

**MICHAEL POLANYI'S TACIT KNOWLEDGE:  
A RESPONSE TO LOGICAL POSITIVISM  
REV. CHARLES R. BIGGS**

**Something or Nothing**

---

Metaphysics asks the question: "Why is there something rather than nothing?" The question that follows leads a person to epistemology: "How do we know there is something rather than nothing; and how do we know that something?" Something is the definition which we make of "what is," it is the predication of a thing. When we begin to seek out in our universe from our finite starting point, with what kind of presuppositions will we begin in order to get answers and to make sense of it all?

Michael Polanyi challenged the methods of science, particularly with regards to the epistemology used in his time. As Francis Schaeffer has said<sup>1</sup>, he completely destroyed the epistemology of Bertrand Russell and Logical Positivism.

He countered the Logical Positivists by challenging them to consider the results of beginning and ending with mere reason, and only that which is

---

<sup>1</sup> Francis Schaeffer has written of Polanyi in *He is There and He is Not Silent*: "Polanyi is a name that hardly ever appears in the popular press and he is unknown by many, but he was one of the dominant thinkers in the intellectual world. His book [Personal Knowledge] shows why Positivism is not a sufficient epistemology, and why the hope of modern science to have any certain knowledge is doomed to failure. And truly there is probably not a chair of philosophy of importance in the world today that teaches Positivism. It is still held by the naïve scientist who, with a happy smile on his face, is building on a foundation that no longer exists." Francis Schaeffer, *Trilogy* (Wheaton, 1990), 311-312.

measurable. He asked by what authority can the Positivists use to draw any conclusions about science, knowledge, or what is true?<sup>2</sup> This led Polanyi to consider a different type of knowing in contrast to Positivism. A knowing he termed “Tacit Knowledge.”

### **A Brief Biography of Polanyi and His Religion**

Michael Polanyi as a scientist, sought to come to sound conclusions in the area of meaning, knowledge (scientia, or science), and epistemology. For him it was a personal matter because of the impending Marxism in his home of Pre-Communist Hungary. He fled Hungary when Hitler came to power and studied and taught in England at the University of Manchester.<sup>3</sup>

Polanyi was a contemporary of C. S. Lewis and was a champion of truth, although he never developed an adequate base as to why these things are true. Polanyi was the first to ask the right questions about subjective knowledge, but he had no real foundation himself to be able to give sound results. Concerning his knowledge of God, Francis Schaeffer describes

---

<sup>2</sup> In defining *Positivism*, I am referring to the synthesized and systematized empiricism of David Hume (1711-1776) and Auguste Comte (1798-1857), although distinct philosophies they were united in the Vienna Circle of the 1920s and 1930s: M. Schlick, R. Carnap, O. Neurath, F. Waismann, Wittgenstein, and K. Popper. The Vienna Circle defined *Logical Positivism* as “the verification principle. This stated that a statement or proposition was meaningful only if it were verifiable by sense experience. If it could not be tested by sense experience, it was dismissed as meaningless.” “Logical Positivism,” in *New Dictionary of Theology*, eds. Sinclair B. Ferguson, David F. Wright, and J. I. Packer (Downers Grove, 1988), 394-395; see also “Michael Polanyi,” 519-520.

<sup>3</sup> Polanyi saw the dangers of the impending philosophies of totalitarian governments such as German and Russia, and the effects that they could and eventually would have on the autonomy of science in England in 1938. In August of 1938, the British Association for the Advancement of Science founded the Division for the Social and International Relations of Science, which was to give social guidance to science. A small number of scientists, including Polanyi, opposed the movement. See Polanyi’s collection of essays: *Science, Faith and Society* (Chicago, 1967), pg.7.

his religious life in *He is There and He is Not Silent*: “At the end of his life he at times gave religious motifs. For example, he said he repeated the Apostle’s Creed, but when questioned further said that he did not believe the prepositional content of the phrases of the Creed—rather, that for him they represented something, as the flag stands for patriotism.”<sup>4</sup>

Another interpreter and close friend of Polanyi, Drusilla Scott, describes his religious life as “veiled, even from his friends.”<sup>5</sup> However, he was very consistent as an unbeliever in trying to sum up the relationship between the objects that truly exist in the universe, and the subjects trying to measure these things, namely scientists. At the end of his book *The Tacit Dimension* Polanyi wrote of the need for man to have something that “bears on eternity” in order to have real meaning in this world.<sup>6</sup>

### **Logical Positivism, Faith, and Presuppositions**

Polanyi was honest enough to admit as someone who desires to know, that himself and all other scientists had presuppositions. Simply put,

---

<sup>4</sup> Francis Schaeffer, *Trilogy* (Wheaton, 1990), pg. 316

<sup>5</sup> It is interesting to note Drusilla Scott’s description of Polanyi’s religious life: “His family was of Jewish origin, but Jewish religion had no explicit part in his upbringing or belief. He said that it was through reading *The Brothers Karamazov* in 1913 that his religious interests were awakened, and for some years he was ‘a completely converted Christian’. He was baptized in 1919 into the Catholic faith, a choice which seems to have been made more for practical than religious reasons. Later, in England, he developed a great admiration for Protestant Christianity and most of what he says about religion applies to Protestantism.” Drusilla Scott *Everyman Revived: The Common Sense of Michael Polanyi* (Grand Rapids, 1985), 181-183.

<sup>6</sup> He writes: “Perhaps, this problem cannot be solved on secular grounds alone. But its religious solution should become more feasible once religious faith is released from pressure by an absurd vision of the universe, and so there will open up instead a more meaningful world which could resound to religion.” Michael Polanyi *The Tacit Dimension* (New York, 1966), Quoted in *ibid.*, 180.

