

Training Your People How to Think About Climate Change

Charles A. Clough

Introduction

During the past decade so-called “climate change” has become a secular replacement of the biblical apocalypse. Its alarm of dangerous anthropogenic global warming (DAGW) resonates in the hearts of the unregenerate and faithless—those who think they live in a cosmos dependent upon chance and chaos for existence. As this spirit of fear has spread throughout the world’s leaders, hastily-conceived global policies are aggressively promoted so that man can save himself from himself.

A segment of evangelicals have climbed aboard the bandwagon triggering a counter-response of other evangelicals.¹ One effect of the climate change debate entering the evangelical community is that in the election of 2008 significant evangelical votes were siphoned off of a traditional “conservative” stance to support “liberal” candidates. More seriously DAGW proponents have convinced federal and state leadership as well as major corporations’ executives that they are *morally bound* to support DAGW-derived policies and *impose them upon all their citizens and employees*.

Unfortunately for Bible-believing Christians this movement requires citizens, school children, and employees to adopt a pagan view of nature, an unethical treatment of the poor, and a confiscation of wealth otherwise committed to Christian ministry and missions. A false sense of guilt is used to seduce freedom-loving people to submit to this totalitarian power. How, then, are we to respond? How are those of us in ministry to prepare our people to respond in the family, in the school classroom, in the workplace, and in neighborhood discussions?

My presentation today will include two parts. The first part will illustrate how to use the Bible’s own “framework” to encompass our thought processes and bear witness to those intimidated by this apocalyptic spirit of fear. My second part will direct your attention to a well-researched position paper of the Cornwall Alliance that is on your CD. This paper was produced by a joint effort of evangelical theologians, scientists, and economists. It includes more than sufficient references to equip you and those you minister to.

Framing the Climate Change Issue within Biblical Truth

Proverbs 18:13 gives us good starting advice: “He who answers a matter before he hears it, it is folly and shame to him.”² Questions usually come with baggage attached. It pays to listen and digest a question before trying to answer it. Climate change, for example, is

¹ On the side of DAGW is the Evangelical Environmental Network headed by Dr. Jim Ball. Against DAGW is the Cornwall Alliance for the Stewardship of Creation headed by Dr. E. Calvin Beisner.

² All biblical references are from the NKJV unless otherwise stated.

often presented with careless or even deliberately deceitful semantics. An example is the question, “don’t you believe in global warming?” This phraseology immediately misdirects the conversation. The climate change debate isn’t about global warming per se. Everyone agrees that global warming has occurred during the last century or so. The debate concerns the *cause* of global warming—is it primarily due to natural variation or to human CO2 emissions? And if it is due to human CO2 emissions, will it produce a global catastrophe for mankind? If the answer is yes to both of these questions, then unprecedented policy changes can be ethically justified.

A biblical view of political discussion.

If political discussions are to be truly productive, they must advance beyond the all-too-frequent sound-bite, ad hominem, name-calling (pro-DAGW are self-aggrandizing researchers; anti-DAGW are shills for the oil companies, etc.). Where would we go in the Bible to see discussions about fundamental social policies? We should go to the legal and prophetic literature of OT Israel where, unlike the NT directives for life under Roman paganism, we can access revelation of the politics of a properly functioning society under God’s direct rule. Deuteronomy is a good starting point.

Over and over again in Deuteronomy Moses primarily warns the nation about idolatry. Idolatry—not immorality, not social disruption, not even environmental regulations—are his focus. Why is this? I suggest the answer is found in looking at slide 1 (see appendix). The pressures of social life appear at first at the political level. But substantive political differences are a symptom of underlying ethical differences. Moses points out that God’s ethically-defining statutes and judgments are the envy of the nations (Deut. 4:6-8). Crudely stated, ethics involves the question, “who are you to tell me how to live my life?” That is, ethics demands an authority of some sort. Moses reminds Israel Who their Authority is:

