III Explaining and Predicting Where Industries Locate

A. Alfred Webers Least Cost Theory of Industrial Location

1. 20th Century German economist Alfred Weber set out to predict and explain where factories would choose to locate + grow.
2. Called Least Cost Theory b/c it predicited where industries would locate based on the places that would be the lowest cost to them.
3. Industries wanted to locate where transportation costs are minimized must consider two issues:
   a) The distance of transportation to the market
   b) The weight of the goods being transported.

B. Assumptions in Weber's Model

1. Transportation cost is determined by the weight of the goods being shipped and the distance they are being shipped.

a) The heavier the good and/or the further the distance the more expensive it is to ship.

2. Industries are competitive and aim to minimize their costs and maximize their profits

3. Markets are in fixed locations

4. Labor exists only in certain places and is not mobile.

5. The physical geography (land quality) and political-cultural landscape are assumed to be uniformed.

a) Assumes equal transportation paths and routes throughout the space (no mountains, lakes or rivers get in the way.)

6. With these assumptions, the location of industry is driven by four factors: transportation, labor, agglomeration, and deglomeration.

C. Criticism of Weber's Model

1. Does not identify the fact that markets and labor are also mobile and that the labor force varies in age, skills, gender, language, and other traits.

2. Some transportation costs, unlike this model, are not directly proportional to distance.