

THE DISCIPLINES OF KNOWING (3): THE SCIENCES



KNOW, LOVE, SERVE
PART 6

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A REVISION STUDY FROM
THE FELLOWSHIP OF AILBE

The Disciplines of Knowing (3): The Sciences
Know, Love, Serve: Part 6
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Welcome to *The Disciplines of Knowing (3): The Sciences*

The idea that science and Christianity are on opposing sides of the knowing divide is a myth. Far from being enemies, science and Christianity are sojourners on the road to increasing knowledge of Christ.

In this study, we'll see why that is so, and how we can make the most of it to grow in love for Jesus.

The scientific revolution had its beginnings within the framework of a Christian worldview, and it continues to operate today on those same Biblical foundations. The secularization of the scientific enterprise has not lessened its dependence on Biblical truth, nor eradicated its ability to help us grow in the knowledge of the Lord. We need to make sure we understand what science can do, and how we can use the products and discoveries of science to deepen our love for Christ.

ReVision studies are designed as brief introductions to the subject under consideration. We hope they will enlarge your worldview, help you to become more firmly rooted in Scripture, equip you to minister to others, and stimulate you to want to learn more about the Word of God and the Biblical worldview.

We're happy to provide this study at no charge. If you find these studies helpful, we hope you'll consider sending a gift to The Fellowship of Ailbe, to help us in making these resources available to others.

And if you find this study helpful, please let us know. How have you benefited from this study? Go to our website, www.ailbe.org, and use the Contact Us button to share your story.

May the Lord bless your study of His Word.

T. M. Moore
Principal

1 Not the Enemy

As a way of knowing, we expect science to teach us about Jesus.

*If the clouds are full of rain,
They empty themselves upon the earth;
And if a tree falls to the south or the north,
In the place where the tree falls, there it shall lie.
He who observes the wind will not sow,
And he who regards the clouds will not reap.* Ecclesiastes 11.3, 4

A way of knowing

King Solomon was a keen observer of creation. Both Proverbs and Ecclesiastes record many of his remarkable observations, together with the lessons and conclusions he drew from those. He observed the ways of animals, patterns of weather, human social interactions, the varieties of plants, and the differences between the seasons of the year. We would not say that Solomon was a *scientist*, but what Solomon did – to gain the wisdom promised him by God – is very similar to what scientists do.

And Solomon insisted that this kind of observing, thinking, processing, and learning for the sake of gaining wisdom is a duty appointed to all of us: “I, the Preacher, was king over Israel in Jerusalem. And I set my heart to seek and search out by wisdom concerning all that is done under heaven; this burdensome task God has given to the sons of man, by which they may be exercised” (Eccl. 1.12, 13).

This is not a call for all of us to strap on our white coat and head out to the lab; but Solomon’s mandate certainly makes being aware of, learning from, and making good use of science a matter of concern for all who want to increase in wisdom, and in the knowledge of Him Who is the very Treasury of divine wisdom.

Russell Maatman explains, “Physical science consists of observations and laws that relate to the world that exists” (*The Unity in Creation*). Vern Poythress reminds us that what we observe in those “laws” are only “the regularities of God’s own commitments and actions” (*Redeeming Science*). He elaborates, echoing a similar thought by Jonathan Edwards, “Scientists describe the regularities in God’s word governing the world. So-called natural law is really the law of God or word of God, imperfectly and approximately described by human investigators.”

Science is thus a way of knowing, a collection of protocols and procedures by which we may study and learn about the operations of the physical world, keeping in mind that all those operations are the result of Jesus Christ’s upholding Word of power, and thus should provide us some insight into His wisdom, power, majesty, faithfulness, and love (Heb. 1.3).

Still too short

My dad was not a very good carpenter, and I have inherited his paltry skills with saws and hammers. Whenever he had to fix something around the house – especially something that involved sawing and hammering – the finished product never quite turned out like new. But he would just smile and say, “I don’t know, I cut it off twice and it’s still too short.”

This is the problem with modern science, and it’s why, for many Christians, science is regarded as the enemy of faith, and why they think we ought have nothing to do with it.

But science, as we shall see in this part of our study on knowing, loving, and serving the Lord Jesus, is not the

enemy. It just keeps coming up short in its work of observing and describing the operations of the universe. As far as modern science goes in discovering and making use of the workings of the cosmos, it is an amazing endeavor. But soon after the beginning of the scientific revolution (around 1700), European thinkers worked to “cut off” God from the field of science and all other disciplines of knowing. The French *philosophes* who created the *Encyclopedia* project redefined all knowledge apart from God, or they made God subservient to reason and philosophy. Then, almost 100 years later and following the publication of Darwin’s *The Origin of Species*, scientists “cut off” God from their labors one more time, insisting that the laws of the universe are independent and objective, and are only under the influence of four material forces – gravity, electro-magnetism, and the strong and weak force of the atom. God, they insisted, has nothing to do with the material cosmos.

So, having “cut off” God twice from the process of knowing through science, it should not surprise us that the studies, discoveries, and products of contemporary secular science are “still too short” to incite wonder, praise, thanks, and obedience to God. Indeed, in many ways, modern science is using its discoveries to foment outright rebellion against God.

And we call this kind of science *scientism*. Scientism makes a religion out of science, insisting that only science can show the way to truth, and that only what science shows to be true should be regarded as such. Scientism bullies the humanities and banishes theology as it pounds the table of learning, insisting that it alone can lead us to the truth that sets us free.