“Ask now concerning the days that are past, which were before you, since the day God created man on the earth, and ask from one end of heaven to the other, where anything like this has happened, or anything like it has been heard. Did any people ever hear the voice of God speaking out of the midst of the fire, as you have heard, and live? Or did God ever try to go and take for Himself a nation from the midst of another nation, by trials, by signs, by wonders, by war, by a mighty hand and an outstretched arm, and by great terrors, according to all that the LORD your God did for you in Egypt before your eyes? To you it was shown that you might know that the LORD Himself is God; there is none other besides Him. Out of heaven He let you hear His voice, that He might instruct you. . . .” (Deut 4:32-36)

In terms of slide 1 Moses established the epistemological and metaphysical foundation—the authority—Yahweh Creator and Savior and Judge—under the ethical claims. Now we can see why idolatry is the primary concern of Moses (cf. Deut 4:15-24). By altering the character of God idolatry overthrows both the metaphysical and epistemological basis of ethical judgments.³

As we shall see, the climate change political discussion hinges on underlying ethical considerations of man’s proper relationship to nature. The ethical considerations in turn

³ Again, crudely put, the epistemological question is “how can I know what you are telling me is true?” and the metaphysical question is “what is the source, meaning, and purpose of your life and mine?”

depend upon the deeper questions of how we know the truth of climate change and the characteristics of our physical environment. Failure to drill down to these deeper levels makes climate change dialog trivial. Let's start at the bottom of slide 1 and work upward.

A biblical view of our physical environment (the metaphysical level).

What key events in Scripture supply doctrine revelation about man and his natural environment? I'd start with creation, fall, flood, and the ecological covenant with Noah. I'd also note the relationship of Israel to its natural environment from the conquest through the fall and exile. Doctrine from these events will help us answer two key metaphysical questions in the climate change debate.

Question #1: Is nature the product of chance or of created design? If the former, then the atmosphere-ocean dynamic could well be a fragile system that is meta-stable and liable to malfunction given slight perturbations by mankind. If the latter, then the atmosphere-ocean dynamic would be designed to withstand variation so as to attain its ultimate purpose of preserving mankind until the new creation. These two alternatives define distinctly different ranges of climate variation to be represented in climate modeling.

A climate modeler who is aware of recent creation, a climate-altering global flood and the Noahic Covenant, for example, will realize that climate change was surprisingly rapid in the past and must be limited by restraining feedback mechanisms. He has confidence in God's engineering ability and in His providential management of climate dynamics. This is, after all, our Father's world. His pagan colleague, however, believes that climate processes slowly and without personal causation evolved over millions of years prior to man. Faced now with comparatively rapid climate changes that appear to coincide with the Industrial Revolution, he will tend to view the present climate as out-of-control. He is vulnerable to spirits of fear.

Creationists see God's design throughout nature, including the atmospheric and oceanic processes. We are to observe God's revelation in our natural environment everywhere and always. This is how we can worship our great God. For example, I saw the recent record-breaking snowstorms in the mid-Atlantic states as a worshipful experience. Snow is God's metaphor of perfect righteousness (Isa. 1:18). Each snow crystal reveals unity (hexagonal design) and diversity (unique details). See slide 2 for the two different ways of viewing snow. Moreover, the shape of each tiny snowflake reveals the temperature and humidity conditions at its origin location in the atmosphere. See slide 3. Of course we respect the power of storms and take wise precautions, but we ought not to have a morbid fear of a capricious nature. The environment is ultimately "friendly" because of our heavenly Father's love as Jesus taught (Matt. 6:25-34).⁴

Question #2: Is the "normal" state of nature one untouched by mankind or is it one of mankind cultivating it to its full potential? And is present nature "normal" or is it subject to alien natural evil? The major difference between modern ecology and the Bible

⁴ Worship, we need to remember, involves responding to God in every area with thankfulness (1 Thess 5:18).

centers on the “proper” relationship of man and nature. God set man as His underlord over the earth to subdue and rule it (Gen. 1:26-28). To show man exactly what subduing and ruling ought to look like, on the 6th day of creation God planted a geographically limited garden in Eden. The original wilderness He subdued by cultivating the soil and planting food-producing plant life.⁵ He then called man to tend and keep it (Gen. 2:8-15). The original natural environment was incomplete without man to turn the wilderness into a garden and thereby bring nature to its full productive potential. This is the work and labor that God has assigned to mankind.

