains the electrons most likely to account for the nature of any reactions involving the atom and of the bonding interactions it has with other atoms. Care must be taken to note that the outermost shell of an ion is not commonly termed valence shell. Electrons in the valence shell are referred to as valence electrons.

In a noble gas, an atom tends to have 8 electrons in its outer shell (except helium, which is only able to fill its shell with 2 electrons). This serves as the model for the octet rule which is mostly applicable to main group elements of the second and third periods. In terms of atomic orbitals, the electrons in the valence shell are distributed 2 in the single s orbital and 2 each in the three p orbitals.

A full description of the electron shells is beyond the scope of this discussion.

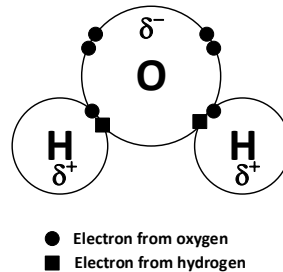
Basically, there are two types of bonds, ionic and covalent. In ionic bonding one or more electrons are transferred from one atom to another to form positive and negative ions, hence the name ionic bonds. The ions are held together by strong electrical forces. One common example of a compound formed by ionic bonding is table salt, sodium chloride. The sodium atom transfers an electron to an atom of chlorine. This forms a positively charged sodium ion and a negatively charged chloride ion. They are strongly attracted to each other and form table salt.

In covalent bonding the atoms each shared an electron bonding them together. Water is formed by two atoms of hydrogen sharing electrons with two electrons from an oxygen atom which is chemically symbolized by H₂O. A simplified electron diagram of the water molecule is shown below.

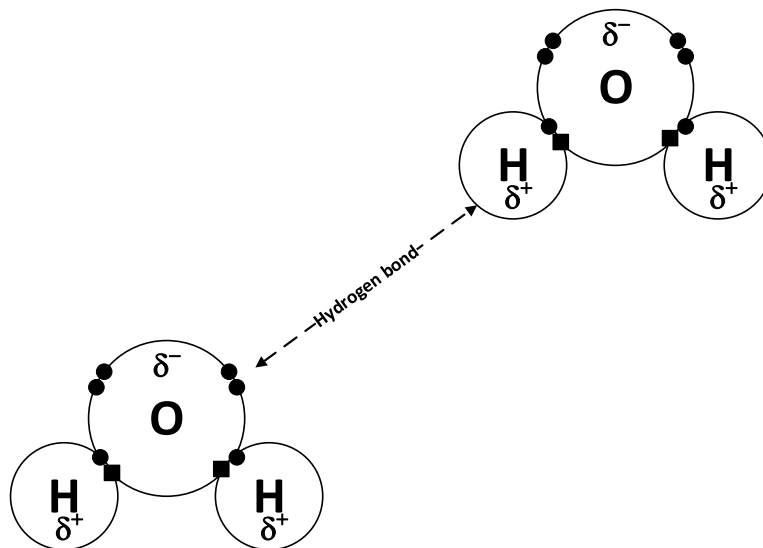


Hydrogen Bonding

The two pairs of shared electrons in the water molecule are not equally shared. Oxygen is electronegative and hydrogen is electropositive. Oxygen has more affinity for electrons and tends to hold electrons more closely than most elements. Hydrogen is more prone to release electrons than most elements. This means the atoms in the water molecule assume partial charges symbolized by the Greek letter delta, δ . These partial charges are shown in the below



The effect this is that neighboring molecules are attracted to each other which has a major effect on the physical properties of water.



Freezing a Lake

We know that water freezes at 0° Celsius (32° Fahrenheit). However, unlike most substances the solid phase of water (ice) floats on the liquid phase and lakes freeze on the top. Most other substances freeze from the bottom up. Why?

The answer is an effect of hydrogen bonding. Substances become more dense as the temperature drops, that is the mass (or what we commonly call weight) per unit volume increases. Practically, this means there are more molecules per unit volume and that they are closer together. For water this brings oxygen atoms with their partial negative charges closer until they begin to repel each other. At some

point the density no longer increases but actually decreases. This occurs at 4° C or 39° F. This is the point of maximum density and the water at this temperature sinks. When a lake is freezing the cooling occurs at the top. The entire body of water cannot cool past 4° C. When the water at the top becomes colder it is less dense and remains at the top. Once it reaches 0°C it freezes at the top and forms a solid insulating layer and makes it more difficult for the lake to freeze solid. This preserves the life of fish and other organisms in the lake and aids in preserving life on earth.

Boiling Point of Water & Evaporative Cooling

When water freezes it undergoes what scientists call a phase change from liquid to solid. When water evaporates or boils it undergoes another phase change from liquid to gas. Hydrogen bonding also affects this phase change. There are two closely related properties that are affected, the boiling point and the heat of vaporization.

The boiling point of water under normal atmospheric pressure is 100° C or 212° F. This boiling point is very high when compared to substances that are chemically similar to water.

Oxygen Chemical Family

Chemical elements exist in families based on their electronic structure. Chemists use the Periodic Table to diagram the element families. (See below.)

