The Ratiocination Inculcator

1999-2000 Academic Year, Number 2

http://www.clearlight.com/~ccs/logic/

A Correction

In the first issue of *The Rat*, I asserted that I would be the youngest teacher your children would have this year. At the time, I didn't know that Mrs. Anthony would be teaching them art. Because she is, I'm not their youngest teacher.

Some Things to Review

School has hardly even gotten started, but your children have already learned some very important concepts in logic. Among the topics we've covered are these:

- the difference between *induction* and *deduction*
- the meaning of *statement*
- how to convert questions and commands into statements
- the three laws of thought

Here's some of what we've discussed about each of these topics. You might want to review these things with your children occasionally.

Induction/Deduction. We just touched on this distinction briefly, and I don't expect the children to be able to make the distinction clearly, yet. The only thing they need to know right now is that induction and deduction are the two main branches of logic. We will be concentrating on deduction for quite some time.

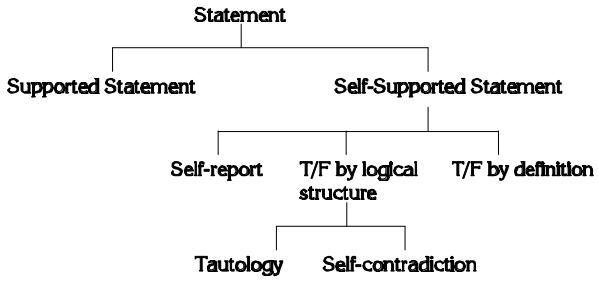
Statements. According to one of the texts we're using in the class: 'A statement is a sentence which is either true or false. Other kinds of sentences which have no true value—such as questions, commands, and nonsense—are not statements.' Most other logic texts, and most trained logicians, usually use the term 'proposition' instead 'statement'. I told the students that I'll be using both terms interchangeably throughout the class.

We spent two days discussing how to distinguish between statements, questions, commands, and nonsense. We also discussed how to convert questions, commands, and nonsense into statements. We had one individual quiz on these subjects, and a group exercise (see the Logic Olympics note later on). Everyone did quite well on both.

Laws of thought. The final subject we covered last week was the three laws of thought. The law of *excluded middle* says that a statement is either true or it is false; there is no middle ground. The law of *non-contradiction* says that a statement cannot be both true and false. Finally, the law of *identity* says that if a statement is true, then it is true.

Some Things to Expect

In the next several days, we'll be expanding our knowledge of statements by learning different ways of classifying them, and the different relationships that exist between them. Your children will be able to explain the following diagram, and give examples of each type of statement.



Next, we'll learn how to recognize the premises and conclusion of an argument, including recognizing implicit premises. Your children will be able to take an argument and show its structure graphically.

Throughout this time, we'll be talking about some of the Biblical principles that should guide our use of logic. Learning these principles and how to apply them will be a very important part of the class throughout the year.

The late Greg Bahnsen put it this way: "Being correct is not enough." God has established rules and principles for thinking logically; He has also established rules and principles for communicating with others. As Christians, we are called to follow these rules and principles. As Paul tells us in Ephesians 4:15: "... speaking the truth in love, we are to grow up in all aspects into Him, who is the head, even Christ."

As your children learn the mechanics of logic, they will, by God's grace, grow in their ability to speak *the*

truth. As we study the Biblical principles relating to the proper ways to communicate with others, they will, by God's grace, grow in their ability to speak the truth *in love*.

Logic Olympics

On Friday we held the first event in the Logic Olympics. Ask your children to explain the details to you, if they haven't already. All three teams performed exceptionally well. In the end, team Laser (Chris, Katie, & Tim) edged out the Pink Panthers (Jonathan, Lizzie, Sara, & Timmy) by a single point. The Vulcans (David, Hannah, & Michelle) were a very close third.

We'll be holding the Logic Olympics every Friday, *deo volente*. We won't always keep the same teams each week, or even have the same number of teams. Some weeks we may have only two teams, and other weeks we may have up to five teams. It will depend on the specifics of the events we're having.

In some weeks, I'll count the scores of the event as part of the group assignment component of the quarterly grade (as stated in the first *Rat*, this component is 30% of the grade). Last Friday's event was one of those. All three teams earned A+'s for their performance, although I didn't tell the class that they would receive a grade.

Materials Available

If any of you would like to purchase copies of your children's textbooks for yourselves, we have some copies available. Just let Principal Snapp know that you'd like to purchase them. The price will be the same for you as it was for your children.

The following are my five primary additional reference books:

- *Introduction to Logic*, 10th edition, by Irving M. Copi & Carl Cohen.
- *Logic*, by Gordon H. Clark
- *Attacking Faulty Reasoning: A Practical Guide to Fallacy-Free Arguments*, 3rd edition, by T. Edward Damer.
- *A Rulebook for Arguments*, 2nd edition, by Anthony Weston.
- *Mathematical Recreations*, by Lewis Carroll (combines his *Symbolic Logic* and *Game of Logic* into one book).

There is no need to buy any of these books for your children to use. In fact, most of these would probably be more confusing than helpful, because they're generally written at a college level.

If any of you are interested in buying one or more of these books for your *own* use, let me know. I can give you information about ordering them, or order them for you if you prefer.

Odds & Ends

If you're interested in sitting in on a logic class, just let me know. You're welcome at any time, but if I know in advance, I can let you know if I'm planning to give a quiz or test on the day you want to come. You can still come on a quiz day, but you might not find it particularly interesting watching the children take a quiz. In case you don't already know, we meet from 11:35-12:25 each day (except for one day a month when we'll meet from 8:30-9:20).

You probably noticed the web address given in the masthead of *The Rat*. There's not much there now, but I hope to have some interesting things relating to logic there eventually. If, and when, I do, I'll announce it.

Here's an insightful quote from G. K. Chesterton, which I told the class last week: "People generally quarrel because they cannot argue." If all goes according to plan, by the time this year is over, your children will know how to argue properly.

It is very unlikely that I will keep up the pace established by the first two issues of *The Rat*. Number 3 definitely will not be coming out next week. Most likely, you will see it in about 3-4 weeks.

Principal Snapp sent a letter home last week telling everyone about the new phone number for the school. As a reminder, I'll repeat it here: 262-0062. When you saw that number, did any of you think that the school might know someone important at Bell-Atlantic?

In case you've misplaced the information, I'll repeat my contact information here. My email address is <holloway@clearlight.com>. My home phone number is 865-1082. If you call, please do so between 7:30-8:15 p.m. My phone number at work is 864-1701, but try to use this only if you're not able to send email or call me at home.

I consider it a great privilege to have the opportunity to teach your children. By God's grace, I hope to teach them well.

That's all for now.