Of course I’ve just committed the unpardonable sin in the eyes of modern environmentalists! My heresy, they think, is that by making man as ruler over nature, I have licensed the wonton destruction and rape of natural resources. I’ve committed the sin of anthropocentricity—giving man absolute power over nature. Be forewarned: there is an intense hatred for the Genesis revelation of man’s relationship to nature, a hatred that is almost universal through all branches of environmentalism. But this reaction assumes that Genesis isn’t revelation. There isn’t a self-revealing God. That man is to rule over nature is a quaint Jewish story. My anthropocentricity must be wiped out and replaced with a nature-centric perspective.

Such critics, however, run while they read. They miss the point, and thereby beg the question. Genesis 1 and 2 are the revelation of the Creator of both man and nature. The Bible teaches theocentricity, not anthropocentricity. Man is metaphysically, epistemologically, and ethically subordinate to his Creator, Savior, and Judge. His relationship to nature, including the atmospheric and oceanic environment, is a matter of the Creator’s design and purpose.

One vital consequence of this biblical theocentricity is that nature has been cursed and now contains natural evil (Rom. 8:20-22). Present nature resists man’s dominion as man resisted God’s dominion. Nature is “defiled” in OT Israel not from physical abuse but from idolatry and religious defiance of God which He then judges by altering the natural environment.(e.g., Isa. 5:8; 24:4; Jer. 2:7-8). Climate change is included in such judgments (Lev. 26:19-20; Deut. 28:17-18, 23-24). Climate change may be a divine punishment on Gentile nations as well (Acts 17:26-27).

Pristine nature does not exist. Storms, floods, drought, heat and cold waves have existed since the fall. They are not recent effects of modern man. One’s metaphysical views—whether entirely self-conscious or not—profoundly affect his way of viewing nature.

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A biblical view of discovering truths of nature (the epistemology level)

⁵ I am indebted to E. Calvin Beisner for this exegetical insight in his book Where Garden Meets Wilderness (Grand Rapids: William B. Eerdmans, 1997).

Going up one level in slide 1 we come to the epistemological level—the level that is concerned with how we know. The Bible has the only sure basis for knowing. Neither Plato, Aristotle, Hume, Kant, nor their modern followers have ever devised a rationale of intelligibly knowing nature. It's rarely if ever covered in any science or engineering course so it's no surprise that researchers sometimes forget the limitations of empirical data and commit logical fallacies in data analysis.

Slide 4 shows the biblical view built upon the Creator/creature distinction. God as Creator has designed man to be a knower of nature not for ego-building but for dominion and worship (cf. Gen. 1:26-28; 2:19-20; Rev 4:11). Though as a finite self-conscious creature man knows only partially, his knowledge can be rationally consistent because God is consistent in His omniscience and in His plan for creation. Man's knowledge can genuinely correspond to external reality because God has created his mind to interpret reality analogously to God's prior "interpretation" in His plan. This is the perspective that originally made science possible and motivated the early scientists to explore nature.⁶ Although promoting optimism and hope in science, the biblical view also breeds a cautious humility. After all, scientific discovery seeks to know God's infinitely-complex designs (note the artistic depiction of the discovery process in Proverbs 25:2).

Climate research faces a formidable set of problems. Data sets are very limited. No systematic surface temperature or humidity measurements on a global scale were made prior to the mid 19th century. No upper-air measurements or CO₂ measurements on a global scale were made prior to the mid 20th century. No satellite pictures or radiation measurements were made prior to the closing decades of the 20th century. Quality assurance, especially of the surface data, is a major problem.⁷ Climate computer models absolutely require such digital data so *model testing can only be done with relatively recent direct measurement data when the whole point is that climate change over several centuries is the object of research.*

If climate change over a century or two is to be studied, then somehow the data set must be extended. Climate researchers extend the data backward by using surrogate data from river flow records, tree-ring data, ice-core sampling, and other sources. This methodology requires very sophisticated statistical analysis to cope with the uneven geographical distribution of such data sources. A major problem appeared with the series of UN Intergovernmental Panel on Climate Change (IPCC) reports over the last decade. Slide 5 shows the problem. The traditional climatological reconstruction is shown on the top. Note the period from about 900 to 1400 AD that shows warming like that of the past century or two. However, Michael Mann came up with a different methodology to

⁶ See Nancy R. Pearcey and Charles B. Thaxton, The Soul of Science: Christian Faith and Natural Philosophy (Wheaton, IL: Crossway Books, 1994), 17-42.