Periodic Table of the Elements

Atomic Number		Oxidation States*	
Symbol	Name	Symbol	Name
1	H	13	Al
2	He	14	Si
3	Li	15	P
4	Be	16	S
5	B	17	Cl
6	C	18	Ar
7	N	19	K
8	O	20	Ca
9	F	21	Sc
10	Ne	22	Ti
11	Na	23	V
12	Mg	24	Cr
13	Al	25	Mn
14	Si	26	Fe
15	P	27	Co
16	S	28	Ni
17	Cl	29	Cu
18	Ar	30	Zn
19	K	31	Ga
20	Ca	32	Ge
21	Sc	33	As
22	Ti	34	Se
23	V	35	Br
24	Cr	36	Kr
25	Mn	37	Rb
26	Fe	38	Sr
27	Co	39	Y
28	Ni	40	Zr
29	Cu	41	Nb
30	Zn	42	Mo
31	Ga	43	Tc
32	Ge	44	Ru
33	As	45	Rh
34	Se	46	Pd
35	Br	47	Ag
36	Kr	48	Cd
37	Rb	49	In
38	Sr	50	Sn
39	Y	51	Sb
40	Zr	52	Te
41	Nb	53	I
42	Mo	54	Xe
43	Tc	55	Cs
44	Ru	56	Ba
45	Rh	57-71	Lanthanide Series
46	Pd	72	Hf
47	Ag	73	Ta
48	Cd	74	W
49	In	75	Re
50	Sn	76	Os
51	Sb	77	Ir
52	Te	78	Pt
53	I	79	Au
54	Xe	80	Hg
55	Cs	81	Tl
56	Ba	82	Pb
57-71	Lanthanide Series	83	Bi
72	Hf	84	Po
73	Ta	85	At
74	W	86	Rn
75	Re	87	Fr
76	Os	88	Ra
77	Ir	89-103	Actinide Series
78	Pt	104	Rf
79	Au	105	Db
80	Hg	106	Sg
81	Tl	107	Bh
82	Pb	108	Hs
83	Bi	109	Mt
84	Po	110	Ds
85	At	111	Rg
86	Rn	112	Cn
87	Fr	113	Uut
88	Ra	114	Ff
89-103	Actinide Series	115	Uup
104	Rf	116	Lv
105	Db	117	Uus
106	Sg	118	Uuo
107	Bh		
108	Hs		
109	Mt		
110	Ds		
111	Rg		
112	Cn		
113	Uut		
114	Ff		
115	Uup		
116	Lv		
117	Uus		
118	Uuo		

Sulfur(S) is the next member of oxygen’s chemical family. It’s analog to water is hydrogen sulfide, H₂S, a very poisonous gas that has the odor of rotten eggs. The boiling point of H₂S is -60° C (-76° F). The table below shows some properties of compounds in the oxygen chemical family from the lightest to heaviest in molecular

mass. [Note: Livermorium (Symbol: Lv) is a synthetic element that has not been observed in nature. The properties of its compounds have not been measured.]

Substance	Formula	Molecular Mass (gms/mol)	Boiling Point	Freezing Point
Water	H ₂ O	18.02	100° C (212° F)	0° C (32° F)
Hydrogen Sulfide	H ₂ S	34.08	-60° C (-76° F)	-82° C (-116° F)
Hydrogen Selenide	H ₂ Se	80.98	-41° C (-42° F)	-66° C (-86° F)
Hydrogen Telluride	H ₂ Te	129.62	-2° C (28° F)	-49° C (-56° F)
Polonium Hydride	H ₂ Po	211	36° C (97° F)	-35° C (-32° F)
Livermorium Hydride (Not known)	H ₂ Lv (?)	300	NA	NA

Notice that water has the lowest molecular mass (it is composed of the least massive elements in the family) but has the highest boiling and freezing points. Also, notice that the trend is lower freezing and boiling points as the molecular mass is lower until water. This is a result of hydrogen bonding.

Heat of Vaporization

The Merriam-Webster gives the following definition of the heat of vaporization:

Heat absorbed when a liquid vaporizes.

Specifically: the quantity of heat required at a specified temperature to convert unit mass of liquid into vapor

At a molecular level this is related to the energy required to move a molecule from the liquid phase to the vapor phase. Again, the heat of vaporization for water is very high compared to similar substances because of hydrogen bonding.

Material	Heat of vaporization At boiling point(kcal/kg)
Water	539
Ethyl (grain) alcohol	205
Methyl (wood) alcohol	263

Evaporative Cooling

Up to this point we examined a good bit of science, chemistry and physics. We have discussed some key properties of water, but now we come to a key water property that is important to every human being on the planet and its consequences. Evaporative cooling is the process of cooling by evaporating a fluid. Because of the very high heat of vaporization of water the mechanism of controlling our body temperature is tied to evaporative cooling from perspiration. This is possible because of the hydrogen bonding and the very high heat of vaporization of water.

God Designed & Created Water

We live in a time with great technology. At times it seems like magic. As a technologist I sometimes get tempted to gloat over things I know and can do. However, when I consider common, everyday water and how essential it is for life I realize I did not create it or design it with its miraculous properties. Nor did I or any other man engineer the natural systems that integrate with it. For example, water is a key component of weather. Yet it is so common we take it for granted.

