# PS 1211: Legislative Process
Homework Two
Multidimensional Spatial Model

Instructions: For this homework assignment/art project, you will need the following supplies: a pencil or pen, a piece of string, a newspaper, glow-in-the-dark Silly Putty capable of transferring images from news print, four Lite Brite pegs, and a small kitchen torch.[1] You can complete the homework on this paper. Each question is worth 10 points.
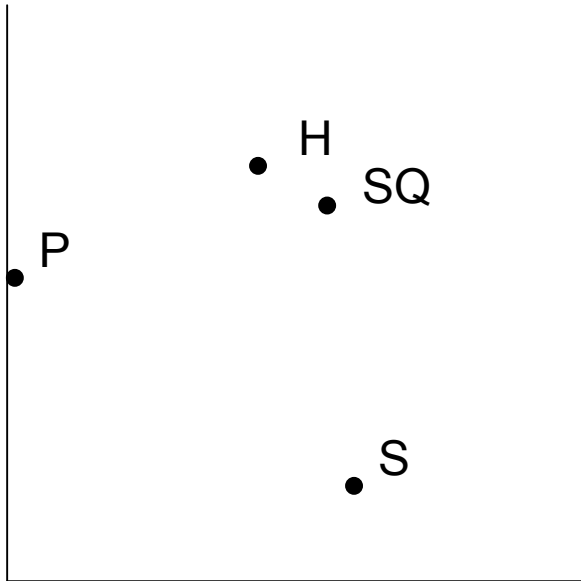
1. Consider the multidimensional policy space below, where H is the House's ideal point, S is the Senate's ideal point, P is the president's ideal point, and SQ is the status quo. Draw the indifference curves for both the House and the Senate and shade SQ's winset. (Note: You can draw the curves using either a drafting compass or a pencil tied to a piece of string. You cannot draw a meaningful indifference curve freehand, if you are, indeed, human. But you can do it freehand, too, if it is close enough.)

H

P   SQ

S
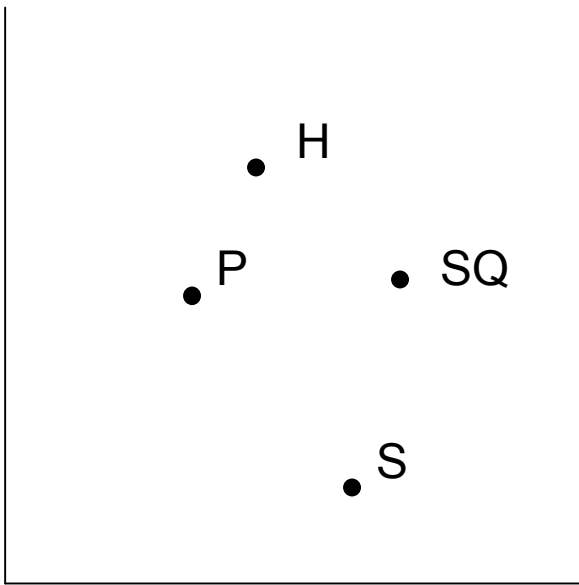
2. Will the House and Senate be able to pass legislation that the president will be willing to sign? Explain.

---

[1] Note that the newspaper, Silly Putty, pegs, and kitchen torch are optional. They just might come in handy if you want to take a break from the assignment. The other stuff, including the string, you'll really need.

3. Consider the policy space below, where all points are labeled as above. Draw the indifference curves for both the House and the Senate and shade SQ's winset.

H

SQ

P

S

4. Will the House and Senate be able to pass legislation that the president will be willing to sign? Explain.

5. Consider the multidimensional policy space below, where A, B and C are ideal points for the three members of a committee, SQ is the status quo and SQ* is a potential new status quo. Drawing indifference curves for A, B and C, create an agenda sequence that moves policy from SQ to SQ*. Label all points on the agenda in order, i.e, 1 is the first policy on the agenda, 2 is the second, and so on.
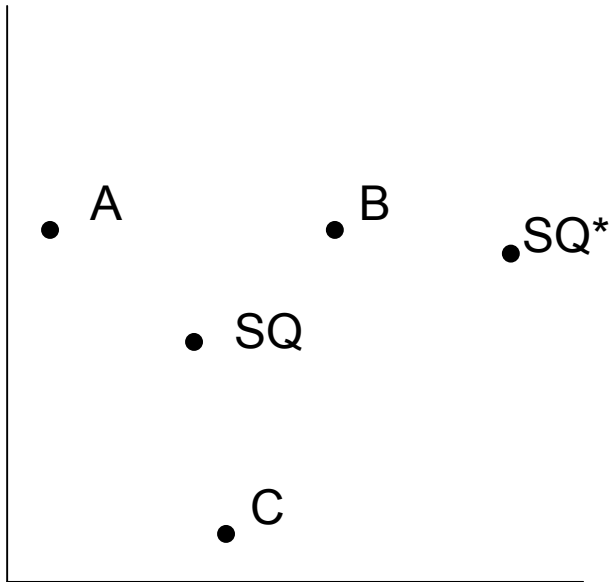
6. According to the McKelvey Chaos Theorem, what is the furthest point an agenda-setter can place policy? Explain.

7. John Dingell, the famously powerful chairman of the House Energy and Commerce Committee (the real one, not the simulated one), is famous for saying: "If you let me write procedure and I let you write substance, I'll beat[2] you every time." How does this statement relate to Condorcet's paradox?

---

[2] In the original, Dingell used a work other than "beat," but the meaning is pretty much the same. Dingell is a salty old guy.

8. Suppose two friends, Jackman and Cooper, decide to have a "movie night" at Cooper's house. As no movie night could be complete without snacks, they decide to make homemade popcorn and a fruity fruit punch. Unfortunately, they disagree on how much salt to put on the popcorn and how much sugar to put in the punch. Jackman likes very salty popcorn and not-very-sweet punch, but Cooper is the opposite – he likes not-very-salty popcorn but very sweet punch. On the two dimensional policy space below, draw and label ideal points for Jackman and Cooper.

9. Now suppose that Jackman cares equally about the level of salt and the level of sugar in his treats, but Cooper cares a lot more about the level of sugar than he does about the level of salt. Draw one indifference curve for each friend to reflect their preferences.

10. Now suppose that their friend Chris Evans decides to join them on movie night. Draw and label Evans' ideal point if his ideal point would avoid snack chaos by creating a preference-induced equilibrium.

Sugar

Salt