⁷ As one with considerable experience establishing and maintaining surface meteorological instrumentation, I can assure you that quality assurance is a *major* problem. Measurement technology has changed during the data record period with little or no overlap to compare different sensor performance. Instrument exposure has changed during the record period due to increasing urbanization. Measurement density varies widely throughout the globe from near zero measurements over oceans, sparse measurements over deserts and uninhabited regions, to denser measurements in developed areas with high population density. Sensor maintenance and quality control varies widely from country to country.

reconstruct past global temperatures and produced the infamous “hockey stick” graph shown on the bottom. This is the graph that is often still used by climate alarmists to convince people that the present warming is unprecedented.

However, after it was published in IPCC Annual Report 3, Congress mandated an investigation about this radical shift in reconstructions and called upon Dr. Edward Wegman, an advanced statistics specialist on the Board of the American Statistical Association. Wegman found that Mann’s statistical analysis was deeply flawed so the recent IPCC report reverted to the traditional graph.⁸ This early episode in the climate debate also pointed to the fallacy of a “peer review” that excluded outside experts in specialized methodologies used in the study.

Once a graph is produced of global temperatures over the past 5-8 centuries, another problem arises. The graph depicts the *effect* of various physical *causes*. What are these causes? The public image of SAGW that the “science is settled” suffers from a commonly encountered logical flaw called by logicians as the “assertion of the consequent.” Slide 6 shows the fallacy. If a cause like human CO₂ emissions is proposed as the *cause* of the global warming *effect* and the graph shows the *effect* is true, one cannot thereby conclude that CO₂ emissions are the *cause*. There could be other causes that would account for the same global warming graph. To make their case SAGW proponents need to show that other causes (oceanic cycles, cosmic ray variations, solar output changes) cannot explain the graph. This has not been done, and in light of the previous warming prior to the modern use of fossil fuels, probably cannot be done..

What has been done is the generation of global climate computer models—22 of them. Close agreement among all or most of the models is then declared to “prove” they are correct. But look more carefully. These models are actually sets of equations that are supposed to mimic atmospheric processes. The models are then tested against recent climate data by adjusting equation parameters until the output reasonably matches the climate data. At least two problems occur. First, adjusting parameters to fit what one is trying to prove as an effect, still suffers from the logical fallacy discussed above. This is the same problem that stock and commodity traders face when they “curve fit” their models to fit past data. Inevitably, the markets no longer fit the models for the reason that “curve fitting” didn’t include all of the causes at work in the market. We observe the same thing with climate models. Which of the models, for example, anticipated the cooling of the past decade?

A second problem with the models is their alleged “consensus.” Since all of them were written by members of a relatively small community of climate modelers who share the same notions of how the atmosphere supposedly works, a consensus would be expected. In particular all the models assume that water vapor, the dominant greenhouse gas,

⁸ A copy of the Wegman report can be obtained at http://republicans.energycommerce.house.gov/108/home/07142006_Wegman_Report.pdf. A similar problem was recently exposed in the “climate-gate” episode. Email traffic exposed the problem that the surrogate data and recent measured temperature data “diverged”, i.e., don’t match. Researchers’ emails revealed that they were using programming “tricks” to force the two data sets to converge.

amplifies the CO₂-triggered warming (ca 1°C per century) by a factor of 2 to 5. The problem here is that water vapor, unlike CO₂, changes state from solid to liquid to gas and back again. Involved in these changes are clouds and precipitating systems, none of which are known thoroughly enough to ascertain whether their feedback is negative or positive.

There is one other observation while we are on the epistemological level. If the global temperature graph shows the medieval warm period to be as warm as present temperatures are, then how can it be true that global warming is catastrophic to civilization and nature? During the warm-up between AD 900 and 1300 the Vikings colonized Greenland, many of the castles and cathedrals of Europe were built (showing that farming was productive enough to spare labor for these projects), and the population in Europe increased about 50%. Remember that DAGW advocates must show *both* the primary cause of warming to be human CO₂ emissions *and* that the result will be catastrophic for civilization.