Actually, water and its properties are only one example from the physical world that demonstrates the veracity of the statement, "For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made...".

FABLE OF EVOLUTION

We began this discussion in Romans 1:18-20. We will now examine this passage in its broader context.

Romans 6:20-21 (KJV)

20 O Timothy, keep that which is committed to thy trust, avoiding profane and vain babblings, and oppositions of science falsely so called:

21 Which some professing have erred concerning the faith. Grace be with thee. Amen.

We witness such teachings as the theory of evolution and falsehoods about climate change and global warming.

The theory of evolution which holds life forms evolve through minor random changes over long periods of time. However, theory continues to be plagued by numerous missing links required to show the intermediate life forms.

The global warming/climate change proponents can be challenged by their assumption that climate is constant. The geologic record does not bear this out. See the following:

<https://www.cbsnews.com/news/study-north-pole-once-was-tropical/>

<https://www.livescience.com/52868-fossil-forests-norway.html>

<http://news.bbc.co.uk/2/hi/science/nature/5034026.stm>

These references indicate the presence of tropical vegetation in polar regions 55 million years ago, well before there could be global warming caused by man's burning of fossil fuels. The geological records shows several periods of global warmth and ice ages. Reliable, objective scientific and statistical evidence to justify the political and social hysteria is lacking. The mathematical models used to promote this hysteria have yet to be validated.

At this point we see there are people who work to suppress the knowledge of God. These people have influence in the media, education, government and politics. They work tirelessly to undermine and discredit anyone who will promote the knowledge of God and Godly living. Next is verse 19.

Romans 1:19 (NKJV)

19 because what may be known of God is manifest in them, for God has shown it to them.

This states that what may be known of God is manifest in them and that God has shown Himself to them. This statement is challenged by many, even believers.

A Godless Creation

In my studies and professional experience I have observed God's brilliance and wisdom in His design and architecture of the physical universe. The skeptic argues that God could have performed the creation any way He wished, including the use of randomness and evolution. The problem with this assertion is the pure harmony and integration of various physical systems in the universe. The miraculous properties of water coupled with the precise placement of the planet, earth, in the solar system and the exact requirements for life on this planet are examples.

The randomness assertion deserves special mention. The probability of the random formation of a single molecule of hemoglobin, the substance in our blood that handles oxygen transport, defies objective thought. The probability is 1 chance in 10^{190} . That is 1 followed by 190 zeroes. (See "Does Hemoglobin Alone Destroy Evolution?" <https://evoillusion.org/3091-2/>) This is only one reference.

Hemoglobin is just one substance required for human life. Another is DNA which also involves our friend hydrogen bonding. Random formation of DNA has the same kind of probability.

Romans 2:12-16 (NKJV)

12 For as many as have sinned without law will also perish without law, and as many as have sinned in the law will be judged by the law

13 (for not the hearers of the law are just in the sight of God, but the doers of the law will be justified;

14 for when Gentiles, who do not have the law, by nature do the things in the law, these, although not having the law, are a law to themselves,

15 who show the work of the law written in their hearts, their conscience also bearing witness, and between themselves their thoughts accusing or else excusing them)

16 in the day when God will judge the secrets of men by Jesus Christ, according to my gospel.

The key here is in verses 14 and 15. This shows there is a conscienceness of God and His way present in Gentiles (broadly speaking non-believers). A significant factor in this is the fact that this has been happening for thousands of years. Since the Garden of Eden human civilization has developed apart from God. We are all "accidents of birth". We do not select our parents or the location or culture into which we are born. We absorb the traditions of our families and cultures without evaluation. It is the only thing we know. According to the preceding passage God does reveal Himself to each human being. Most are so steeped in and familiar with how they grew up, they do not change. All civilizations have laws and traditions against murder and theft. These originate ultimately from God, but going deeper into God's ways requires more and ultimately personal choice.

God's Existence Shown in Physical Creation

The context continues in verse 20.

Romans 1:20 (NKJV)

20 For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse,

The primary point we are discussing here is that God's existence, power and wisdom is revealed in His creation. We cite the properties of water here. There is much more.

Futile and Foolish Thinking

Romans 1:21-22(NKJV)

21 because, although they knew God, they did not glorify Him as God, nor were thankful, but became futile in their thoughts, and their foolish hearts were darkened.

22 Professing to be wise, they became fools,

Verses 21 and 22 describe the initiation of negative consequences by a failure to glorify God and ingratitude. There are two important consequences that lead to degeneracy.

Futile or useless thinking

What and how we think is vital. In addressing a scientific or technical matter clear thinking is required. If the thinking is futile, the conclusions reached from that thinking are also futile.

Darkening of the heart, foolishness that cannot be hidden

The following quote is from the Lexham Syntactic Greek New Testament:

In mediaeval days the jester was instantly recognized by his costume. The circus clown puts on his make up and his red nose and dons his baggy pants, leaving no one

in doubt as to his role. But, says the Preacher, the fool will still be instantly recognizable without any outward embellishments—he will soon give himself away. He is a tragic/comic character, for he is unaware of the transparency of his foolishness—thinking himself wise he becomes a fool. Paul gives us this picture when he describes fallen people who, ‘although they knew God, they did not glorify him as God, nor were thankful, but became futile in their thoughts, and their foolish hearts were darkened. Professing to be wise, they became fools’ (Rom. 1:21–22). Modern people parade their foolishness for all to see. They proclaim a ‘Post Christian’ era and openly defy the commandments of God to their own temporal and eternal destruction—and consider themselves wise!