No reason to reject science

But the fact that some scientists have become carried away by secular winds should not cause us to turn a blind eye to the work of science. Science opens up windows on the creation, allowing us to peer into its operations, marvel at its mysteries, and discern in it the voice and Presence of God, making Himself known and calling us to enjoy and glorify Him forever.

As Russel Maatman reminds us, “created reality is the sum of everything that is linked by the strands of the creating and upholding power of God.” Our calling, as those who have been given dominion over the creation (Ps. 8; cf. Heb. 2.5-9), is to set our focus on Jesus and explore and make good use of the protocols and products of science in loving God and our neighbors.

We need a vision for how science can help us increase in the knowledge of Jesus Christ, just as we need a vision to guide us in taking up the work of theology and exploring the bounty of the humanities. Vern Poythress asks, “Where is a vision for the whole world that would draw us into an appreciation of the human significance of science?”

It is the outlines of such a vision that we hope to supply in this series.

For Reflection

1. What do we mean by saying that science is a way of knowing? Knowing what? Why are the findings of modern science “still too short”?
2. Why should we expect a better appreciation of science to help us in knowing, loving, and serving Jesus Christ?
3. Do any aspects of science help you to love the Lord more? Explain.

Next Steps – Preparation: How many different ways do you make use of science in your daily life? Keep a list throughout the day. At the end of the day, give thanks to Jesus – the upholding Word of God – for making these benefits available to you. Share this exercise with a Christian friend.

2 The Christian Foundation of Science

The scientific revolution owes its beginnings to Christianity.

*All Your works shall praise You, O LORD,
And Your saints shall bless You.
They shall speak of the glory of Your kingdom,
And talk of Your power,
To make known to the sons of men His mighty acts,
And the glorious majesty of His kingdom.
Your kingdom is an everlasting kingdom,
And Your dominion endures throughout all generations.* Psalm 145.10-13

Not surprising

It does not surprise us to know that the modern scientific revolution, and all the many, amazing, and useful discoveries and technologies that go with it, have their roots in the Christian worldview.

While ancient Greeks and others dabbled in scientific speculation, Christians in the period following the Reformation laid down the bricks and mortar upon which the high rise of modern science has been constructed. And while many have sought to deny those foundations, and others are trying to move the edifice of science onto different and sandy ground, the historical fact remains. The pioneers of the scientific revolution knew God; they understood the world as His creation, and realized that as such, creation must be both knowable and infused with purpose; they took the Scriptures seriously and submitted their minds and methods to them; they labored conscientiously and diligently for the glory of God; and they made the seminal discoveries and developed the initial protocols and technologies which allowed the scientific enterprise rapidly to advance and expand.

From Copernicus to Galileo to Newton, Linnaeus, Ray, and many more, the first Christian “natural philosophers” were men who believed God, accepted the authority of Scripture, were convinced that understanding the creation would both glorify God and benefit humankind, and pursued their work as a calling from God to know Him and make Him known.

For this reason alone, Christians should maintain an active interest in science, for it offers abundant opportunities for engaging the mind of God and leading us more deeply and consistently into the Treasury of all knowledge and wisdom, our Lord Jesus Christ.

Science and the knowledge of God

How can science help us grow in the knowledge of Christ? Reformation thinkers such as John Calvin gave early scientists all the impetus they needed to apply themselves religiously to the study of creation. In his *Institutes of the Christian Religion* (I.v.2), Calvin wrote, “In attestation of His wondrous wisdom, both the heavens and the earth present us with innumerable proofs, not only those more recondite proofs which astronomy, medicine, and all the natural sciences are designed to illustrate, but proofs which force themselves on the notice of the most illiterate peasant, who cannot open his eyes without noticing them.”

Creation veritably shouts the Presence of God, and calls us to seek in created things a richer, fuller knowledge of God and His glory. Early Christian scientists developed the protocols and tools that allowed human beings to penetrate the mysteries of the created order in new and more expansive, exciting, and beneficial ways. They proved the truth of the teaching of men such as John Calvin, who continued, “It is true, indeed, that those who are more or less intimately acquainted with those liberal studies are thereby assisted and enabled to

obtain a deeper insight into the secret workings of divine wisdom.”

Divine wisdom issues from Christ as the Wisdom of Proverbs 8, Who calls to all people, that they might seek, know, love, and serve the Lord, and prove the value of His wisdom for all aspects of life.

But to gain the wisdom science can provide, we must at all times remember and resort to the foundations of scientific thinking, and not allow ourselves to be wooed, misled, and deceived by those who insist that other foundations are more reliable and true. When European thinkers, in the 18th and 19th century, began to insist that science could get along just fine without God, they did not abandon the Christian foundations of science – for the entire enterprise would collapse without such teachings as the omnipotence and faithfulness of God, the orderliness of creation, and the reliability of reason within the bounds of revelation – but they *pretended* to have discovered *other* foundations that allowed them to leave God aside and, ultimately, banish Him forever. Thus, the scientific enterprise continues to borrow on the original investment of Christian thinking, without acknowledging its debt; at the same time, it presumes to build an edifice of science and technology devoted only to the betterment of man, without reference to God. We need only to mention some of the dead ends to which that kind of thinking has led: Auschwitz, Hiroshima, Love Canal, abortion, euthanasia.

Yes, science has accomplished much and still does much good. But this is *in spite* of its foolish theories and *because* it remains rooted in its Christian foundations.

A flag captured

Secular, naturalistic, evolutionary thinking has captured the flag of the modern scientific enterprise. Yet it still occupies the hill first established by Christian thinkers. How has this happened? It’s a story of Christians – at every level in the church – failing to pay attention to, care for, and advance their heritage; while, at the same time, those who were accumulating the data and discoveries of science erected new altars and offered their achievements to the god of reason and human happiness.