With limited data, questionable statistical analyses, and clear evidence of earlier warming *not* caused by fossil fuel CO₂ emissions and not catastrophic for mankind, no one can legitimately claim yet that the “science is settled” as to the cause of modern global warming such that freedom-destroying public policy is justified.

A biblical view of ethics for nature management (the ethical level)

Coming up to the ethical level in slide 1, we can state that biblically man is obligated to subdue nature in accordance with God’s design. That includes the protection and economic production of private property, reproducing families, and civil authority that protects them. Abuse of nature is tantamount to theft since it diminishes the value of other claims on that asset. Civil authority can legitimately act to prevent such theft.

However, it must be proved that CO₂ emissions are an abuse of nature. It must also be shown that any proposed CO₂ emission controls do not cause greater harm to society than no controls. This has not been done.⁹ Economists have shown in fact that curtailed fossil fuel usage will drastically harm undeveloped areas—areas, incidentally, where Christian missions are at work. Undeveloped areas are notoriously abusive of nature by cutting down trees, contaminating water supplies, and ruining the quality of the soil. Only when they are allowed to develop through more efficient fossil fuel usage can they share in the environmental protection interests of the developed world.

A serious ethical concern in the climate debate concerns the seduction of scientific research by government-controlled funding. Tracing this cultural shift back to the Manhattan Project during World War II, Richard Lindzen, an atmospheric scientist at MIT writes:

“The institutional factor has many components. One is the inordinate growth of administration in universities and the consequent increase in importance of grant

⁹ See economic discussion in the Declaration of the Cornwall Alliance, especially the discussion of the Stern Report that allegedly addresses the risk and reward of mandatory emission controls.

overhead. This leads to an emphasis on large programs that never end. Another is the hierarchical nature of formal scientific organizations whereby a small executive council can speak on behalf of thousands of scientists as well as govern the distribution of ‘carrots and sticks’ whereby reputations are made and broken. The above factors are all amplified by the need for government funding. When an issue becomes a vital part of a political agenda, as is the case with climate, then the politically desired position becomes a goal rather than a consequence of scientific research.¹⁰

One further point: if recycling is legitimate, why is fossil fuel usage illegitimate? On a young-earth view, the earth’s fossil fuel supply is a sequestering of carbon from a previous human generation’s environment. That generation obviously flourished—the warming wasn’t a catastrophe. Of course on an old earth view, that fuel supply is a sequestering of carbon from many generations so releasing it all in one generation would be problematical. Again we see how ethical questions depend upon the underlying epistemological and metaphysical foundations. A rational discussion has to include all the levels.”

A Renewed Call to Truth, Prudence, and Protection of the Poor: An Evangelical Examination of the Theology, Science, and Economics of Global Warming

I have asked the folks here to include on your CD the Cornwall Alliance paper on climate change because it provides a cogently-argued case against dangerous anthropogenic global warming (DAGW). This is a valuable resource for you for several reasons.

It is comprehensive, covering the theology, science, and economics involved. You rarely ever see such a comprehensive discussion in today’s culture. It is a model paper in its scope.