The reference to “the Preacher” refers to:

Ecclesiastes 10:3(NKJV)

3 Even when a fool walks along the way, He lacks wisdom, and he shows everyone that he is a fool.

The Lexham source speaks of the modern rhetoric like, ‘Post Christian’ era, but this mode of thinking is evident even in ancient times. A perceptive person can see through the flawed thinking.

Idolatry

Romans 1:23(NKJV)

23 and changed the glory of the incorruptible God into an image made like corruptible man—and birds and four-footed animals and creeping things.

Many view idolatry in the light statues to pagan gods erected for worship. While this is true, there are other more insidious manifestations of idolatry that are more difficult to acknowledge. John Bevere’s book, [Killing Kryptonite – Destroy What Steals Your Strength](#), Messenger International, Inc., 2017, relates idolatry to acceptance of non-Godly ideas in popular culture and a lack of Godly obedience and repentance. The tendency of many, even those who profess Christianity, accept sinful lifestyles and practices, such as, homosexuality and abortion, are forms of idolatry. The thinking that non-Christian religions and philosophies have equal standing with the Word of God is idolatry.

God Turns People Over to Perverted Lifestyles

Romans 1:24-27(NKJV)

24 Therefore God also gave them up to uncleanness, in the lusts of their hearts, to dishonor their bodies among themselves,

25 who exchanged the truth of God for the lie, and worshiped and served the creature rather than the Creator, who is blessed forever. Amen.

26 For this reason God gave them up to vile passions. For even their women exchanged the natural use for what is against nature.

27 Likewise also the men, leaving the natural use of the woman, burned in their lust for one another, men with men committing what is shameful, and receiving in themselves the penalty of their error which was due.

GOOD & BAD VIBES

Sometimes we can discover things we did not know were there. Relatively late scientists and engineers encountered the importance vibration in the design and operation of structures and systems.

Dealing with Natural Frequencies

One fairly well-known failure was the lack of understanding of the impact of natural frequencies in structures. All structures vibrate with a set of frequencies, natural frequencies, based upon the way they are constructed and the materials from which they are constructed. Bridges, airplanes, our homes and even our skeletons have natural frequencies. There are frequencies associated with a structure's surroundings such as fluids, like air (wind), water and even rocks. One way we detect these frequencies is sound. We all are familiar with the sound of the wind blowing. When an airplane flies there is a set of frequencies resulting from its movement through the air. This phenomena is called, resonance, which causes the intensity of vibrations in the structure to increase.

In mechanical systems, resonance is a phenomenon that occurs when the frequency at which a force is periodically applied is equal or nearly equal to one of the natural frequencies of the system on which it acts. This causes the system to oscillate with larger amplitude than when the force is applied at other frequencies. (From: <https://en.wikipedia.org/wiki/Resonance>)

Here is a quote from a physics textbook. (Ironically, an earlier edition was my college physics textbook.)

*There is a characteristic value of the driving frequency ω'' at which the amplitude of oscillation is a maximum. This condition is called resonance and the value of ω'' at which resonance occurs is called the resonant frequency. Resnick and Halliday (1977). *Physics* (3rd ed.). John Wiley & Sons. p. 324. ISBN 9780471717164.*

Most people have never heard of resonance. That does not mean it does not exist and cannot have disastrous effects. When the frequencies of the wind and the air surrounding an aircraft interact with the natural frequencies of a bridge or the aircraft in a certain way, the structure fails. There are two well-known examples. First, there is the failure of the Tacoma Narrows Bridge in Washington state on November 7, 1940. (See https://en.wikipedia.org/wiki/Tacoma_Narrows_Bridge.) The second is the crash of Braniff flight 542 near Buffalo, Texas on September 29, 1959. (See https://en.wikipedia.org/wiki/Braniff_Flight_542.) One key factor in both the bridge and the aircraft had been in service only a short time, The Tacoma Narrows bridge had been open only four months. The resonance had been

observed during construction and during its brief lifetime. All measures to stop it failed. The Braniff aircraft, a Lockheed L-188 Electra, had been in service only 11 days. Another Electra (Northwest flight 710) crashed the same way on March 17, 1960. The full significance of natural frequencies and resonance were not sufficiently understood.

I personally encountered resonance in a structure when I was an engineer in the drilling group of an oil company in the 1980s. An associate had developed a program that took into account the materials of construction and changing natural frequencies of the drill string and the surrounding rock. This program would then set the drilling parameters so that the drill string would not resonate and break.

Not Knowing What You Don't Know

The major factor here is not knowing what you don't know. From an early age my father, a Mathematics teacher, impressed on me the limitations of my knowledge. Much of the teaching of mathematics in those days involved teaching things that could not be done; only to discover that many of those things could be done once we gained a broader perspective after learning more. A simple example is computing $2 - 3$. Initially, we were taught you cannot do this. Later, we were taught the result is -1 . We were not taught about negative numbers at first. My father's specific area was number theory, the study of different types or sets of numbers. Most of us have never heard of this area of mathematics. It is vast and affects many phenomena in everyday life. Simply because many do not know about number theory, or even want to know about it, does not negate its importance in many areas.

