

**VERN S. POYTHRESS. *LOGIC: A GOD-CENTERED APPROACH TO THE FOUNDATION OF WESTERN THOUGHT*. CROSSWAY, 2013. 736 PP. PAPERBACK. \$55.00.**

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*Some writers in the philosophical discipline are to be considered prolific. But few are as prolific in as many areas as Vern S. Poythress. To date, he has written a compendium of books on several subjects in his “Redeeming” series, such as Redeeming Science, Redeeming Sociology, and Redeeming Mathematics, and in 2013, Dr. Poythress took up the challenge of writing a treatise on logic that served to reorient the subject for Christians both in and out of academia. Dr. Poythress studied at Harvard, where he received a PhD in Mathematics in 1970 and then a Doctor of Theology in New Testament Studies at the University of Stellenbosch in 1981. He went on to become a professor of New Testament Interpretation at Westminster Theological Seminary, where he has taught for over 44 years. In that time, he has focused his academic interests on many subjects but has specifically explored the ideas of the triune nature of God, Christ’s sovereignty, and biblical hermeneutics.*

*He was influenced early on by thinkers such as John Frame, Kenneth Pike, and Cornelius Van Till, and the works of these individuals forced Poythress to wrestle with the overarching idea that logic should be approached from a distinctly Christian perspective rather than a secular one.*

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### Summary

This book is a comprehensive text about logic, fitting for both the first-time student and the seasoned professional. It explores the recasting of the subject utilizing a distinctively Christian worldview, something that most books on the subject never begin to attempt. While most logic texts focus on fixing the problems inherent in logic, Poythress endeavors to address the foundational logic problems with a God-centered approach, tackling the problem of logic itself rather than the problems that stem from it.

Unlike many logic texts today or in the past, Poythress asserts in this volume that mathematics is not the key to the physics of the world but focuses on logic as the mechanism that has been responsible for everything in our physical reality, as well as the reshaping of Western Civilization.

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The book is divided into four major sections:

Part 1 – This section deals with elementary logic and is readable by anyone and they will receive a first exposure to logic. It focuses on explaining the elementary ideas and concepts of logic clearly and completely. It is the heart of the book as Poythress uses this space to emphasize how logic comes into play in our world and our thinking, illustrating how Christians should think about logic. He provides biblical argumentation of theological foundations, and this section will be of more interest to the pastor or theological student than the others; it could be read alone without loss of the main argument.

Part 2 – This section on propositional logic (part of symbolic logic) introduces specialized symbolism and has a more mathematical feel to it. It is more challenging for people who do not have exposure to rigorous mathematics such as someone who is majoring in the humanities or practical theology. It focuses on later developments in the history of logic, provides a detailed discussion of various approaches, and is intended for individuals who find the subject of formal logic interesting and wish to pursue it more in-depth.

Part 3 - This section is even more advanced and mathematically oriented. While most of Poythress' theological comments are found in Part 1, they are restated again in Parts 2 and here in Part 3.

Part 4 – This section serves as a supplement, containing proofs, interactions with philosophy, as well as providing an application section.

### **Critical Analysis**

The book is written in a straightforward style, with study questions included for further reflection, but no assignments and no answer key. It has successfully been used as an introductory textbook for both high school and college students and provides a simplistic representation of reality, but it illustrates how our actual reality is much more complex than what representations can explain. Poythress defines two distinct kinds of logic: that of the believer and that of the non-believer. He explains how mystery increases for the believer as the believer increases in knowledge, but this is not the case for the non-believer. For both, as answers are unearthed, more questions arise. He claims that modern-day logic is too often dependent on models, and these tend to simplify what is much more elaborate and detailed. Rather than recognizing the “model city” for what it is, secular logicians tend to accept this fabrication as the “real city.” By doing so, Poythress argues, we fall prey to our instincts to relate ourselves to God when, as creatures, we cannot. In our fallen state, it is impossible to relate to God in any meaningful way, as our limitations in our ability to apprehend only

render us guilty of idealization. This problem is exacerbated when we presume that logic solves the issues, and we futilely raise ourselves to the same level that is God.

Poythress challenges the idea that Aristotle's syllogisms are correct, despite their being the backbone of rationality throughout much of the history of Western Civilization. He wrestles against ideas proposed by James Anderson and Greg Welty in the necessity of logic propositions being metaphysically true in every possible world, yet not being extended further along to connect to the very thoughts of God.<sup>294</sup> He states that there are similarities between the creator and creature but expresses reservations in the depiction of one level and not two. One can say that logic goes back to the mind of God, but this logic in the mind of God, Poythress would argue, is found in Jesus and remains incomprehensible to us; God does reveal himself to us to a point but then goes no further. While most people operate in logical arguments on one level, they do not extend those arguments to the second. To include both God and man on the same level is to make us out to be God.