Logical Positivism is the knowledge that begins and ends with reason, or that which is measurable. Polanyi said that the data that is to be studied (the objects), must be interpreted by finite subjects who bring a great amount of real human presuppositions that they impose upon the data. He even cited Augustine in his epistemology, recognizing that faith must precede our reasoning process.<sup>7</sup>

Polanyi's epistemology stood in contrast to Bertrand Russell, a eminent philosopher, mathematician, scientist and prolific writer of the twentieth century. Russell was a Logical Positivist, who unashamedly stated that the data he read was objective, without any of his own convictions and authority being placed upon it.<sup>8</sup> However, according to Polanyi, the only conclusions a Positivist or any other man in the universe would come to were those interpreted by a subjective mind. Concerning knowledge, Positivism had left us with honest skepticism, or dishonest hope.<sup>9</sup> He

---

<sup>7</sup> Drusilla Scott writes: "He returned many times to two great masters of Christian thought, St. Augustine and St. Paul. Their formulations of the Christian scheme seemed to him to express most truly the faith on which science also rests...Polanyi called Augustine's fourth century inauguration of the first post-critical philosophy and firmly placed faith before reason, as he came to feel it had to be placed in science...The priority of faith imposed by Augustine had indeed held up the scientific progress, but when it was overthrown [in the 17<sup>th</sup> century] the opposite imbalance took its place. Believing in the necessity for faith and reason in science and in all knowledge, Polanyi wanted to restore the balance." *ibid.*, 183.

<sup>8</sup> Paul Johnson in his remarkable book *Intellectuals*, wrote concerning Russell: "No intellectual in history offered advice to humanity over so long a period of time...Why did Russell feel qualified to offer so much advice, and why did people listen to him? Probably the biggest single reason he wrote so much was that he found writing so easy, and in his case so well paid." "...An even larger part of his life was spent telling the public what they ought to think and do...Russell became for the masses of people all over the world, the quintessence, the archetype of the abstract philosopher, the embodiment of the talking head. What was philosophy? Well: it was the sort of think Bertrand Russell said." Paul Johnson *Intellectuals* (New York, 1988), 197-199.

<sup>9</sup> Drusilla Scott writes: "What then in the end has Polanyi done to free us from the choice that Bertrand Russell left us with—the choice between honest skepticism or dishonest hope? This was the choice that Polanyi saw as the root of so much of the despair and violence of the modern world, leaving men as it does with no honest hope, yet with moral passions that must find an outlet." *ibid.*, 197; David Wells writes concerning Polanyi: "He has argued that even in science, the objectivity of the findings depends in some measure on the subjectivity of the interpreter...Just as there is an interpretive element in science, there is an objective element in biblical faith, and the interpretive element cannot substitute for or swing loose from the objective element." David Wells *No Place for Truth; Or Whatever Happened to Evangelical Theology?* (Grand Rapids, 1993), 261-262.

argued that we are truly human people, not merely “rational machines” but people that care about truth, and truly want answers in the scientific enterprise. Reason and rationale were most important, and part of the make up of man, as man (his mannishness)<sup>10</sup>, but man is not *merely* rational and he did not begin with the rational consistently.

In the realm of science, the scientific enterprise to “know”, there is the object to be examined, the data that is observed, and the conclusion to be made about the object. Particularly in the epistemological realm is this important. The Positivist might assert that he is gathering data objectively, in reality he is gathering this data in his closed universe, with no chance for possibilities of an outside mind, and trying to examine the data as an “island” or one who is finitely disconnected to all other reality. In this worldview of Positivism, it leaves out the possibility of authority from outside the world. It is built upon the groundwork of Immanuel Kant who destroyed the way we can truly know.

### **Kant’s Influence on Epistemology and Logical Positivism**

Kant in the Eighteenth century asserted that there must be separation from the phenomenal realm (or that known by our reason and experience), and the noumenal realm (the realm known outside this world; the place

---

<sup>10</sup> Philosophical language borrowed from the writings of Francis Schaeffer

of authority, the metaphysical where God resides). Positivism built inconsistently on Kant's work, understood that if you wanted to have true knowledge, you would only have it by subjectively testing the objects around you. You dare not go to another realm, the noumenal, because for some cognitive reason this was the realm of the imagination. In reality it did not exist because it could not be measured. Polanyi considered this was not consistent with reality, this not only confuses epistemology but it denies the reality of the human element. If you are to know anything, you must allow for the possibility of something being true and remember that in your observation you are continuously thinking and drawing your conclusions from reason, experience and authority. Even for those who deny authority and look to reason alone, have set mere reason up as an authority. Therefore, they cannot truly rid themselves of it because authority truly exists.<sup>11</sup>

### **Epistemology, Anti-Intellectualism, Evidentialism and Christianity**

The area of epistemology is a very important concept for the Christian in understanding their own worldview, and for evaluating and

---

<sup>11</sup> A lengthy quotation from Scott is necessary : "The theologian with whom Polanyi was most in agreement at one time was Paul Tillich. But later he argued against Tillich when Tillich said that science and religion bypass each other, as they talk about different domains and so cannot come into conflict as long as each keeps to its own domain; that of science being strictly detached knowledge while that of religion is the domain of unconditional commitment. Polanyi says 'no', they are talking about the same world; there is not strictly detached knowledge, although to recognize the higher levels of mind and human responsibility needs more indwelling and commitment than physics. And the leap of imagination by which the religious level is reached, like the primitive daring by which the first steps in knowledge were taken, attests the creative power in the universe that enables human understanding to surpass itself. This power imposes an obligation 'to strive for the impossible in the hope of achieving it by divine grace'- another reference to the Christian scheme of redemption set out by St. Paul." *ibid.*, 189.

apprehending non-Christian worldviews. Many Christians in the Church today, generally misunderstand true epistemology because they have committed themselves to some form of anti-intellectualism.<sup>12</sup> There is even a misapplication of epistemology by the majority of Christian apologists.<sup>13</sup> Christians have a special way of knowing authoritatively, which they learn from the Scriptures. Evidentialist apologists have for centuries since Justin Martyr (2<sup>nd</sup> Century), and others such as Thomas Aquinas (13<sup>th</sup> Century) and Jonathan Edwards (18<sup>th</sup> Century) have tried to prove the faith of Christianity based on mere reason. It was understood, with brilliant theologians such as Jonathan Edwards<sup>14</sup> that if you could start from the creation, or what is visible in the phenomenal realm and work backwards, you would come to the Creator which is God.<sup>15</sup> The problem to this approach was not that the unbeliever did not know God in his bearing of his image, or in creation, but the fact that he had suppressed this knowledge. God had given him over to a depraved

---

<sup>12</sup> Refer to: Mark Noll, *The Scandal of the Evangelical Mind* (Grand Rapids, 1994), 10-12; David F. Wells, *No Place for Truth: Or Whatever Happened to Evangelical Theology* (Grand Rapids, 1993), 187-213; Richard Hofstadter *Anti-Intellectualism in American Life* (New York, 1962), 3-23.