ACTIVE REJECTION OF GODLY KNOWLEDGE

Romans 1:28-32(NKJV)

28 And even as they did not like to retain God in their knowledge, God gave them over to a debased mind, to do those things which are not fitting;

29 being filled with all unrighteousness, sexual immorality, wickedness, covetousness, maliciousness; full of envy, murder, strife, deceit, evil-mindedness; they are whisperers,

30 backbiters, haters of God, violent, proud, boasters, inventors of evil things, disobedient to parents,

31 undiscerning, untrustworthy, unloving, unforgiving, unmerciful;

32 who, knowing the righteous judgment of God, that those who practice such things are deserving of death, not only do the same but also approve of those who practice them.

Our Lack of Knowledge Does Not Avoid Consequences

The major thing notice here is that the first manifestation of natural frequencies and resonance occurred in late 1940 with the collapse of the Tacoma Narrows bridge. Approximately twenty years later two airliners crashed killing all on board as a result of the same phenomenon. After another twenty years when I was an oil company engineer it was understood well enough that a mathematical model was developed to avoid drill string failures.

Lack of knowledge did not avoid unwanted consequences. The problem with the tree of the knowledge of good and evil is we must discover and discern the difference when God's Word reveals the way to avoid the consequences even if we do not understand the details.

An Alternative Path

There is an alternative path. A different way we can think.

Isaiah 55:6–11(NKJV)

- 6 Seek the LORD while He may be found,
Call upon Him while He is near.
- 7 Let the wicked forsake his way,
And the unrighteous man his thoughts;
Let him return to the LORD,
And He will have mercy on him;
And to our God, For He will abundantly pardon.
- 8 "For My thoughts are not your thoughts,
Nor are your ways My ways," says the LORD.
- 9 "For as the heavens are higher than the earth,
So are My ways higher than your ways,
And My thoughts than your thoughts.
- 10 "For as the rain comes down, and the snow from heaven,
And do not return there,
But water the earth,
And make it bring forth and bud,
That it may give seed to the sower
And bread to the eater,
- 11 So shall My word be that goes forth from My mouth;
It shall not return to Me void,
But it shall accomplish what I please,
And it shall prosper in the thing for which I sent it.

This tells us that we should seek God as opposed to rejecting Him. We see that God's ways and thinking are superior to ours. His Divine Design, which includes an abundance of water, brings life. One of the trees of Genesis 2 is the Tree of Life. Here we see a reference to the food chain. We also see the effect of God's Word and what it produces as opposed to what is produced by its rejection.

Lack of Trust & Faith

What is the basis of the active rejection of Godly knowledge? It is the lack of trust and faith in God.

Proverbs 3:5-8 (NKJV)

- 5 Trust in the Lord with all your heart,
And lean not on your own understanding;
- 6 In all your ways acknowledge Him,
And He shall direct your paths.

- 7 Do not be wise in your own eyes;
Fear the Lord and depart from evil.
- 8 It will be health to your flesh,
And strength to your bones.

This arises from the lie that following God deprives us of power, knowledge, pleasure and wealth. I will repeat from the description of the "original sin" in Genesis 3.

Genesis 3:1-6(NKJV)

- 1 Now the serpent was more cunning than any beast of the field which the LORD God had made. And he said to the woman, "Has God indeed said, 'You shall not eat of every tree of the garden?'"
- 2 And the woman said to the serpent, "We may eat the fruit of the trees of the garden;
- 3 but of the fruit of the tree which is in the midst of the garden, God has said, 'You shall not eat it, nor shall you touch it, lest you die.'"
- 4 Then the serpent said to the woman, "You will not surely die.
- 5 For God knows that in the day you eat of it your eyes will be opened, and you will be like God, knowing good and evil."
- 6 So when the woman saw that the tree was good for food, that it was pleasant to the eyes, and a tree desirable to make one wise, she took of its fruit and ate. She also gave to her husband with her, and he ate.

Here we see that Satan, the serpent, actively misled Eve saying, in effect, "God is holding out on you, He is depriving you of knowledge, power (equivalence with God) and the pleasure to be derived from the illicit fruit of the Tree of the Knowledge of Good and Evil." You can have all this, if you lean on your own understanding and become wise in your own eyes. The Godly promise from Proverbs 3 holds that God will lead us to wise paths, health and strength. We simply need to trust Him.

WHERE WERE YOU?

Job 42

SUMMARY AND CONCLUSION

This passage, Romans 1:18-32, begins with actions to suppress the teaching and discussion of God's truth and the inability to accept God as Creator. This leads foolish thinking followed by degenerate behavior, resulting from the lack of God's influence. As matters progress the result is utter rejection of God and more sinful thinking and behavior.

We have taken the example of the most common substance on the earth, water, and have shown it is a miracle that enables and maintains life.

