

# Practice Problems on Models

1. Describe the model-building process that Lave and March recommend (see esp. pp. 19-20).
2. Explain Lave and March's three rules of thumb for model-building (see esp. pp. 40-42).
3. Summarize Lave and March's three criteria and several sub-criteria for evaluating models. Which of these do you think is most important? Least important? Would you argue that any of these are not important?
4. (Lave and March, p. 44) Suppose that a study of the opinions of congressmen showed that members of the House of Representatives who serve on the House Committee on Welfare and Education (which considers welfare matters) generally have more extreme views (pro or con) on welfare matters than the average member of Congress; that members of the Senate foreign relations committee general have more extreme views on foreign policy than the average member of the Senate; and that the same pattern seems to be true of other committees in in Congress. (Remember that congressmen have some choice about their committee assignment and presumably select the committees that interest them most.)
  - (a) Do these results contradict the model outlined in Section 2.4 (Lave and March, pp. 21-25)?
  - (b) If the data *do* contradict the model, how would you revise it?
  - (c) If the data *do not* contradict the model, are there any data that might?
5. (Clark, Golder, and Golder, p. 47) It has been frequently observed that democracies do not go to war with each other. This has come to be known as the "democratic peace."
  - (a) Make up two theories or models that would account for this observation.
  - (b) Generate a total of three interesting predictions from the two models and identify from which model they were derived.
  - (c) Find some critical fact/situation/observation prediction that will distinguish between the two models. Be explicit about how it simultaneously confirms one model and contradicts the other.
6. Turnout varies substantially across countries. On average, turnout is about 48% in the U.S., 83% in Brazil, 87% in Denmark, and 93% in Chile. Many researchers believe that low turnout is a problem for a democracy, and would like to see higher turnout increase in the U.S..
  - (a) Make up two theories or models that would explain the variation in turnout across countries.
  - (b) Generate a total of three interesting predictions from the two models and identify from which model they were derived.

- (c) Find some critical fact/situation/observation/prediction that will distinguish between the two models. Be explicit about how it simultaneously confirms one model and contradicts the other.
- (d) Based on your model, what changes might the U.S. make to increase participation in elections?