<sup>13</sup> Cornelius Van Til *Christian Apologetics* (Phillipsburg, 1975) Chapter IV: The Problem of Method, 59-78; See Robert Reymond's Articles: "Dr. John Gerstner on Thomas Aquinas as a Protestant," *Westminster Theological Journal* Vol. 59, No. 1 (1997) 113-121.

<sup>14</sup> There is a debate as to whether Jonathan Edwards taught that God could be known by reason, or if he was speaking of Common Grace in our knowledge as Dr. Van Til teaches from Romans One. See article by Mark A. Noll, "The Contested Legacy of Jonathan Edwards in Antebellum Calvinism" (200-217), *Reckoning with the Past: Historical Essays on American Evangelicalism from the Institute for the Study of American Evangelicals*, D. G. Hart (ed.), (Grand Rapids, 1995); Also, article by Allen C. Guelzo, "Jonathan Edwards and the New Divinity: Change and Continuity in New England Calvinism, 1758-1858" (147-167), *Pressing Toward the Mark: Essays Commemorating Fifty Years of the Orthodox Presbyterian Church*, Charles G. Dennison and Richard C. Gamble (eds.), (Philadelphia: 1986).

<sup>15</sup> Jonathan Edwards, *The Works of Jonathan Edwards* (Carlisle, PA: Reprinted 1992), Vol. I: *On the Freedom of the Will*, Part II, Sec. III, pg.16. "[Edward's quotes Romans 1]The invisible things of him, from the creation of the world, are clearly seen; being understood by the things that are made; even his eternal power and Godhead. We first ascend, and prove a posteriori, or from effects, that there must be an eternal Cause; and then secondly, prove by argumentation, not intuition, that this Being must be necessarily existent; and then thirdly, from the proved necessity of his existence, we may descend, and prove many of his perfections a priori."

mind and much wickedness. As John Frame has said, the best that evidentialism will do is to prove that an impersonal force exists, or the possibility of it. It will never with real authority speak about God the way he has revealed himself to man. It is to be anti-Scriptural not to admit this truth. The creation praises God by its works, everyday it screams aloud the reality of God.<sup>16</sup>

While God is reasonable, because reason defines itself through His unity and coherence, there is a deeper issue involved. When it comes to understanding the Logical Positivist and how he thinks he knows, and the Christian, there is a tremendous difference in interpretation.

‘The Christian and the non-Christian have everything in common metaphysically, and nothing in common epistemologically,’ wrote Cornelius Van Til in attempting to show the problem of mere evidentialism, or reasoning on a “neutral ground” with unbelievers.<sup>17</sup>

### **Man’s Knowledge of the True God**

In the first chapter of the Epistle to the Romans, the Apostle Paul makes some very enlightening claims not merely about man and his relation to the world (in the scientific enterprise), but how man interprets

---

<sup>16</sup> John Frame *The Doctrine of the Knowledge of God* (Phillipsburg:1987), 13-18.

<sup>17</sup> Cornelius Van Til *Common Grace and the Gospel* (Phillipsburg, 1972), 15. “...The believer and the non-believer, are epistemologically self-conscious and as such engaged in the interpretive enterprise, they cannot be said to have any fact in common. On the other hand, it must be asserted that they have every fact in common. Both deal with the same God and with the same universe created by God. Both are made in the image of God. In short, they have the metaphysical situation in common. Metaphysically, both parties have all things in common, while epistemologically they have nothing in common.”

the world (in the epistemological enterprise). St. Paul writes:

“The wrath of God is being revealed from heaven against all the godlessness and wickedness of men who suppress the truth by their wickedness, since what may be known about God is plain to them, because God has made it plain to them. For since the creation of the world God's invisible qualities-- his eternal power and divine nature-- have been clearly seen, being understood from what has been made, so that men are without excuse. For although they knew God, they neither glorified him as God nor gave thanks to him, but their thinking became futile and their foolish hearts were darkened. Although they claimed to be wise, they became fools and exchanged the glory of the immortal God for images made to look like mortal man and birds and animals and reptiles. Therefore God gave them over in the sinful desires of their hearts...They exchanged the truth of God for a lie, and worshiped and served created things rather than the Creator-- who is forever praised. Amen...Furthermore, since they did not think it worthwhile to retain the knowledge of God, he gave them over to a depraved mind, to do what ought not to be done.”<sup>18</sup>

From these passages, we learn it is not that man does not know God, or even that it is reason's fault for not revealing him, but it is problem of sin; a problem of evil that suppresses the truth of God so that man exchanges the true God, for one of his own making as it were. All men, particularly Logical Positivists do not have any reason for coming to conclusions in the created realm (knowledge), without a knowledge of God (the Creator), which they suppress (although they still make assertions). In fact, the relationships which they forge between truth and fiction, between the object known and the subject that interprets, is biased based on the fact that they are suppressing the truth they know, and exchanging

---

<sup>18</sup> Romans 1:18-28 (selected verses), The Holy Bible, New International Version

it with something else, namely bare reason<sup>19</sup>. At the same time depending upon this true knowledge of God, they think they can discover knowledge and truly know, and this knowledge will have meaning. This is illogical logic if the God who is revealed in the Bible does not exist, there would be no reason to seek out and discover knowledge, because God's existence gives meaning to every predication, whether a Christian or a Logical Positivist.<sup>20</sup>

Whether or not Michael Polanyi would agree with these verses from Romans Chapter One, he was consistent in understanding the faultiness of Positivism. As Dr. Cornelius Van Til has said, (concerning those who make predications of fact in a universe coupled with unbelief), perhaps Polanyi was using "borrowed capital" from the Christian world view. However Polanyi finally came to understand man's basic presuppositions imposed on data, and how it affected knowledge and meaning, he did understand the weakness of subjective interpretation. Without a true biblical foundation of God, Polanyi wanted to prove an objective by which the person interprets. He was forced to assert knowledge as *tacitly* known.