As David Pilbeam has noted concerning the work of science (“Rearranging Our Family Tree,” *Human Nature*, June 1978), “At any time we are at the mercy of two things: data and theory. Theory shapes the way we think about, even perceive, data. Theory can be explicit, but a great deal of it is implicit; we are unaware of many of our assumptions.” Christians today have *assumed* that science is no friend of faith. They have *assumed* that if we give rein to science, religion will suffer. They have *assumed* that Christianity is not a faith to be troubled with the details and diligence of science, and that if we simply ignore it, we won’t be affected by it.

What has happened instead is that, by failing to hold fast to our Christian assumptions about God – creation, knowledge, human good, and *other* Scriptural assumptions – *dangerous* assumptions, ideas, and practices have captured the flag of science. Now, evolution, greed, manipulation, narcissism, convenience, and more dominate the scientific endeavor, which continues operating on the foundations laid by Christian thinkers; and these assumptions are bending the work of science toward creating a human utopia before it’s too late.

The longer Christians remain ignorant of the sciences, or uninvolved in studying them, the more their children will be indoctrinated into a *secular* and *merely humanistic* theory of life, bolstered by science, which seeks to persuade them that the religion of their parents and forebears is of merely personal value in the modern world, but unnecessary for addressing the larger issues of life.

We must recapture the flag of science by returning to its Scriptural foundations and engaging scientific thinkers today – many of whom are doing amazing work with enormous potential for good – so that we may show in the work of science, evidence of *God’s* work and a summons to seek *God’s* wisdom for the progress of *God’s* Kingdom and glory.

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For Reflection

1. Does it matter that the science taught to school children omits any need for God? Explain.
2. Why are scientific thinkers so eager to be done with God as a foundation and goal of the work of science?
3. What are some ways that Christians could begin both to appreciate the good work of science and to encourage that work to more Christ-honoring ends?

Next Steps – Conversation: Talk with a few believers about how they try to keep up with the world of science, and why.

3 Every Good Gift

Science offers many avenues into Christ and His glorious work.

“Nevertheless He did not leave Himself without witness, in that He did good, gave us rain from heaven and fruitful seasons, filling our hearts with food and gladness.” Acts 14.17

Science as witness

Let’s take a few moments to consider all the science that goes into the work of harvesting a crop. Now, not all the science that operates in the field of agriculture was discovered by scientists. At least, not scientists in the strictest sense. Much was known and fruitfully practiced in farming before science began to take an interest in it. And what science *has* added to agriculture is sometimes a mixed blessing. Fertilizers enrich and replenish the soil, but they also wash into lakes – like Lake Champlain – where they feed blooms of various sorts that starve the lake of oxygen and kill many native fish.

But that aside, let’s look out, say, over a Kansas wheat field at harvest time. What do we see? Those heavy, golden heads waving in the wind, “amber waves of grain” that flow with the breezes in rhythmic elegance. Teams of combines, staggered side-by-side to maximize the harvest. The rich, dark soil exposed, God’s gift to farmers, and their stewardship to Him. That soil will either be reinforced with lime and fertilizers for the next crop, or it will be “rotated” and sown with clover or some other nitrogen-rich mineral to restore what the hungry wheat crop devoured. And then the plans being realized – both of sowing and harvesting, as well as getting the grain to market. The timing of the work, like a great ballet of technology and weather; and the sounds – music to a farmer’s ears – of a harvest in progress.

A Kansas wheat harvest is a thing of majesty and mystery, timing and technology, plowing and planting, beauty and bounty, wisdom and wealth. And all this, and all the science that goes into it, Paul says, is a witness to God and His grace. We can look out over that glorious, golden field, see those machines rumbling through together, watch as the template of the field changes row by row, and sigh with wonder and gratitude over the beauty of it all. Imagine how much more we would be moved to wonder and praise if we understood the science behind all that technology and agriculture!

Our Lord Jesus Christ, the upholding Word of the Father, has left a witness to Himself in the creation and its operations; and science can help us see more of His greatness, wisdom, power, beauty, majesty, goodness, and love, so that we know, love, and serve Him more.

The gift of God

Science is a gift of God to humankind. It is a simple discipline involving observation, hypothesis, testing, confirming, and sharing of knowledge, all of which issues from the Treasury of knowledge Himself – our Lord Jesus.

Simple as the process and protocols of science are, they are wildly diverse and profoundly sophisticated in the ways they are applied. All of creation is the legitimate field of study for scientists, and by their methods they discover the works of God, which they publish and share, to create goods and services beneficial to all life on the earth.

The fields of science are many and varied. Resources abound to take us into the work of scientists, and to help us appreciate the variegated witness of our infinitely wise God. Books, journals, periodicals, programs on public television, free online courses, and much, much more are readily available to us. Why would we not

take the time to seek out the goodness of God by learning about the creation and its processes? Why would we prefer mind-numbing sitcoms to reading about the work of scientists who are bent on eradicating disease or conserving some aspect of our environment? Why are we loathe to take up such modest and easily-obtainable skills as learning the night sky, or the names of local flora and fauna, or new and delicious ways of serving familiar foods? Jesus has left a witness to Himself in all aspects of creation, and He has given good gifts to scientists in many different fields, so that we by their exertions we might better appreciate His works, and know and love Him more.

What to look for

I can only offer a short list of things to bear in mind as you take up a more consistent study of the works of God. Those who delight in His works, the psalmist tells us, will pursue His works to His praise and glory (Ps. 111). Once you get started in looking to science as a viable and rewarding means for increasing in the knowledge of Christ, you will continue to do so, and that despite science's reluctance to lead you all the way to His throne, but your grounding in the Word of God will take you there.

