Peter Smith, Introduction to Formal Logic (CUP, 2nd edition)

Exercises 1: Some informal arguments

What are the premisses, inference markers, and conclusions of the following arguments? Which of these arguments do you suppose involve deductively valid reasoning? Why? (Just improvise, and answer the best you can!)

- (1) Most politicians are corrupt. After all, most ordinary people are corrupt and politicians are ordinary people.
- (2) Anyone who is well prepared for the exam, even if she doesn't get an A grade, will at least get a B. Jane is well prepared, so she will get at least a B grade.
- (3) John is taller than Mary and Jane is shorter than Mary. So John is taller than Jane.
- (4) At eleven, Fred is always either in the library or in the coffee bar. And assuming he's in the coffee bar, he's drinking an espresso. Fred was not in the library at eleven. So he was drinking an espresso then.
- (5) The Democrats will win the election. There's only a week to go. The polls put them 20 points ahead, and a lead of 20 points with only a week to go to polling day can't be overturned.
- (6) Dogs have four legs. Fido is a dog. Therefore Fido has four legs.
- (7) Jekyll isn't the same person as Hyde. The reason is that no murderers are sane but Hyde is a murderer, and Jekyll is certainly sane.
- (8) All the slithy toves did gyre and gimble in the wabe. Some mome raths are slithy toves. Hence some mome raths did gyre and gimble in the wabe.
- (9) Some but not all philosophers are logicians. All logicians are clever. Hence some but not all philosophers are clever.
- (10) No experienced person is incompetent. Jenkins is always blundering. No competent person is always blundering. Therefore Jenkins is inexperienced.
- (11) Many politicians take bribes. Most politicians have extra-marital affairs. So many people who take bribes have extra-marital affairs.
- (12) Kermit is green all over. Hence Kermit is not red all over.
- (13) Every letter is in a pigeon hole. There are more letters that there are pigeon holes. So some pigeon hole contains more than one letter.
- (14) There are more people than there are hairs on anyone's head. So at least two people have the same number of hairs on their head.
- (15) Miracles cannot happen. Since, by definition, a miracle is an event incompatible with the laws of nature. And everything that happens is always consistent with the laws of nature.
- (16) (Lewis Carroll) No interesting poems are unpopular among people of real taste. No modern poetry is free from affectation. All your poems are on the subject of soap bubbles. No affected poetry is popular among people of real taste. Only a modern poem would be on the subject of soap bubbles. Therefore none of your poems are interesting.
- (17) 'If we found by chance a watch or other piece of intricate mechanism we should infer that it had been made by someone. But all around us we do find intricate pieces of natural mechanism, and the processes of the universe are seen to move together in complex relations; we should therefore infer that these too have a maker.'
- (18) 'I can doubt that the physical world exists. I can even doubt whether my body really exists. I cannot doubt that I myself exist. So I am not my body.'