During his discussion of syllogisms, Poythress takes up Cornelius Van Til's challenge to give logic "a distinctly Christian reading" (25n1). He argues that Aristotle, Kant, and contemporary philosophers pursue "the same old ideal of perfectly precise categories" that "implicitly reject the Trinity and pursues human autonomy" (188– 189). By contrast, Poythress's "reformed logic will be analogically Trinitarian" (691).

Throughout the text, Poythress reiterates our need to return to Scripture in all that we do. He states it is the lens by which we see the rest of the world, and by which we understand it. Our thinking needs to be firmly rooted in Scripture, in all aspects of our life - compared to it and assessed by it. He outlines the logic used in the arguments presented in the Bible, as well as undercuts the claims that logical arguments are in and of themselves unspiritual which can be very helpful for the Theologian or Christian Philosopher. Poythress argues that formal logic is not independent of the world or God but is intricately intertwined with both. Rather than allowing logic to become a competition against God, Poythress proposes that the origin of logic is found in God, in his selfconsistency, his faithfulness, and in his self-commitment to himself and to the external world he created. The world, on the other hand, views logic as impersonal and mechanistic. It is something out there, and relativism holds that logic and the laws of logic and the world itself are relative to the culture and society it exists within. But Poythress argues this does not work because you can't survive without thinking that the world is rational.

He also dismisses the idea that God created the laws of logic as this requires God to be an unknown behind the laws he created. Instead, he argues that logic and the laws of logic originate explicitly with the logos and are manifested then in the created world as natural regularities. This idea is paradoxical to the unbeliever, as the unbeliever demands of the believer to "prove that God exists," yet, while making such demands, the non-believer is essentially operating within rational thought and using logic to argue against the existence of God who is logic incarnate and, by doing so, proves the very answer to their query.

The book does not go without its criticisms from scholars. Some argue that the book is old-fashioned and ill-informed of recent research and literature. There is the claim that Poythress relies too much on older formal systems, like Russell and Whitehead's work, even though natural deduction systems are the more dominant means of teaching and disseminating logic today. Despite his use of intuitionist and fuzzy logic, he does not indicate that other non-

classical logics exist. The book additionally has no formal instruction on how to do proofs in any modern sense.

Examples of proofs are included in Appendix B2, but these are incomplete. His Venn diagrams are his design and do not conform to conventional standards and some of the symbolism used is unorthodox (using a checkmark instead of a traditional  $x$ , 217). There are also some inconsistencies, such as the adoption of the dot notation from Whitehead and Russell's *Principia Mathematica* only to abandon it in later chapters. Likewise, his use of “only if” in the place of “if and only if” is troubling to some. He states that “because in ordinary English the context indicates well enough that ‘if and only if’ is implied” can be argued as both false and misleading. In logic, only if indicates a necessary condition, and if and only if a necessary and sufficient one.

There is also criticism that Poythress relies too heavily on too few experts in the field, overwhelmingly citing two individuals in the footnotes: John Frame and Cornelius Van Til. While these are both respected Reformed scholars, it can be troubling that his reliance on so few authoritative sources can produce a short-sighted view of the subject matter. Because of these shortcomings, some argue that students armed with just Poythress' Logic would be confused with the nonstandard way of doing logic and could have difficulty communicating effectively with the rest of the logic community.

### **Conclusion**

In sum, this is a tremendous work in the field of logic, especially in terms of logic from the approach of the Christian Theologian or Christian Philosopher. As we know, God did not have to create the world in which we see today in the way in which we see it. The laws of entropy and death and futility could have been avoided. The laws of gravity could have been reversed, altered, or even non-existent. But God did create what we see, and he utilized the logic innate in the Logos to do so. Everything is traced back to the originating source of God in his perfect will and the necessity of his nature. God is rational. He is logical. He is the God of order and not the God of Chaos. It is our task to discover, recognize, and acknowledge who he is and what it is he is calling us to.

Using *Logic: A God-Centered Approach* is a tremendously helpful text for anyone who has an interest in logic and especially the student who desires a clearer and deeper understanding of the nature of God as a logician himself.

Steven Veach