Technological Progress is not Everything

We live in a time of tremendous technological progress. I have spent most of my life learning and applying technology. I have patents in chemistry and publications in information technology. In all this activity the effort was directed at complying with physical design of the universe and systems derived from physical laws. At no point does any technical system work as it consistently violates physical laws. We have seen examples of catastrophic failures of systems in which the designers and builders unknowingly violated physical law. However, there is more to our existence than physical laws.

Spiritual Creation

God did not stop with the creation of physical law. This passage (Romans 1:18-32) does not just address the physical creation. It addresses the idea of not liking to retain God in our knowledge.

The phrase "And even as they did not like to retain God in their knowledge" is a key. Many of the vices listed are pleasurable in some way. Others are ways to deal with pain and frustration. Some represent what is viewed as shortcuts to success and wealth. God and His way are viewed as opposed to pleasure and success. Some religious leaders knowingly or unknowingly teach that misery, pain and frustration are part of Godly life. This started in the Garden.

Genesis 3:1-6(NKJV)

- 1 Now the serpent was more cunning than any beast of the field which the LORD God had made. And he said to the woman, "Has God indeed said, 'You shall not eat of every tree of the garden?'"
- 2 And the woman said to the serpent, "We may eat the fruit of the trees of the garden;
- 3 but of the fruit of the tree which is in the midst of the garden, God has said, 'You shall not eat it, nor shall you touch it, lest you die.' "
- 4 Then the serpent said to the woman, "You will not surely die.
- 5 For God knows that in the day you eat of it your eyes will be opened, and you will be like God, knowing good and evil."
- 6 So when the woman saw that the tree was good for food, that it was pleasant to the eyes, and a tree desirable to make one wise, she took of its fruit and ate. She also gave to her husband with her, and he ate.

The lie Satan told here has been repeated throughout human history which says in essence, "God is holding out on you and He wants to restrict your pleasure, your knowledge and your ability to deal with problems. He is too restrictive." At some point it becomes, "There is no God; there is only nature."

Mankind has built its civilizations apart from God. Mankind has not liked to have knowledge of God. Just as the designers of the Tacoma Narrows Bridge and the Lockheed Electra were unaware of the effects of resonance on structures, mankind has ignored God's teachings on how to live in our homes, institutions and nations. The result has been misery and death.

Marriage, the Foundation of Civilization

Continuing in Genesis 2 we see that God institutes marriage.

Genesis 2:18-24(NKJV)

- 18 And the LORD God said, "It is not good that man should be alone; I will make him a helper comparable to him."
- 19 Out of the ground the LORD God formed every beast of the field and every bird of the air, and brought them to Adam to see what he would call them. And whatever Adam called each living creature, that was its name.
- 20 So Adam gave names to all cattle, to the birds of the air, and to every beast of the field. But for Adam there was not found a helper comparable to him.
- 21 And the LORD God caused a deep sleep to fall on Adam, and he slept; and He took one of his ribs, and closed up the flesh in its place.
- 22 Then the rib which the LORD God had taken from man He made into a woman, and He brought her to the man.
- 23 And Adam said:
"This is now bone of my bones
And flesh of my flesh;
She shall be called Woman,
Because she was taken out of Man."
- 24 Therefore a man shall leave his father and mother and be joined to his wife, and they shall become one flesh.

In the King James Version the words, "be joined", is rendered "cleave". Unfortunately, the word, cleave, has ambiguous meanings. One is to divide as with a meat cleaver. The other, the correct one here, is to adhere or stick to. Other translations use the words, "be united with".

The reason for mentioning this here is that human civilization began with marriage and then the home and family. Families then formed nations. This has spiritual implications. God's intent from the beginning that marriage be the basis of civilization with married couples living in covenant with each other. In Ephesians 5 we see this idea.

Ephesians 5:31-33(NKJV)

- 31 "For this reason a man shall leave his father and mother and be joined to his wife, and the two shall become one flesh."
- 32 This is a great mystery, but I speak concerning Christ and the church.
- 33 Nevertheless let each one of you in particular so love his own wife as himself, and let the wife see that she respects her husband.

The Two Trees

In Genesis 2 we see the discussion of the two trees.

Genesis 2:8-9, 15-17(NKJV)

- 8 The LORD God planted a garden eastward in Eden, and there He put the man whom He had formed.

- 9 And out of the ground the LORD God made every tree grow that is pleasant to the sight and good for food. The tree of life was also in the midst of the garden, and the tree of the knowledge of good and evil.
- 15 Then the LORD God took the man and put him in the garden of Eden to tend and keep it.
- 16 And the LORD God commanded the man, saying, "Of every tree of the garden you may freely eat;
- 17 but of the tree of the knowledge of good and evil you shall not eat, for in the day that you eat of it you shall surely die."

Many assume there was a tree of good and a tree of evil. This is incorrect. It was (and is) the tree of life and the tree of the knowledge of good and evil. The tree of life imparts eternal life. The tree of the knowledge of good and evil imparts the knowledge that is a mixture of good and evil that leads to death. In Genesis 3 Satan tells Adam and Eve this tree would make them like God knowing good and evil. The problem was and remains there are gaps in man's knowledge that cannot be filled except through bitter experience. This is what we see in the case of resonance in structures. In the period from 1940 to 1960 engineers had limited knowledge of this phenomenon. The bridge collapsed and two airliners crashed killing all aboard. By the time of my experience with resonance in the 1980's it was better understood and my associate could write a computer model to deal with it in drilling oil wells.