---

<sup>19</sup> The importance of the biblical presuppositions of men is to realize that bare reason is not logical without a God. According to presuppositional understanding, you cannot use laws of logic to predicate anything if there is not transcendence God who give meaning to reason.

<sup>20</sup> It is interesting to note that Bertrand Russell, a profound and brilliant Positivist, dehumanizes man, but still thinks there is reason for science and meaning in this world. He writes: "Man is a part of nature, not something contrasted with nature. His thoughts and bodily movements follow the same laws that describe the motions of stars and atoms...What we call our 'thoughts' seem to depend upon the organization of tracks in the brain in the same sort of way in which journeys depend upon roads and railways. The energy used in thinking seems to have a chemical origin...God and immortality, the central dogmas of the Christian religion, find no support in science." Bertrand Russell *Why I Am Not a Christian and other essays on religion and related subjects* (New York: 1952), 48-51.

## **Polanyi's Tacit Knowledge and Calvin's Sensus Divinitatis**

Tacit knowledge was a term that Polanyi used to describe what man knew inherently; the truth which he knew to be true after observing something. Tacit knowledge was defined by Polanyi as “an inherent knowledge of something that you cannot necessarily put into words, or give reasons for your conclusion. This tacit knowledge may just be a “hunch” that men have, but when they follow this leading, perhaps after looking over the data for long periods of time, they discover new and fresh conclusions. They do not intentionally go forth in the scientific enterprise to find or discover something new, but building upon time and information from within, and given the new understanding of the data, they come to new understanding.”<sup>21</sup>

Applying Polanyi's tacit knowledge to the created world, in which we make discoveries of knowledge and meaning, the conclusions we make

---

<sup>21</sup> Michael Polanyi and Harry Prosch *Meaning* (Chicago: 1975), 34-39. “We have seen that there three centers of tacit knowledge: first, the subsidiary particulars; second, the focal target; and third, the knower who links the first to the second. We can place these three things in the three corners of a triangle. Or we can think of them as forming a triad, controlled by a person, the knower, who causes the subsidiaries to bear on the focus of his attention. We can then say that the knower integrates the subsidiaries to a focal target, or we can say that for the knower the subsidiaries have a meaning which fills the center of his focal attention. Hence the knower can dissolve the triad by his own specific action: by merely looking differently at the subsidiaries. The triad will disappear if the knower shifts his focal attention away from the focus of the triad and fixes it on the subsidiaries.” *ibid.*, 38; Drusilla Scott summarizes Polanyi's thought: “In all these kinds of knowing and know-how there are two levels of objects; the parts, details, particulars from which you attend, and the whole or meaning to which you attend. This is the characteristic structure of tacit knowing. Polanyi puts the difference in various ways; sometimes he speaks of subsidiary and focal objects of attention, the subsidiary being the particulars we are attending from, and the focal the whole on which our attention is focused. Because in this process the meaning tends to be placed away outside ourselves, as when we interpret clues in our own bodies as revealing an object outside us...the way we get from one to the other is not formal reasoning, it is a skilled imaginative integration. We have this sort of power built into us, and to realize this was exiting to Polanyi because it does provide a clue to the way that discoveries are made...Polanyi claims that tacit knowledge, the same kind as we use every day, is in fact the dominant principle of all knowledge, and that its rejection would involve the rejection of any kind of knowledge whatsoever. At the heart of knowledge, he insists, however exact, however much it uses formal procedure, there is this element of personal judgment depending on an unformalizable intuition, a skilled integration of unspecifiable particulars.” *ibid.*, 52.

are still subjective and would give us no confidence. True knowledge of the creation should lead us to God himself (taking into account the fallenness of man's interpretive equipment as it were).<sup>22</sup> John Calvin, during the Reformation of the Sixteenth century, in his *Institutes of the Christian Religion*, described a term called the "*divinitatis sensum*"<sup>23</sup> or an "awareness of divinity", and he also spoke of a "*semen religionis*" in every man<sup>24</sup>. A connection could be made between Polanyi's *tacit knowledge* and Calvin's *divinitatis sensum*. If Polanyi meant in his term that there is an objective reality that gives real subjective understanding, then perhaps as a fallen man albeit unintentionally, he was concluding that true knowledge needs the necessary existence of God to explain meaning. In contrast to Polanyi, the Positivists while suppressing this *divinitatis sensum*, endeavor to disconnect themselves from the world and others around them. However, they cannot escape the fact that they have true biases, and are truly religious because they are in reality made in the image of God.

---

<sup>22</sup> It is not the intention of the author to "change gears" by implication, that Polanyi's tacit knowing was inherently Christian. The intention is to prove how epistemologically, if man is consistent with reality, that what he observes in this world should lead him to the knowledge of God. As summarized above, Polanyi did not use the term tacit knowledge as a necessarily religious term.

<sup>23</sup> "*Divinitatis Sensum*" "This term and "seed of religion," used immediately below (I.iv.1), refer generally to a numinous awareness of God, and are closely related to conscience, which is a moral response to God. Cf. I.i.3 and Comm. John 1:5, 9. On verse 5, Calvin writes: "There are two principal parts of the light which still remains in corrupt nature: first, the seed of religion is planted in all men; next, the distinction between good and evil is engraved on their consciences." John Calvin *Institutes of the Christian Religion* (Philadelphia) The Library of Christian Classics, Vol. XX, John T. McNeill (ed) I.iii.1, note 2.

