Questions to Consider when Selecting the "Maximum" Model

1. What basic variables are important when trying to predict Y?

2. Should higher order terms be considered?

3. Should interactions of predictor variables be considered?

4. Should transformations of response and/or predictor variables be considered?

5. Are there control variables that should be included? That is, are there predictor variables whose absence/presence in the model effect the relationship between the response and predictor variables?

6. If the control variables are important, does it make sense to include interactions and/or powers of these variables?