As we examine the context of Romans 1:18-32 it is clear that the failure of acknowledging God's role in physical creation translates to spiritual issues. The most recent example of worldwide consequences of failure to truly acknowledge God is World War II. The Axis powers chose to advance their interests at the expense of other nations. Even among the Allies there were issues about the existence and sovereignty of God, particularly with the Soviet Union. The result was the death of some 70 million people. The world embraced the tree of the knowledge of good and evil and death was the result.

Re-visiting Not Knowing What You Don't Know

There are limits to our personal knowledge. There are limits to human knowledge. We are often taught that God is omniscient.

omniscient adjective

om·ni·scient | \ä'm-'ni-shənt

Definition of omniscient

1

: having infinite awareness, understanding, and insight

an omniscient author

the narrator seems an omniscient person who tells us about the characters and their relations

— Ira Konigsberg

2

: possessed of universal or complete knowledge

the omniscient God

<https://www.merriam-webster.com/dictionary/omniscient>

Omniscient is derived from the Latin words, omni, meaning “all” and, scire, meaning “to know”. God is all knowing, we human beings are not. This is fundamentally revealed in scripture in Genesis chapters 2 and 3. The trap in the tree of the knowledge of good and evil is our limited knowledge. None of us is omniscient; God is. This is the message from Isaiah chapter 55. We are dependent on revealed input from God that often goes beyond our knowledge. We either don’t get that input or reject it. The engineers who designed the Tacoma Narrows bridge and the Lockheed Electra did not intend to produce failing structures. They had an inadequate knowledge of natural frequencies and resonance. The bridge collapsed and two airliners crashed.

Acknowledge God; Receive Divine Direction

In Romans 1:28 there is a statement to the effect that some do not acknowledge God. Consider the following.

Proverbs 3:5-8(NKJV)

- 5 Trust in the LORD with all your heart,
And lean not on your own understanding;
- 6 In all your ways acknowledge Him,
And He shall direct your paths.
- 7 Do not be wise in your own eyes;
Fear the LORD and depart from evil.
- 8 It will be health to your flesh,
And strength to your bones.

God is not passive. He directs us, if we allow Him to do so. He does it from a position of omniscience. When we choose to limit ourselves to our own understanding, we limit the scope of our actions. We deprive ourselves of input from sources that go beyond our knowledge, education and experience.

Role of the Holy Spirit

Correct knowledge involves the Holy Spirit. Christ spoke of this before He was crucified.

John 16:12-14(NKJV)

- 12 “I still have many things to say to you, but you cannot bear *them* now.
- 13 However, when He, the Spirit of truth, has come, He will guide you into all truth; for He will not speak on His own *authority*, but whatever He hears He will speak; and He will tell you things to come.
- 14 He will glorify Me, for He will take of what is Mine and declare *it* to you.

Our ability to bear or tolerate God’s truth involves the Holy Spirit. Our walk with God requires a spiritual component, the Holy Spirit, working in and through us.

I Corinthians 2:9-14(NKJV)

- 9 But as it is written:
“Eye has not seen, nor ear heard,

Nor have entered into the heart of man
The things which God has prepared for those who love Him.”

- 10 But God has revealed *them* to us through His Spirit. For the Spirit searches all things, yes, the deep things of God.
- 11 For what man knows the things of a man except the spirit of the man which is in him? Even so no one knows the things of God except the Spirit of God.
- 12 Now we have received, not the spirit of the world, but the Spirit who is from God, that we might know the things that have been freely given to us by God.

Conclusion

In Romans 1:18-32 we see that we can learn God’s existence and begin to understand His ways from the physical creation. We see that God designed and created water to enable our physical survival on this planet. Water has miraculous properties. Furthermore, we see that the idea that our creation did not occur by a set of random events over an extended period of time. We are more likely to win the lottery than to have a single molecule of hemoglobin or DNA come into existence by random occurrence. We, also, see that there things we do not know from eating from the tree of the knowledge of good and evil.

TWO TREES

At Creation God presents the Two Trees of Eden.

Genesis 2:8-9, 15-17(NKJV)

- 8 The LORD God planted a garden eastward in Eden, and there He put the man whom He had formed.
- 9 And out of the ground the LORD God made every tree grow that is pleasant to the sight and good for food. The tree of life was also in the midst of the garden, and the tree of the knowledge of good and evil.
- 15 Then the LORD God took the man and put him in the garden of Eden to tend and keep it.
- 16 And the LORD God commanded the man, saying, "Of every tree of the garden you may freely eat;
- 17 but of the tree of the knowledge of good and evil you shall not eat, for in the day that you eat of it you shall surely die."

These trees represent two diametrically opposed ways of thinking and living.

Tree of the Knowledge of Good and Evil

This tree represents the approach of learning what is good and what is evil, mostly apart from God. Some maintain this is the essence of the scientific method, observe things and determine if the result is desirable or good or not or try things, experiment, to produce good. This was the essence of the Satanic temptation.