So here's a brief checklist of what to seek, what to observe, what to meditate and reflect on as you read or engage in science as a way of knowing the Lord:

- Look for things beautiful, good, and true; things you delight in and rely on, because of how they lead you to delight in and rely on Jesus.
- Consider things large – like Orion, as he steals across the southern horizon – to remind you of the greatness and majesty of God.
- Ponder things small – cells, atoms, particles – to lead you to give thanks for His detailed, infinite care.
- Try to understand things useful – tools and technologies, for example – to remind you that God works all things for our good and His glory.
- Study about things long in coming – such as a cure for cancer – to nurture patience in seeking the Lord.
- Learn about things sudden and unexpected (“Eureka!” “Watson, come here, I need you!”), to lead you always to hope and pray for a sudden and widespread revival of God's saving and sanctifying grace.
- Read about things more complex and profound than you can ever fully grasp, to teach you wonder, trust, and the importance of mystery.
- Discover things easy to explain – like the names of local wildflowers – so you'll always have something to talk about appreciatively and with a view to rejoicing in the Lord.
- Learn the patterns and cycles and other indications of order in the cosmos, and let such things remind you that the craziness and unpredictability of our lives occurs within a framework held together by God's faithfulness and love.

The creation abounds in wondrous witnesses to our glorious Savior and King. He is speaking to us, making His glory known, and calling us to seek and know Him in all the amazing works of the cosmos. Every good gift of creation and science awaits us, that we may discover the glory God has hidden in His world, and thus come to know, love, and serve Him with increasing fruitfulness and joy (Prov. 25.2).

For reflection

1. Can you think of one beautiful thing about the creation that science has helped you to appreciate? How can this be a witness to the Lord Jesus?
2. Why can we expect to learn about God and Jesus Christ even from the work of unbelieving scientists?
3. Would you be content only to read a few books of the Bible? Why not? How can science help us to “read” the revelation of God in creation?

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Next steps – Transformation: Choose one aspect of science that you are familiar with and enjoy – such as the weather, or computers, or nutrition. Why do you enjoy this? How is it helpful? In what ways can this help you increase in the knowledge of Jesus Christ? Share the results of this exercise with a Christian friend.

4 The Kingdom as Ecosystem

An understanding of ecosystems can help us in seeking and advancing the Kingdom.

And He said, "The kingdom of God is as if a man should scatter seed on the ground, and should sleep by night and rise by day, and the seed should sprout and grow, he himself does not know how. For the earth yields crops by itself: first the blade, then the head, after that the full grain in the head. But when the grain ripens, immediately he puts in the sickle, because the harvest has come." Mark 4.26-29

Help with the Kingdom

For many Christians, "Kingdom of God" amounts to little more than an idea, and not a very well-developed idea at that. We are familiar with the term, but we seem to have little understanding of the Kingdom or how it operates, and we evidence little of its power for righteousness, peace, and joy in the Spirit (1 Cor. 4.20; Rom. 14.17, 18)

But since seeking the Kingdom of God is the Christian's highest priority (Matt. 6.33; 1 Thess. 2.12), we should learn as much as we can about this heavenly domain – what it is, how it is ruled and makes progress, and how to live within its parameters. We need all the help we can get in this, beginning with the Scriptures, and including whatever the Lord may be pleased to reveal to us from the world of creation, where God is continually revealing His glory, and inviting us to discover and participate in it (Ps. 19.1-4; Prov. 25.2), and where, as Jesus indicated in His parables, many helpful insights may be found to help us in our Kingdom calling.

Science can help us here. Understanding creation, using the disciplines of science, can shed light on our Kingdom calling and project, particularly as we look at the *ecosystems* of creation, and consider what the Kingdom of God has in common with these ecosystems.

Ecosystems

Ecosystems are those natural environments where a variety of components exist and interact so that life thrives and much good results. Interest in creation and ecosystems should come naturally to the followers of Christ, for three reasons. First, we are the heirs of a mandate to *exercise responsible dominion and stewardship* over the creation, to care for and develop our environment, so that its various ecosystems can abound with God's goodness (Gen. 1.26-28; Ps. 8; Heb. 2.5-9).

Second, Christians should take an interest in creation and ecosystems because Jesus made such varied use of creation in His teaching about the Kingdom of God. He pointed to seeds, birds, lilies, farms, fields, trees, weather, and more to explain the mysteries of the Kingdom. The better we understand creation and its ecosystems, the more we may hope to realize the presence, promise, and power of the Kingdom of God. Science can be a useful resource here to discover how to manage and develop the various ecosystems of the Kingdom of God.

Finally, and building on these two reasons, understanding creation and ecosystems can help us enjoy and communicate the Good News of the Kingdom. Ecosystems and their function is a subject of increasing interest in the world. Understanding ecosystems is so useful that ecosystem terminology has been adopted for describing various human systems, such as education, criminal justice, politics and government, and even global missions. People, it seems, find clarity by thinking in terms of ecosystems, so we should expect that understanding ecosystems will benefit our calling in the Kingdom and our ability to explain it to others.

We don't typically think of the Kingdom of God as an ecosystem, but the etymology of *ecology* shows that this

word applies not only to creation but to the Kingdom of God. The prefix *eco* is derived from the Greek *oikos*, meaning *house, environment, or habitat*. Further, the suffix *-ology* means “the study of.” Therefore, as *natural* ecology is the study of the interactions and relationships between organisms and their environment, home, or habitat, *Kingdom* ecology is the study of the interactions and relationships that exist within and among the various components of the Kingdom of God.

