Problem of the Week
Number Nine
November 13, 2017

We have now reached the penultimate problem in our ten-themed edition of POTW. By tradition, this is the hardest problem of the term, since I like to end the term with a lighter problem. So, for your consideration this week, I found an exceptionally clever logic puzzle in which the number ten does, indeed, make an appearance. And since the puzzle requires more space than usual to state, let us just get right to it!

When Professor Smith's will was read upon his death, it was found that he bequeathed 10 of his books to his students Anne, Bill, and Carl. The three students were to choose from among his books in a particular order. Smith's wishes with regard to the order were captured in the following three statements:

1. No person who has seen me in a green tie is to choose before Anne.

2. If Bill was not in Oxford in 1920, then the first chooser never lent me an umbrella.

3. If Bill or Carl has second choice, then Carl comes before the one who first fell in love.

Unfortunately, none of the students could remember any of the relevant facts. However, knowing Professor Smith's fondness for economy of information, they reasoned he would not include superfluous statements. They then realized that, assuming that every statement provided essential information toward the solution, there is only one possible order. Can you work out that order?

When you think you have the problem figured out, follow the instructions below.