Genesis 3:1-6(NKJV)

- 1 Now the serpent was more cunning than any beast of the field which the LORD God had made. And he said to the woman, "Has God indeed said, 'You shall not eat of every tree of the garden'?"
- 2 And the woman said to the serpent, "We may eat the fruit of the trees of the garden;
- 3 but of the fruit of the tree which is in the midst of the garden, God has said, 'You shall not eat it, nor shall you touch it, lest you die.'"
- 4 Then the serpent said to the woman, "You will not surely die.
- 5 For God knows that in the day you eat of it your eyes will be opened, and you will be like God, knowing good and evil."
- 6 So when the woman saw that the tree was good for food, that it was pleasant to the eyes, and a tree desirable to make one wise, she took of its fruit and ate. She also gave to her husband with her, and he ate.

The serpent, Satan, presents a lie, "You shall not surely die." followed by the promise of becoming like God, "knowing good and evil". Buried within the original human temptation is the idea that we gain eternal life, avoid death, and gain equivalence to God by gaining knowledge of good and evil apart from God. This has been a recurring theme throughout human history. It has not worked!

Transhumanist Movement

This approach has given rise to the transhumanist movement. Under transhumanism mankind can become more than human via a combination of evolution, scientific progress, computer enhancements, non-God spirituality. The movement gained support during the 20th century and attracted many from the scientific, philosophical and political worlds, such as, Julian Huxley, Isaac Asimov, Bertrand Russell and Zbigniew Brzezinski. It has gain widespread influence in media and culture.

A detailed exposition on tranhumanism can be found in the book by Thomas Horn and others (Horn, Thomas et.al. *The Milieu: Welcome to the Transhuman Resistance*, Defender Publishing, Crane, MO, 2018).

Limitations of Observation and Experimentation

Mankind is limited in both ability and time to gain sufficient knowledge to solve problems via the Tree of the Knowledge of Good and Evil. Each of us is born at a specific time into a particular culture. Early in life we absorb the definitions and assumptions of those around us, parents, siblings, teachers and religious and political leaders. These definitions and assumptions initially become our basis for "Truth". As we grow older these definitions and assumptions are examined in our experiences, education and observations. We begin to challenge our original definitions and assumptions and develop our own. However, we are limited in what we know. If we have limited exposure to other cultures and systems of thinking our thinking is limited and often in error in some way. This is true regardless of whether we live in an upscale, prosperous environment or one marked by poverty and deprivation. In the following section we see remedy for these limitations, The Tree of Life

Tree of Life

I Corinthians 2:1-16(NKJV)

- 1 And I, brethren, when I came to you, did not come with excellence of speech or of wisdom declaring to you the testimony of God.
- 2 For I determined not to know anything among you except Jesus Christ and Him crucified.
- 3 I was with you in weakness, in fear, and in much trembling.
- 4 And my speech and my preaching were not with persuasive words of human wisdom, but in demonstration of the Spirit and of power,
- 5 that your faith should not be in the wisdom of men but in the power of God.
- 6 However, we speak wisdom among those who are mature, yet not the wisdom of this age, nor of the rulers of this age, who are coming to nothing.
- 7 But we speak the wisdom of God in a mystery, the hidden wisdom which God ordained before the ages for our glory,

- 8 which none of the rulers of this age knew; for had they known, they would not have crucified the Lord of glory.
- 9 But as it is written:
“Eye has not seen, nor ear heard,
Nor have entered into the heart of man
The things which God has prepared for those who love Him.”
- 10 But God has revealed them to us through His Spirit. For the Spirit searches all things, yes, the deep things of God.
- 11 For what man knows the things of a man except the spirit of the man which is in him? Even so no one knows the things of God except the Spirit of God.
- 12 Now we have received, not the spirit of the world, but the Spirit who is from God, that we might know the things that have been freely given to us by God.
- 13 These things we also speak, not in words which man’s wisdom teaches but which the Holy Spirit teaches, comparing spiritual things with spiritual.
- 14 But the natural man does not receive the things of the Spirit of God, for they are foolishness to him; nor can he know them, because they are spiritually discerned.
- 15 But he who is spiritual judges all things, yet he himself is rightly judged by no one.
- 16 For “who has known the mind of the Lord that he may instruct Him?” But we have the mind of Christ.

Given the limitations of human efforts to gain necessary knowledge via the Tree of the Knowledge of Good and Evil, God gave us another means.

Role of the Spirit

In I Corinthians 2 we see the need for the Holy Spirit and revelation. This brings us to the role of the spirit. We humans are physical beings and, no matter our disposition, we have difficulty with things spiritual. Consider the following.

John 4:22-24(NKJV)

- 22 You worship what you do not know; we know what we worship, for salvation is of the Jews.
- 23 But the hour is coming, and now is, when the true worshipers will worship the Father in spirit and truth; for the Father is seeking such to worship Him.
- 24 God is Spirit, and those who worship Him must worship in spirit and truth.”

Here it says, “God is Spirit”. By default He is not visible, He is not audible. He is not discerned by our five senses by default. I say “by default” because He can, does and has made His existence and presence known physically. My education since childhood has emphasized the physical sciences, chemistry and physics, with a lot of mathematics. Therefore, Romans 1:20 has great significance to me.

Romans 1:20(NKJV)

- 20 For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse,