

Pastor-teacher Don Hargrove
Faith Bible Church
<http://www.fbcweb.org/doctrines.html>

LOGIC – Lesson 17 Ponensing through 1 John

I mentioned in last Sunday's Bible class that there are four key rational thinking skills that all doctrinal believers need to possess. I mention doctrinal believers because of all believers, doctrinal believers in particular should really be truth seekers, which requires understanding the basic rules of logic, the structure of reality. We all know too well that there are many Christians who want to play church and play religion even with doctrinal terms, but who really do not care about truth; they are not my concern. The four areas that we need to develop rational thinking skills in include 1) modus ponens, 2) modus tollens, 3) ability to put sentences into logical form; and 4) constructing and checking the validity of any syllogism.

To understand modus ponens and modus tollens is to understand what one can and cannot say about many passages of the Word of God—what one can say truthfully about God Himself. Understanding modus ponens and modus tollens in many cases is even more important than understanding the original languages of Scripture. Let me illustrate. Say there was a young believer, a genius in fact, who loved the Word of God proceeded to earned five PhD's: in Koine Greek, Classical Greek, Hebrew, Aramaic, and Bible studies. He became a real master of the original languages and the Bible. However, in all of his studies he never learned the basics of modus ponens and tollens. Let's say he did a brilliant job of exegeting and translating 1 John 1:9 (where a core truth is that if we confess our sins, God will forgive us). However, apart from understanding logic, he could very well think and teach that this verse *logically also* means that 'if we do not confess our sins, God will not forgive us.' Consider the waste of all of his skills in original languages of Scripture and Bible studies as demonstrated by the fact that no matter how much genius went into explaining the passage in its ICE context (isagogics, categories, exegesis), he is dead wrong about that he thought the passage *also* meant. He is wrong about truth. He is being untruthful! What a waste of God-given genius! What a waste of time for this young man to come so far and to be so wrong. Furthermore, by distorting the passage he might be tempted to believe in Purgatory, which is where Catholics believe that believers go at death to have their unconfessed sins purged away by fire. According to his false modus tollens (denying the antecedent), he believes that the passage can be used to teach that people who die with unconfessed sins are not forgiven and must suffer in the fires of Purgatory.

The first thing I would like to do in developing our rational and critical thinking skills is to take us through modus ponens verses of 1 John. After we have mastered modus ponens, then we will pick another book in the Bible for modus tollens. Then we will move to another book of the Bible to put verses into logical forms, and then syllogisms in yet another book (perhaps Romans).

Remember that modus ponens is the mood of affirming. The idea is that we have a hypothetical syllogism that says “If you have P (antecedent), then you will have Q (consequent);” it is written out $P \supset Q$ (= if P then Q). While making charts and imaging this may help a bit a first, the main thing in logic is to *understand* what is going on here. We are saying P is the sufficient condition for Q. Nothing more and nothing less. It is all about P and what P is sufficient to accomplish. We cannot affirm anything about Q in modus ponens.

In these exercises, I would like for you to practice putting these verses in the form of symbolic logic. I have paraphrased some of the passages (without changing the meaning, which is perfectly acceptable in logic) to make it a bit easier. I will write out the verse and then I would like for you to fill in what I have put in red in the first few examples. We will get to the doctrinal implications later. Right now I just want you to be able to identify a true or false modus ponens. After you put them in the proper form, label them as VALID or INVALID. After a little practice, it will become second nature; this is what we are after.

1. Put in VALID modus ponens form with symbolic logic: *1 John 1:6, If we say that we have fellowship with Him while walking in darkness (P), we do not practice the truth (Q).*

P = we say we have fellowship with Him while walking in darkness

Q = do not practice the truth

\supset = if (antecedent of P) . . . then (consequent of Q)

$P \supset Q$

P

Therefore Q = Valid modus ponens

2. Put in VALID modus ponens form with symbolic logic: *1 John 1:7, If we walk in the light (P), we have fellowship with one another (Q)*

P = if we walk in the light

Q = we have fellowship with one another

$P \supset Q$

P

Therefore, Q = valid modus ponens

3. Put in INVALID modus ponens form with symbolic logic: *1 John 1:7: If we walk in the light (P), the blood of Jesus His Son cleanses us from all sin (Q).*

P=if we walk in the light

Q=the blood of Jesus His Son cleanses us from all sin.

P>Q

Q

Therefore, P = INVALID: One cannot affirm the consequent (Q) to get to affirming the antecedent of P; one may be tempted to say that the cleansing blood of Jesus means that we are walking in the light, but logically we cannot say anything affirmative about P from Q; in modus ponens the question was never about Q; it is what P is sufficient to produce; something else could produce Q, like believing in Jesus or confessing sins.

4. Put in INVALID modus ponens form with symbolic logic: *1 John 1:8, If we say that we have no sin (P), we are deceiving ourselves (Q).*

5. Put in VALID modus ponens form with symbolic logic *1 John 1:8, If we say that we have no sin (P), the truth is not in us (Q).*

6. Put in INVALID modus ponens form with symbolic logic: *1 John 1:6, If we say that we have fellowship with Him while walking in darkness (P), we do not practice the truth (Q).*

7. Put in VALID modus ponens form with symbolic logic: *1 John 1:8, If we say that we have no sin (P), we are deceiving ourselves (Q).*

8. Put in VALID modus ponens form with symbolic logic : *1 John 1:8, If we say that we have no sin (P), the truth is not in us (Q).*

9. Put in VALID modus ponens form with symbolic logic *1 John 1:6, If we say that we have fellowship with Him while walking in darkness (P), we do not practice the truth (Q).*

10. Put in VALID modus ponens form with symbolic logic *1 John 1:7, If we walk in the light (P), we have fellowship with one another (Q).*

Answers to 4-10 are on the next page

Answers to 4-10

4. Put in INVALID modus ponens form with symbolic logic: *1 John 1:8, If we say that we have no sin (P), we are deceiving ourselves (Q).*

P=if we say that we have no sin

Q=we are deceiving ourselves.

$P > Q$

Q

Therefore, P = INVALID - Couldn't we be deceiving ourselves as a result of something else?

5. Put in VALID modus ponens form with symbolic logic: *1 John 1:8, If we say that we have no sin (P), the truth is not in us (Q).*

P=if we say that we have no sin

Q=the truth is not in us

$P > Q$

P

Therefore, Q = VALID

6. Put in INVALID modus ponens form with symbolic logic: *1 John 1:6, If we say that we have fellowship with Him while walking in darkness (P), we do not practice the truth (Q).*

P=if we say that we have fellowship with Him while walking in darkness

Q=we do not practice the truth

$P > Q$

Q

Therefore, P = INVALID (Couldn't someone be not practicing the truth and not saying anything about fellowship)

7. Put in VALID modus ponens form with symbolic logic: *1 John 1:8, If we say that we have no sin (P), we are deceiving ourselves (Q).*

P=if we say that we have no sin

Q=we are deceiving ourselves

$P > Q$

P

Therefore, Q = VALID

8. Put in VALID modus ponens form with symbolic logic: *1 John 1:8, If we say that we have no sin (P), the truth is not in us (Q).*

P=if we say that we have no sin

Q=the truth is not in us

$P \supset Q$

P

Q = VALID

9. Put in VALID modus ponens form with symbolic logic: *1 John 1:6, If we say that we have fellowship with Him while walking in darkness (P), we do not practice the truth (Q).*

P=if we say that we have fellowship with Him while walking in darkness

Q=we do not practice the truth

$P \supset Q$

P

Q = VALID

10. Put in VALID modus ponens form with symbolic logic: *1 John 1:7, If we walk in the light (P), we have fellowship with one another (Q).*

P=If we walk in the light

Q=we have fellowship with one another

$P \supset Q$

P

Q = VALID

Advancing in the Logos for the integrity of Scripture, Bible doctrine, and the
glory of God,

Pastor Don