Ecosystems and the Kingdom

Examples of ecosystems – which are the focus of ecology – include forests, lakes, oceans, coral reefs, grasslands, ponds, mountains, tundra, and even the Yellowstone hot springs. As in the study of natural ecosystems, so it is with the Kingdom of God, the interactions and relationships between various components of an ecosystem are of central importance. In comparing natural ecosystems to the various structures that make up the Kingdom of God, many similarities emerge which can help us gain a better perspective on the Kingdom, clarify our roles and responsibilities within that domain, and aid us in seeking and advancing the Kingdom on earth as it is in heaven.

The Kingdom of God is also made up of various ecosystems which, like the ecosystems of the earth, work together for the flourishing of the Kingdom on earth as it is in heaven. These include the soul, where three spiritual entities – heart, mind, and conscience – interact and cooperate to shape and direct our lives. Each believer’s life and calling is also a kind of ecosystem, with lots of interacting components, pressures and stresses, and opportunities for doing good. The local church, and local churches throughout a community, are another level of Kingdom ecosystem that we must understand if we are to carry out Christ’s agenda of building His Church. Even the local community in which we carry out our calling, and the times in which we live, have characteristics of ecosystems, and are the setting within which all the ecosystems of the Kingdom seek to flourish and bring life to the world.

All these Kingdom ecosystems share features with natural ecosystems – such as structure, function, diversity, stressors, power, energy, and goods and services. By understanding the ecosystems of creation, we can exercise better focus on and care for the ecosystems of the Kingdom. Many resources exist within the world of science to help us appreciate the beauty, diversity, and value of natural ecosystems. These include books, journals, television programs, and even a wide variety of apps. Using these tools to understand natural ecosystems can give us insight to how God works to sustain His creation, and can open our eyes to a better understanding of how we may seek and advance the Kingdom of God and its spiritual ecosystems.

In the Kingdom of God, everything is connected. If your soul is sick, your walk with the Lord will suffer. You won’t be much help to your church, and your community will suffer. And when these Kingdom ecosystems are in distress, or are being neglected for any reason, the times in which we live will come under the powerful influence of the lie, leading to corruption, misery, disorientation, dissolution, and death.

You don’t have to become an expert in ecosystems to appreciate the beauty of them, and of how they interact with one another to foster a healthy planet. The same is true of the ecosystems of the Kingdom. But we must know something about caring for our spiritual ecosystems, how they interact and depend on one another, what causes them to decline and what enables them to flourish. Scripture is our main guide here, but – again, as Jesus indicated – understanding the world around us, and its many various ecosystems, can equip us with resources and guidance for fulfilling our calling to the Kingdom and glory of God.

For reflection

1. What is an ecosystem? Why are ecosystems a helpful metaphor for understanding the Kingdom of God?
2. How are the various components of the Kingdom of God – the soul, our lives, the church, and so forth – like ecosystems? How can understanding ecosystems help us to keep these spiritual entities strong and flourishing?

3. Do you think that being more mindful of the *natural* ecosystems within which you live would help you to think more consistently and constructively about the *spiritual* ecosystems of the Kingdom of God? Explain.

Next Steps – Transformation: Your soul consists of mind, heart, and conscience. How can looking at your soul as an ecosystem help you to pay more thorough and consistent attention to its wellbeing?

5 Engaging Science

We'll need to be careful here.

...for in Him we live and move and have our being, as also some of your own poets have said, 'For we are also His offspring.' Therefore, since we are the offspring of God, we ought not to think that the Divine Nature is like gold or silver or stone, something shaped by art and man's devising." Acts 17.28, 29

Religious, but misguided

Paul's encounter with the philosophers in Athens can be instructive for us as we turn to consider the best ways of benefiting from science in our pursuit of the knowledge of Jesus Christ.

It's clear from here and Titus 1 that Paul was well-versed in the pagan philosophies of Greece. In verse 28 he cites one Greek poet (Epimenides) and quotes another (Aratus). He has already commended the Athenians for their "religious" approach to life and knowing (v. 22); and now he shows that he approves the conclusions of two of their best thinkers. At least, as far as those conclusions go.

But they don't go far enough. Paul used the references to pagan thinking to connect with his audience, but he moved on to anchor his testimony in Scripture and drive his argument toward Christ and the coming judgment. The Greek poets reached their conclusions through reason, which they exercised within the givens of their contemporary worldview. Beginning with their own observations of the world, and relying on reason and discussion, they made assertions that were correct, but misguided. Within their system of thought, Zeus would have been the focus of their observations, but Paul did not allow their remarks to remain captive to a false worldview. He immediately changed the focus of those remarks from Zeus and the Greek worldview to God and the Biblical worldview.

Most of what you will engage from the realm of science is like this. Science operates within a given worldview, and that worldview has no place for God. It begins in man and his reason, engages the world by observation and experimentation, and proffers conclusions within an "under the sun" view of the cosmos. Scientists make many excellent and useful observations, leading to valuable products and technologies. But merely serving the interests and needs of human beings, or even of the world itself, does not go far enough in making right use of the creation. As we read about science, watch programs and videos about science, talk with our children about what they're learning in school, or venture out with a guidebook to identify the flora and fauna of our world, we want to harvest and value the true insights of science, and take those insights beyond their secular confines into the realm of Christ and His glory. For only then will science be of value to us in our pursuit of the knowledge of Christ.