<sup>24</sup> Richard Muller defines "seed of religion" as: "the rudimentary knowledge of God that arises in every human being because of the objective revelation of God in his work of creation and providence, and because of the subjective reality of a remnant of the image of God (imago Dei) in each person. Because of the Fall, however, the *semen religionis* gives rise, not to true religion, but to idolatry and error in the name of God." *Dictionary of Latin and Greek Theological Terms* (Grand Rapids: 1985), 278.

The importance of honesty in the scientific venture is most important. Whether trying to find out how an engine works; how a planet orbits another; how to make sense of the unity and diversity in the world, it is to be decided by the data received. Polanyi knew that scientists were using their presuppositions to interpret the data. From a non-Christian perspective, this was true scientific originality anchored in a suppressed knowledge of God. From a Christian standpoint, he differed with Cornelius Van Til, disregarding the foundation to these presuppositions that all men have. Although he realized that men do presuppose certain things, have biases, and a particular tacit way of knowing, he unfortunately had not foundation for making these claims. The foundation that Polanyi required, is unique to the Christian worldview. No other worldview can explain the “what,” “the why” or the “how”.<sup>25</sup>

### **Christian Epistemology Predicated upon God**

---

Cornelius Van Til was a pioneer in Christian apologetics toward the latter part of the twentieth century. Dr. Van Til understood as the pioneer of presuppositionalism, his context in history was to address a Post-

---

<sup>25</sup> Greg Bahnsen quotes J. Gresham Machen from an article entitled “The Relation to Science and Philosophy,” *The Princeton Theological Review* 24 (1926) 1:51-52: “...The various teachings of the Bible all hang together, so that we ought to take as a whole and not separate its parts from one another in the system. But this is isolated biblical claim to independent verification by some autonomous standard...Machen recognized that the Christian worldview does not epistemologically divorce scientific matters from religious matters; that would be ‘just about the most destructive thing that could possibly be imagined,’ because the Christian religion is ‘most emphatically dependent upon facts.’ What the apologist defends, then, is the full and integrated system of Christian truth—a worldview. This worldview stands in sharp antithesis with that of unbelievers, being ‘out of accord with the main trend of opinion both outside the Church and inside of it.’” in “Machen, Van Til and the Apologetical Tradition of the OPC,” *Pressing Toward the Mark: Essays Commemorating Fifty Years of the Orthodox Presbyterian Church*, (Philadelphia: 1986), 283-284.

Kantian, skeptical, evidentialist world. He stressed the importance of starting with Scripture, God, and Jesus Christ when trying to understand not only what we know, but how we know. In opposition to Classical Apologetics and Evidentialism, he pointed out the necessity for the existence of God prior to logic, understanding, or knowledge.<sup>26</sup> Polanyi did not understand as Dr. Van Til asserted, this is God's world and in God's world you have meaning and answers to questions, because of the fact it is God's world. If it were not God's world (as if that could be comprehended) you would not have any kind of meaning and you would be unable to predicate anything. In God's created world he has created man, much like a fish in an ocean, he is equipped naturally with what he requires to know about the world which he lives, and what he needs to survive (e.g. gills). With man it is the same, because God has placed him where He wanted him.<sup>27</sup> Unfortunately, Man has a religious tendency to set up idols in place of God, to worship the created rather than the Creator, to suppress this truth, then exchange it for a lie.

What Polanyi should have understood in his scientific understanding of epistemology and meaning was not merely that you could draw honest conclusions by observation. If he would have applied this understanding

---

<sup>26</sup> For example, when beginning with "Theistic Proofs" in the apologetic argument, you are forced to begin autonomously with reason, which ultimately becomes your authority, or beginning with God himself to make sense of reason at all. There would be no reason, no intelligibility if God did not exist. Real autonomy according to Scripture does not exist. Dr. Van Til says: "The only 'proof' of the Christian position is that unless its truth is presupposed there is no possibility of 'proving' anything at all." "My Credo," *Jerusalem and Athens: Critical Discussions on the Theology and Apologetics of Cornelius Van Til*, ed. E. R. Geehan (n.p.: Presbyterian and Reformed, 1971), 21

<sup>27</sup> Cornelius Van Til, *Common Grace and the Gospel*, (Phillipsburg: 1972), 9-11.

to all aspects of his knowledge, not only would he have been more consistent with his system, but he would have realized the fact that he had autonomously set up another God in place of the one true God of Scripture.<sup>28</sup> He called this other god by the name of tacit knowledge. In Polanyi's misunderstanding, he failed to resolve the tension between his *why* and his *what*. His *what* was that you could have real and true meaning, but not entirely objectively. However, why was this? Why could a person subjectively investigate something and come to conclusions? What promises does anyone have if the God of Scripture who is Absolute, Personal and Trinitarian is not understood to be that which gives all things meaning.

The God of Scripture is personal and created man the same. Man discovers things about the world in which he lives because God has created him to rule over the creation, simultaneously in subjection to him as the Great Ruler. Man only has two choices really: to worship and serve the true God, or to make his mind an "idol factory" as Calvin said. If man disregards the Creator, his only alternative is to substitute another god in His place, and think autonomously. It is not so much the question of what does a person think about the true God, or whether they believe in Him. Rather, the real question is "what have they done with the true God in

---

<sup>28</sup> Although Polanyi might not have posited a "God" he necessarily would have to place some objectivity in God's place to make assertions and draw conclusions from his data. Inasmuch as he did not use the term "God" he implied it necessarily by the objectivity that he imposed in creation, substituting tacit knowledge as the essential concept.

their thinking”? It is most important to point this out in any investigation of meaning and understanding. Man begins with himself autonomously and worships and serves the *created* of God.