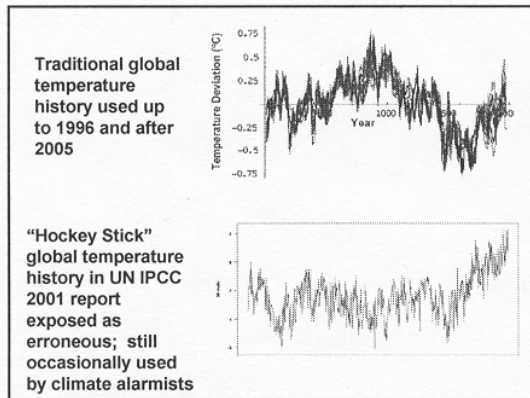
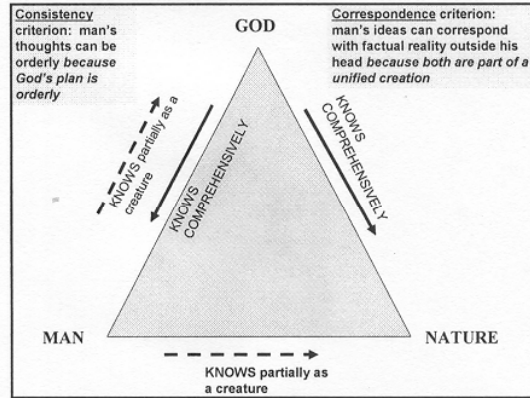
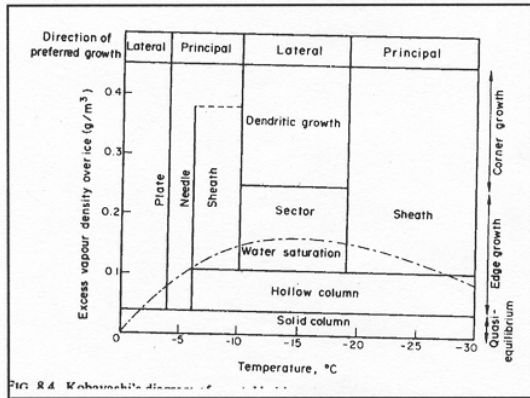
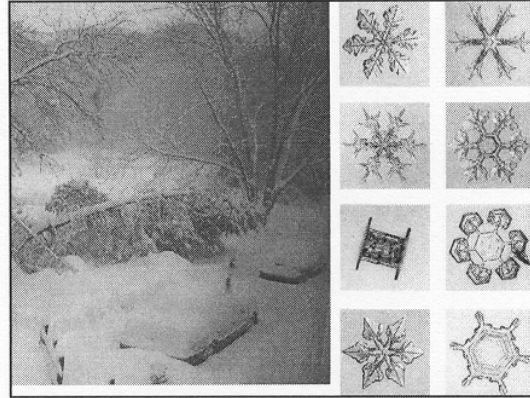
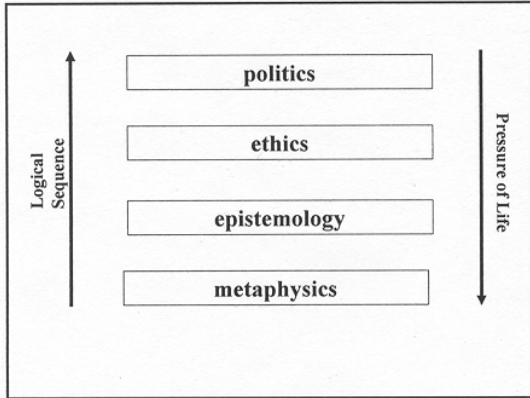
It is produced by a large group of qualified evangelical scholars qualified in their fields and therefore cannot be hastily dismissed as the isolated speculations of a few individuals. It is a model paper for Christian “salt-and-light” influence on the political process. Not all the authors and reviewers agree in their theology, but for this particular political debate they share common ground and illustrate how to wage a combined forces operation.

Conclusion

This presentation has illustrated a framework approach toward a contemporary issue. Climate change is a source of fear to many who think in a pagan fashion, lack an adequate foundation for meaning and truth, and therefore make arbitrary ethical judgments. As Bible-believing Christians we have the only foundation for real meaning and true knowing, and therefore can make justifiable ethical judgments. As citizens of

¹⁰Richard S. Lindzen, “Climate Science: Is it currently designed to answer questions?” A paper prepared 9/27/08 and formerly available on the web. I have a copy (.pdf) that I will supply to those requesting it.

the republic we have been given a providential opportunity to seek the “shalom” of our nation with confidence and thanksgiving to our Creator, Savior, and Judge. We should seek to inject wisdom arguing pragmatically, if necessary, as Daniel did in Dan. 1:13-16. Christians of previous generations knew the importance of doing so. We neglect such attempts at a peril to our families, churches, and most of all, our children.



Logical Fallacy of Scientific Induction

•If “p”, then “q”
•“q” is true
•Therefore “p” is true

•If [human CO2 emissions], then [global warming]
•[Global warming] is true
•Therefore [human CO2 emissions] is true

“assertion of the consequent” or
“the generalization fallacy”