The Christian "circle of knowledge"

Christians operate within a different "circle of knowledge" than those who do not have faith in God. The assumptions, convictions, and values that define our worldview are 180 degrees away from those that define the worldview of secularism and naturalistic science. We acknowledge that secularists are very religious – they have their own gods and disciplines for pursuing them. And we acknowledge that, by God's common grace, even unbelievers have been able to make remarkable and useful discoveries.

But our goal in life is to glorify God in everything we do (1 Cor. 10.31). We are those who possess eternal life, which is the knowledge of God and Jesus Christ (Jn. 17.3). We are called to increase in the knowledge of Christ (2 Pet. 3.18), to take every thought captive and make it obedient to Christ (2 Cor. 10.3-5), and to think with the mind of Christ at all times (1 Cor. 2.16), so that Christ may increase in us, and we may decrease (Jn. 3.30).

Thus, when reading about or otherwise engaging the world of secular science, we want to bring the findings of the thinkers of our day into the circle of Christian knowledge – the Christian *encyclopedia* – so that we mine those resources for what they can teach or show us about our Lord Jesus Christ. He is the Treasury of all wisdom and knowledge; thus, we expect whatever we may learn about this world to yield some insight about Him, that our love for Him may increase, and that we may serve Him by every good gift that He bestows from whatever source.

We are not blind to the false assumptions of secular science: matter is eternal; chance rules the world of matter; existence and life have no final purpose; evolution is the driving force in all life; human beings are *the* interpreters of the cosmos; there is no spiritual realm. It might seem strange or unlikely that people so firmly committed to such ideas can achieve anything worthwhile, but they do. This is possible only because, in the final analysis, unbelievers *deny* the assumptions they protest to believe, and they *operate* on assumptions that are revealed in the Word of God – that life has meaning, the cosmos is an orderly place, acquiring true knowledge is possible, reason can be a reliable tool, and so forth.

What we want to do is take the good work of science and, by bringing it within the circle of Christian knowledge, liberate it from its secular shackles so that it may fulfill its appointed purpose of glorifying God (Ps. 148) and of leading us to a richer, fuller knowledge of Jesus Christ.

Put on your thinking cap

So how can we do this? How can we engage science, by all the means available to us, and come away from that encounter having made some increase in the knowledge of Jesus Christ?

First, concentrate on *understanding*. Ask questions. Assume you have something to learn, something that will open a window onto Christ and His glory. Don't feel like you have to doubt or deny every conclusion or argument presented by the secular worldview. Be aware of them, but don't waste your time arguing; concentrate on learning. Make sure that you can articulate the main points you find in your own words, and try to see their value and validity, as far as they go.

Maintain an attitude of prayer, asking the Lord to guard you from false paths and to point you toward insights that may help you know, love, and serve Him better. Talk with the Lord about your observations. Do they bring to mind any relevant passages of Scripture? Jot them down, or at least, let them factor into the process of your observing and reflecting.

Remember that God commands all creation to praise Him (Ps. 148), and the primary way that happens is when we who know the Lord draw out from His creatures the glory He has hidden in them (Prov. 25.2). Look for something for which you can praise the Lord – something that makes you think of Him, that reminds you of something Scripture teaches about God, or some way the Scriptures use the item you're observing. Tell the Lord how you can see Him and His glory in the object or subject of study. Relate it to other things you've observed or studied, and give praise to Christ Who upholds all things by His Word of power (Heb. 1.3).

The more you observe, reflect, pray, and relate the things your engagement with science yields, the more insights you will have through which to see refracted the work and glory of Jesus Christ. Don't feel like you have to refute all the false notions you will encounter. It's only what we should expect from people who pursue the quest for knowledge "under the sun".

Whatever glimmer or glimpse the Lord reveals to you of Himself, delight in it, seek to learn more about it, look to other resources that can add to your understanding, give thanks and praise to God for it all, and seek ways your increased knowledge of the Lord can lead you to more consistent and fruitful service in His Name.

For Reflection

1. Why do we expect science to yield insights to help us know Christ better? Can you think of some examples?
2. How does Paul's experience in Athens guide us in this matter of learning from unbelieving worldviews?
3. What do we mean by the Christian "circle of knowledge"? How does this relate to using the mind of Christ?

Next Steps – Transformation: Make some engagement with science today, and use it to praise and glorify Jesus Christ. Share your experience with a friend.

6 Making Use of Science

We can't avoid science, so we ought to appreciate it as fully as we can.

Then the Pharisees and Sadducees came, and testing Him asked that He would show them a sign from heaven. He answered and said to them, "When it is evening you say, 'It will be fair weather, for the sky is red'; and in the morning, 'It will be foul weather today, for the sky is red and threatening.' Hypocrites! You know how to discern the face of the sky, but you cannot discern the signs of the times." Matthew 16.1-3

A science-blessed world

We live in a world abundantly blessed by the work of scientists. We simply can't get away from or avoid the many good and useful benefits science brings to us each day. Vern Poythress reminds us, "Whether we like science or not, we all have to deal with it on a practical level" (*Redeeming Science*). That may seem obvious, but perhaps it's so obvious that we have taken for granted the enormous boon the scientific revolution has made possible for us. And perhaps we've never paused to consider whether the way we make use of science is consistent with our calling to live for the Kingdom and glory of God (1 Thess. 2.12; 1 Cor. 10.31).

As I write this, I'm sitting in our TV room listening to a recording of Benny Goodman playing Mozart's clarinet concerto in A major. The room is well-lighted and warm, despite the gray skies and nearly 16 inches of snow on the ground outside. Modest furnishings state the theme of our home décor – American simplicity. Some prints of Andrew Wyeth flank the walls on either side of the cabinet that holds our television. Two dogs lie at my feet, one on the hassock, the other on a reproduction Persian rug. As I clean my glasses and take a drink from the can of flavored fizzy water next to me on the side table, I hear the furnace pumping warm air through the ducts; and I'm keeping an eye on the cursor as my fingers tap away at the keys on my laptop.