### **Christian and Non-Christian Understanding of Creation**

Man is not free as he should be in his thinking, and is not always accurate in his conclusions. Many times man’s mind is illogical. In reality, according to Scripture he has been created by God, in his image, to reflect the glory of God as a creature. When the man fails to do this, he is not living as God has made him to live. Many Christians have attempted to speak to the non-Christian about the reality of God. However, they have gone about it in the wrong way. Rather than showing the inconsistency of another’s position as unbeliever (including the false conclusions they draw from true meaning that exists in this created world), they try to appeal on the unbeliever’s illogical level.

This is a grave mistake to subject real truth and understanding of the true God to a possible hypothesis. How can anyone come to a real and saving knowledge of meaning and the truth of God if not confronted with their own said inconsistencies. It must be pointed out to those who have “done away with God in their thinking.” Michael Polanyi knew the dangers of trying to begin with only reason and attempting from that square to

make sense of conclusions. While trying to base your beliefs only on what can be proven by reason, you must reject your position. Logical Positivists cannot prove from reason alone (by their own standards) that their position is correct. It is inconsistent with reality and this is synonymous with saying that this is inconsistent with the way God has created this world. It is not fit to speak this way, because it denies logic and destroys the pertinence of speech.

### **Authority and Tacit Knowledge**

This brings us to real authority. Authority is called “tacit knowledge” by Polanyi. That which all men know about their conclusions, but it is more than a mere hunch. Polanyi understood that every man has an understanding of reality and that we must be honest to admit that most of what we know as created beings comes from authority. Many today look to the philosopher-scientists for all the answers. Perhaps in the past, people looked to the government, church or a great leader. Today, it seems there is a true skepticism when it comes to recognizing authority. Many accept conclusions from others based on feelings, or popularity that appears on a medium such as television.<sup>29</sup> For instance, today a person can quote a scientist today and tell you that it is going to rain tomorrow, or that this particular meat will cause cancer, or that you ought not smoke

---

<sup>29</sup> See Neil Postman, *Amusing Ourselves to Death: Public Discourse in the Age of Showbusiness* (New York: 1986), 16-29.

this particular tobacco or drink this coffee. It never ends. However, where in a society such as ours, do men draw most of their conclusions? They rarely even know the true statistics of these claims or the scientist or research group that did them. Polanyi would have said that many of these scientists were using their authority as scientists to propagate their conclusions.

In speculation, if Polanyi had been informed in his thinking by John Calvin or Dr. Van Til, he might have said that the tacit knowledge that a person has about truth comes from the creation of God, and because he is made in the image of God. Scripture reveals the truth of our conclusions. Whether we start from our own (so-called) neutral, autonomous ground to arrive at truth, or whether we start with the knowledge in which God has truly revealed himself to us in our very beings will be very different conclusions.

### **Tacit Knowledge Christianly Interpreted**

Michael Polanyi in writing concerning tacit knowledge said that the discovery in the scientific process as another kind of knowledge besides the explicit, exact and testable kind; a sense by which we can be dimly aware of the direction in which we must seek for a solution, before we can formulate it. Karl Popper, reacted by calling tacit knowledge 'faith in

quite hazy ideas' and shuts it out of science. For Polanyi, 'tacit knowing' is an essential element of his theory of knowledge. In response to both Russell (with his discovery of truth only on that which can be measured), and Thomas Kuhn (who believed that discovery came from that which we could disprove), Polanyi postulated a truly human (that which is consistent with the real created world of God) view of the scientific method of epistemology and thus came with truly human answers. He argued against both of these supremely influential scientists that to test without considering our own subjective, personal presuppositions was to be less than human. You could not arrive at truth and knowledge by merely deducting from what is, nor can you really try to reduce everything to that which cannot be disproved.

Polanyi's human response to science is revealed when he writes: "A responsible creative being could not be produced by any number of aeons of blind chance, so either man is not a sentient responsible created being, or he has truly emerged by some more active process. And why not? We have seen that discovery, looked at from afterwards, appears determined, but looked at from the discoverer's point of view is seen as indeterminate, active, powered by passionate personal commitment."<sup>30</sup> At times Polanyi seems to be thinking as a Christian Presuppositionalist, but much of his thought is Platonic in origin. To say that man's mind was formed

---

<sup>30</sup> Drusilla Scott, *ibid.*

over aeons and in that mind there is some knowledge which has been submerged, as it were, in a swamp that needs to be found by recollection and honesty as to what truly makes up a man. This applied to science helps us to interpret our discoveries and draw conclusions. However, Plato would have been pleased with this type of thought. In addition, the later Neo-Platonic Gnostics who claimed that man had this “spark of knowledge” that was in them from the time when their eternal souls were in the world of forms, before they made the trip to earth seems closer to Polanyi’s idea of tacit knowledge than St. Paul’s and Calvin’s knowledge of God.<sup>31</sup>

### **True Biblical Knowledge**

The Bible on the other hand speaks of a different knowledge that man has. First of all, it would be important to begin with the Biblical understanding of metaphysics and then we can see clearly the conclusions that are applied in the realm of epistemology. In the Biblical world of metaphysics there is no “possible” god derived from the things that we see on the earth. In the scientific enterprise as we look around creation and try to derive meaning, we are indeed interpreting everything through our own biases and presuppositions. However, the Bible speaks

---

<sup>31</sup> In addition to sounding like the Greeks in thought, Polanyi’s tacit knowledge at times reminds of Lord Herbert of Cherbury (1583-1648) who is sometimes called the “Father of Deism” who asserted men could have a kind of universal instincts by which they observe their surroundings; a “rationalistic hunch” if you will. See G. R. Cragg, *From Puritans to the Age of Reason* (Cambridge: University Press, 1950), passim.

of the Absolute, Trinitarian, Personal God who has revealed Himself from the noumenal realm of metaphysics to the phenomenal realm of creation. This Absolute, Trinitarian, Personal God who is the self-evident God of Scripture has come to us and revealed himself by his authority in his Word, the creation, and the stamp of himself which he has placed within every man. There is a difference between God's relationship to man and the world in his immanence and transcendence and these should not be confused.