None of this would have been possible without science. Science has led to the technological revolution that shows us how to harness light and sound waves; create images by computer code; reproduce paintings and recordings so that they can be widely available; manufacture inexpensive furnishings, provide heat and light for our homes; and transform fingers tapping on a plastic board into letters and words, which can be read after they have been sent by light waves over thousands of miles. Science has perfected the packaging of foods, given us lenses to improve our vision, and made possible inexpensive fabrics that can be dyed and woven into all kinds of furnishings and clothes.

Whether we like it or not, or whether we are even aware of it, we are all making use of science every moment of every day! And this should prompt within us the question, "To what end?" "Am I using science as one should who is devoted to Jesus Christ, our Savior, King, and Lord?"

I want to propose a two-pronged answer to those questions.

A call to worship

In his excellent book, *A Praying Life*, Paul Miller offers sound advice for improving our prayer lives. He assumes we all need some help here, and most of us will readily agree.

The focus of Paul Miller's book is on bringing prayer more consistently into the everyday situations and activities of our lives. And given that we are inescapably and continuously involved with science in one form or another, science can function like a call to worship – if, that is, we're open to hearing the call.

As we have said, the gifts of science all come from the grace of our Redeemer and Lord. He gives these gifts

to human beings, like the boundaries and languages He provided for the early nations of the earth, so that we might realize how good, wonderful, loving, faithful, and strong He is, and might seek Him more diligently. None of what science has wrought would be possible without the work of God, as Samuel Morse acknowledged in the first demonstration of his telegraph machine. The message he sent from the nation's capital to Baltimore was simply, "What God hath wrought." Morse was inviting those observing the demonstration to join him in marveling and giving thanks at the way God enabled him to bring this new technology into existence. Everything science does or has made possible is of the same order – a gift from God. And therefore, everything by which we connect with or benefit from the work of scientists in a wide range of fields should cause us to wonder and lead us to thanksgiving and praise.

Take time each day, at several times in the day, to consider some object of science. Don't take anything for granted. Ball point pens, automobiles, the food you eat and the clothes you wear – all are available for your use because of science, and because God has given a great many people the ability to employ the disciplines of science to good ends. Give thanks to God, in concrete and specific detail, for all the benefits science brings to you each day. Overlook nothing. You could spend the whole day doing nothing but moving from one call to worship to the next, praising and thanking the Lord for the goodness He lavishes upon you through science.

You can expect two benefits from letting the works of science call you to worship like this. First, you will pray more often, as Paul Miller explains. And second, you will be more constantly aware of God's loving kindness and provision, so that you know your Savior to be truly, abundantly, profusely, and continuously good to you. Your love for Jesus will increase as you let His gifts to you through science lead you daily into worship.

A call to stewardship

Jesus' rebuke to the religious leaders of His day was that they didn't go far enough in their use of science. They could tell the weather by observing the skies, but they couldn't see beyond the weather to Him Who makes and sustains it. They could not see in the blessings and patterns of weather the signs of One Who loved them with an everlasting love, so much that He sent His own Son, brandishing signs of every sort, to tell them that their redemption was nigh.

We are being good stewards of science when we use the gifts and products of science in ways that prepare us and the world for the coming of Christ's Kingdom. We should not indulge any products of science that might corrupt our souls, cause our bodies to decline or our neighbors to stumble into sin; or lead us to regard those gifts – rather than Him Who gives them – as our greatest good and joy. We should care for the gifts of science God entrusts to us, as we would a treasured gift from any loved one, and use them as intended by God, not merely by those who manufacture and distribute them.

We can glorify God in the way we use the His gifts; and in so doing, we can do much good for ourselves and the people God has put into our lives. The gifts of science can empower us for many good works, and thus enable us to fulfill our calling as followers of Jesus Christ (Eph. 2.8-10) and seekers of the Kingdom of righteousness, peace, and joy in the Holy Spirit (Matt. 6.33; Rom. 14.17, 18).

And the more conscientious, diligent, and faithful we are in this, the more we will rejoice in the Lord, and the more we may expect Him to grant us additional gifts to use for His glory.

A second facet of our stewardship of science relates to the countless ways science can facilitate conversations about goodness, beauty, and truth – conversations that can pave the way for us to tell others about the Giver of every good and perfect gift. (Of this we shall have more to say in our final installment in this part of our study.)

The Disciplines of Knowing (3): The Sciences

For Reflection

1. Choose one object made possible by science that is immediately within your purview. Spend 10 minutes thinking about it from all aspects – what it consists of, what it allows you to do, how you came to acquire it, etc. Then praise and thank God for what He shows you of His love and goodness.
2. Why does it make sense to connect the good gifts of God with Christ? How does this help us increase in knowing Him?
3. How can you be more consistent in heeding the call to worship that science provides, and in exercising better stewardship over the gifts of science?

Next Steps – Preparation: As you pray in the morning, think about opportunities science will bring you to give thanks and praise to God. Jot these down on a note card or a note app, and use them to remind you to pray throughout the day.

7 Talking about Science

Science provides a conversational avenue to Christ.

“Which of you by worrying can add one cubit to his stature? So why do you worry about clothing? Consider the lilies of the field, how they grow: they neither toil nor spin; and yet I say to you that even Solomon in all his glory was not arrayed like one of these. Now if God so clothes the grass of the field, which today is, and tomorrow is thrown into the oven, will He not much more clothe you, O you of little faith? Matthew 6.27-30

Wonder, worship, witness

I was having some tests done at the local hospital, one of which involved measuring the flow of electricity through the nerves in my legs and feet.