Polanyi conceives of a "possible god" and therefore there is a chance to have meaning. He speaks of a "tacit knowledge" by which every man interprets things, particularly in the scientific realm, so that he can account for objective conclusions interpreted by subjective men. However, man is fallen according to the God who is there, who has revealed himself to us and no matter how much Polanyi makes a similar assertion to Van Til's presuppositionalism, it must be defined as that which in reality is inconsistent.

The world in which we live can be known and interpreted by man. We can know. But why can we know should be the next question? In the metaphysical realm, the Bible says that God is Absolute, that in creation he created a man after his own image. This man was to be prophet of his word in creation, priest by worshipping God and tending to his people,

and king of the creation. He was to rule over creation and from the very beginning in the Book of Genesis you have man assigned to naming the animals and placing them in categories. However, man was commanded that as King under THE King must eat and enjoy everything the King had provided, except for the tree of the knowledge of good and evil. Man disobeyed God and God placed him under a curse. Man had fallen from his great, non-mediatorial, relationship with God, so a perfect creation in harmony with the Creator was no more. He was still to work the ground and be God's creature, but he was subject to death and he would suffer in sin, both in heart and mind.

### **Man's Fallen Knowledge**

Man's knowledge of creation because of this is tainted by sin, what theologians call the noetic influence of sin. Fallen man knows the true God who is there, who has revealed himself in Scripture, but he does not process that knowledge correctly. In suppressing the truth, when engaging in the scientific enterprise, he does not think God's revealed thoughts after him. Therefore he cannot apply them to his conclusions, but he must use his own autonomous self as the interpreter of everything.

The problem with having a "tacit knowledge", if it is not the "Sensus divinitatis" of Calvin, it is really man's own knowledge that is autonomous.

As much as people may argue that there is a general, and “neutral” way to speak of ontology (being), epistemology (how you know), and axiology (how you apply this knowledge to the real world), the reality is that this is not so. If we can engage in the scientific enterprise at all, then Polanyi must understand that the only thing we can truly presuppose, or tacitly know, is that which we have concluded autonomously.

Truth is in God and God is truth. It is part of God’s simplicity, he is not compounded of parts, but also truth, beauty, holiness, are not merely “pieces” of God’s makeup, but exist because HE IS. The acieity of God is that which is self-contained, God does not need any knowledge outside of himself and what is true for him, is true because it was thought by him. He cannot think anything other than truth. For him all possibility is actuality and all “ought” is. We could not predicate anything about our conclusions in science based on our mere autonomy. We could not say whether something is right or wrong if it is not measured according to God’s revealed truth.

Although Polanyi was used by God to destroy the arguments of the Logical Positivists when they tried to claim that the only knowledge that could be attained by scientists was that knowledge that was rational. However, by showing the Positivists that not all conclusions can be reached by rationality, he failed to see that in reality all our conclusions

come from authority. It is either what we call our “neutral” autonomous authority, or the authority that comes from the Author himself, the one that gives meaning to the term “authority.” If the self-evident, revealed God of Scripture did not exist, then there would be no authority. In fact to be consistent, if the self-evident, revealed God of Scripture did not exist, nothing would be, which is impossible to think about because we know that he is, because he has said that his he is in Scripture.

### **A True Knowledge of God From His Initiative**

If Polanyi destroyed the conclusions of the Positivists, what can we say about hope for the scientific enterprise in general, and epistemology in particular? We live in a physical, phenomenal realm where things constantly are changing, including ideas. How do we expect to know? How do we expect to honestly practice science trusting our conclusions? How do we study science thinking that all things will continue normally, according to a pattern, when we have no trust of the future in such things? We must first begin with Scripture. Not that Scripture in and of itself is a manual for science; it is not. However, Scripture is God’s word given to man so that although we are in a world created by God, trapped in a creation that we are trying to understand as it were, we can have solid, foundational knowledge about that which exists, and we can look to the

Bible to find how God has revealed himself.

As fallen men we are in a predicament without hope if we try to say that we know the world, yet we do not care to know God. Scripture teaches that the wrath of God is being revealed to all men, internally in the image of God and externally in the creation, so that they know what they should do, and who they truly should know. God has worked through history in all areas of knowledge to display himself. The Bible is the result of many thousands of years, by many different authors of differing ages and occupations who God has disclosed and revealed himself to. Man is without excuse for disbelieving in God. Jesus Christ is the hope of true science.<sup>32</sup> He is the true hope of real knowledge and accurate conclusions from which men may trust. The Lord prays in John Chapter 17, “Now this is eternal life: that they may know you, the only true God, and Jesus Christ, whom you have sent.”<sup>33</sup>

Without saving knowledge of God, there is no hope for science, and there is no reason conclusively why man must seek answers in the scientific enterprise. If consistent, fallen man without God would realize that there is no reason for their questions or their answers, because

---

<sup>32</sup> J. Gresham Machen writes concerning all correct epistemology secured in Christ: “The supernatural Jesus is thus the key to a right understanding of early Christian history. But He is also the key to far more than that. Mankind stands in the presence of more riddles than the riddle of New Testament times. All about us are riddles—the riddle of our existence, the riddle of the universe, the riddle of our misery and our sin. To all those riddles, Jesus, as the New Testament presents Him, provides the key. He is the key not to some things but to everything. Very comprehensive, very wonderfully cumulative, very profound and very compelling is the evidence for the reality of the supernatural Christ.” *The Christian Faith in the Modern World*, (Grand Rapids: 1947), 70.

<sup>33</sup> Book of John, Chapter 17. The Holy Bible, New International Version

they are tainted by sin and the revelatory knowledge that they do have of God, has been suppressed. To be clear, it is not that scientists which have not known God have been entirely unhelpful throughout history. On the contrary, many discoveries have been beneficial in the life of man. However, the knowledge of fallen men (autonomously suppressing the truth) is much like the classical Greek philosophy. It had many questions and helped to promote the thinking of the human race, but it never did anything to bring us closer to the true God. The true God revealed himself through successive periods of time. During great philosophic and scientific times, in response hman did not honor God as God, but used the knowledge which they gained to worship idols, not to worship God. They used the knowledge to promote man's self, apart from God while they sought to suppress the truth.