I watched as the graph on the screen bounced up and down and the neurologist looked back and forth between it and the needles he was kindly prodding into my leg. I asked what he was measuring. He said this test was designed to determine the amount and flow of electricity through my legs, which, he explained, was a measure of how much deterioration had already occurred.

I asked, in sincere curiosity, “Where does the electricity in the body come from?” He looked up with a kind of surprised glee; then he paused to explain that the chemicals in each cell act like the chemicals in a battery, combining to create an electrical charge that combines with the charges from other cells to provide just the amount of electricity the body needs to continue functioning. We went back and forth on that idea for a few minutes, I seeking more clarity, and he happily explaining the marvelous workings of the human body.

I was amazed at the simplicity of it all (which I honestly didn’t understand until that moment). I said, “Wow! That is truly amazing!” He replied, “Yes, it is.”

And then I felt a nudge in my soul, and I said, “And to think that they want us to believe that all this came about and continues by mere chance.”

He blurted out, “I *knew* that’s where you were going with this!”

Well, I didn’t know that’s where I was going, but it’s where the Spirit took us. He went on to explain that he had been raised in a Christian home, and always had an interest in science, since he was a little boy. But the church he and his parents belonged to discouraged his interest in science, telling him that science was no friend of faith. When he went off to college, he abandoned the faith and devoted himself to science. I was able to say a few words about how science bears witness to the reality of God and His love, but we didn’t get any further than that.

Susie and I talked afterward about how sad that was. His own church had driven him into the arms of a secular worldview, when it might have equipped him to be a powerful witness for Christ in his field of endeavor.

Science is no enemy of the faith. It can be one of our best friends, in helping us to know and love Jesus Christ, and one of our most valuable tools in bearing witness to His sovereign power and grace.

Who cares about science?

Everybody cares about science. Watch people reading labels at a drug store or grocery store. They’re looking at ingredients and comparing what they read with other similar products. They know enough about the

science of what's good for them to choose the best combination of ingredients for the best price.

Or consider how people snap up the latest technology, and especially the latest apps and social media platforms. They don't know how this stuff works, but they love what it can do for them. I don't know how it works either, but it has something to do with capturing, harnessing, and directing light.

Think about that for a while.

Since all people are immersed in science and its products all day long, they can't help but be interested in it, curious about its workings, and perhaps open to talking about science with folks like us.

Everybody knows that science is a powerful instrument for knowing things about the world and how to make use of its resources. That is, everyone is affected by the scientific worldview to some extent. They learned about science in school. Indeed, science curricula are crowding out and overwhelming nearly every other course offering, focusing increasingly on science, technology, and mathematics.

So everybody has an interest – if only latent – in science. This creates many wonderful opportunities for us to use the work of science to introduce people to the Treasury of all knowledge and wisdom, even our Lord Jesus Christ.

Science, grace, and the Gospel

How can we go about this? It's really quite simple. Take an object, any object. Everything in our lives is shot through with science! Think and pray and meditate and talk to yourself until you begin to see what this object has to say to you about Jesus. Its order, simplicity, beauty, utility, and ubiquity (like a ball point pen) can remind us of many virtues and attributes that inhere in Christ, and that can only be explained by His upholding power. Chance can't make anything remain the same for very long. Only Jesus can do that.

Share your observations with a Christian friend. Invite comments and additional input, and make sure to tie everything back to Jesus. Now you're training yourself and your soul to be at the ready when an opportunity arises for science to create an avenue for journeying toward Jesus.

Think about the people you will see in the week ahead. Do they have one of these objects you've been contemplating? Do you ever have an opportunity to chat with them, even if only for a few short minutes? You could explain that it is the *common* grace of God that makes such wonders possible. This will pave the way for you to explain the *saving* grace God has for us in Jesus.

You can do the same with books or articles, television programs, video games and apps, the latest technologies in film, and much, much more. Or use something you're not familiar with to start a conversation in which you can learn, and perhaps bear witness, if only in passing. Train yourself. Talk to yourself about such things. Journal about them. Talk with Christian friends, and let their questions and observations improve your appreciation of whatever you're discussing. Then pray and plan and prepare to use what you're learning to talk with others about the grace of God, which is everywhere present in the work of science, and the greater grace that comes only through the Gospel.

For reflection

1. Make a list of objects or topics in science that you will contemplate over the next few weeks. Start with the first one, and focus on it prayerfully until it yields the glory of Jesus He has concealed there (Prov. 25.2). Start a journal of such observations, and work on it regularly.
2. What opportunities do you have throughout the week for getting together with someone for conversation? How might you create more such opportunities?

3. What else can you do to bring more of science into your growth in the Lord and your witness for Him?

Next Steps – Conversation: Review the previous studies in this series on the sciences. Begin letting science have a larger role in your quest to increase in the knowledge of Jesus Christ.

Questions for Reflection or Discussion

1. Why do we say that science is not an enemy of faith, but potentially one of its best friends?
2. Why does it make sense that the scientific revolution had its origins among those who held to a Christian worldview?
3. What caveats do we need to keep in mind as we read or otherwise learn about science?
4. What can you do to use the sciences to help you in your growth in the Lord and witness for Him?
5. What's the most important lesson you've learned from this study of the sciences as a resource for increasing in the knowledge of the Lord? How are you putting that lesson to work in your Personal Mission Field?

For prayer:

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Thank you.