With regards to true *scientia*, or knowledge of objective or that which is revealed to us for discovery, unless it is true knowledge which we begin the scientific investigation or enterprise as Polanyi attempts, we cannot truly know. In fact, according to Calvin it was the knowledge of God that must be foundational to any true knowledge or meaning gained from the creation. If we do not have the true knowledge of God, then it is hopeless to look for real answers that will ultimately help us. As has been pointed out, science has its answers that have helped man, but

ultimately science in and of itself does not bring real progress no matter how beneficial, because it is illusory progress if not foundationally rooted in God's knowledge as he has revealed.

The tacit knowledge that scientists truly have of the created works of God, in which the observers impose on the data is from a fallen labyrinth that brings forth either false gods and idolatry of man's making, or other religions which are inherently demon worship. If we do not begin the scientific enterprise with the right tacit knowledge, we will never come to sound conclusions no matter how bright the scientist. For if the greatest of the philosophers in the Golden Age of Greece did not answer man's problems, how can anyone else do any better? We should humbly consider that whatever this knowledge is that natural man has within himself, it is a seed of religion, a sense of divinity and the image of God, that God has placed in man. However, because we are truly fallen we will only misinterpret and corrupt the data.

This is not to say that scientists that begin with themselves have not invented and understood greatly the works of God. They have not entirely been without truth because of the image of God imprinted in them, however, they will never necessarily come to real truth that glorifies God.<sup>34</sup> What is knowledge if it is not helpful in placing God first and understanding

---

<sup>34</sup> See Van Til *Common Grace and the Gospel*, *ibid.*; Professor John Murray *Collected Writings of John Murray* (Carlisle, PA: 1977), Chapter 10, 'Common Grace', Reprint from the Westminster Theological Journal, Vol. V. I, 1942; Herman Bavinck *Calvin and Common Grace* The Princeton Theological Review, Vol. VII, 1909, p. 437; John Calvin *Institutes* *ibid.*, II.ii-iii.

who he is? Without this knowledge, all other knowledge will lead to despair and as we have evidence of in the twentieth century, it will only lead to wars of progress between nations. Men cannot expect to search for answers and draw conclusions as scientists at the cost of denying and turning their backs on the God who is there, and has revealed himself.<sup>35</sup> For this, men are truly without excuse.

---

<sup>35</sup> Schaeffer, *ibid.*

## **Bibliography**

---

**Calvin, John.** *Institutes of the Christian Religion*. Ed. John T. McNeill.

Translated by Ford Lewis Battles. 2 Vols. Philadelphia: Westminster.

**Edgar, William.** *Reasons of the Heart: Recovering Christian Persuasion*.

Grand Rapids: Baker Books, 1996.

**Grene, Marjorie (ed.).** *Knowing and Being: Essays by Michael Polanyi*.

Chicago: University of Chicago Press, 1969.

**Polanyi, Michael and Prosch, Harry.** *Meaning*. Chicago: University of

Chicago Press, 1975.

**Polanyi, Michael.** *Personal Knowledge*. Chicago: University of Chicago

Press, 1964.

**Schaeffer, Francis.** *Trilogy*. Wheaton: Crossway, 1990.

**Scott, Drusilla.** *Everyman Revived: The Common Sense of Michael*

*Polanyi*. Grand Rapids: Eerdmans, 1985.

**Van Til, Cornelius.** *Common Grace and the Gospel*. Phillipsburg, NJ:

Presbyterian and Reformed Publishing Co., 1972.

----- *Christian Apologetics*. Phillipsburg, NJ: Presbyterian and Reformed

Publishing Co., 1976.

---

## **Works Consulted**

---

**Dennison, Charles G. and Gamble, Richard C. (eds.).** *Pressing Toward the Mark: Essays Commemorating Fifty Years of the Orthodox Presbyterian Church.* Philadelphia: Orthodox Presbyterian Church, 1986.

**Edwards, Jonathan.** *The Works of Jonathan Edwards.* Carlisle, PA: Banner of Truth, Reprint 1992.

**Ferguson, Sinclair B., Wright, David F., and Packer, J. I. (eds.).** *New Dictionary of Theology.* Downers Grove: InterVarsity Press, 1988.

**Frame, John.** *The Doctrine of the Knowledge of God.* Phillipsburg, NJ: Presbyterian and Reformed Publishing Co., 1987.

**Hart, D. G. (ed.).** *Reckoning with the Past: Historical Essay on American Evangelicalism from the Institute for the Study of American Evangelicals.* Grand Rapids, MI: Baker Books, 1995.

**Hofstadter, Richard.** *Anti-Intellectualism in American Life.* New York: Alfred Knopf, 1962.

**Machen, J. Gresham.** *Christian Faith in the Modern World.* Grand Rapids, MI: Eerdmans, 1947 Reprint.

**Muller, Richard A.** *Dictionary of Latin and Greek Theological Terms: Drawn Principally from Protestant Scholastic Theology.* Grand Rapids: Baker, 1985

**Murray, John.** *Collected Works of John Murray, Vol. II: Systematic Theology.* Carlisle, PA: Banner of Truth, 1977.

**Johnson, Paul.** *Intellectuals*. New York, NY: Harper and Row, 1988

**Noll, Mark.** *The Scandal of the Evangelical Mind*. Grand Rapids: Eerdmans, 1994.

**Postman, Neil.** *Amusing Ourselves to Death: Public Discourse in the Age of Showbusiness*. New York, NY: Penguin Books, 1986.

**Russell, Bertrand.** *Why I am Not a Christian and other essays on religion and related subjects*. New York: Simon and Schuster, 1957.

**Wells, David F.** *No Place for Truth: Or Whatever Happened to Evangelical Theology?* Grand Rapids: Eerdmans, 1993.