SIPPS Coding Workshop

Interactions in linear models

Linear models: types of effects

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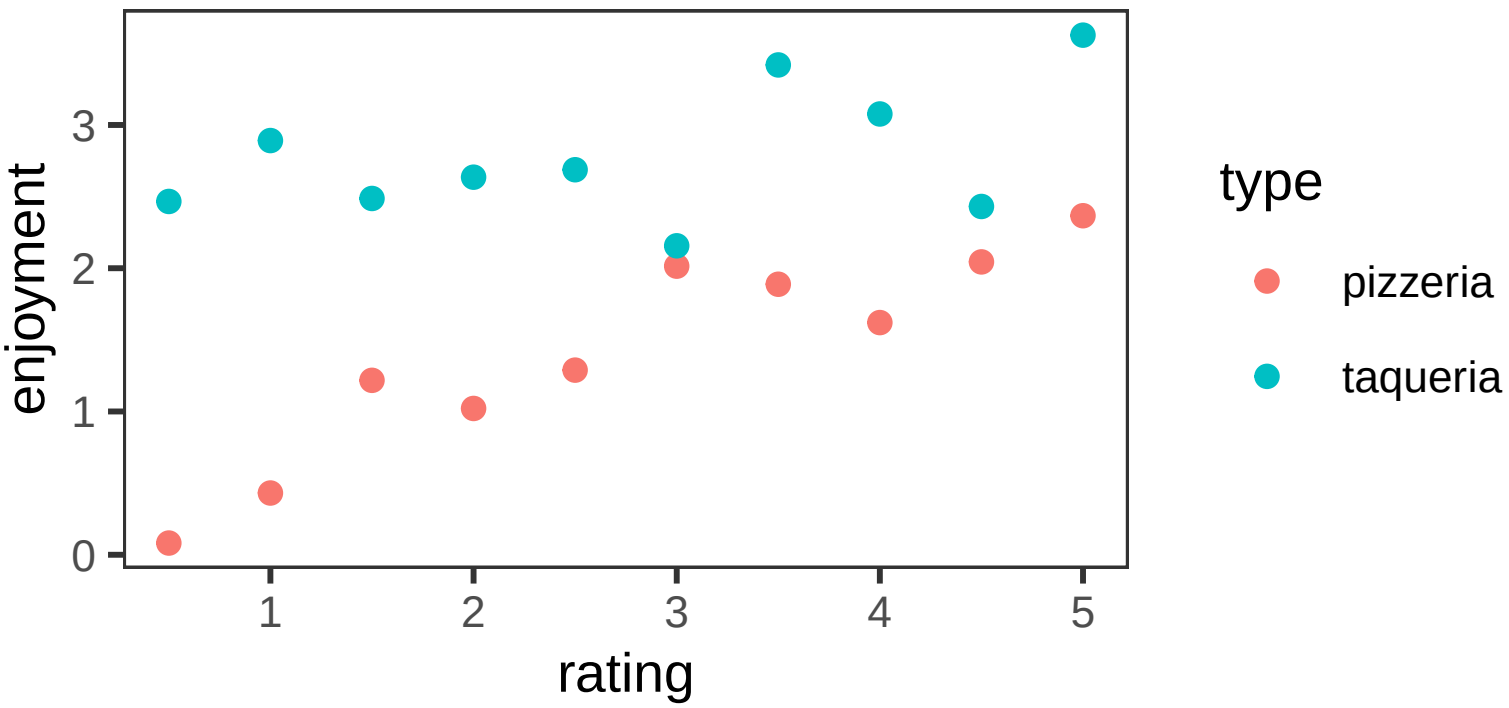
- so far, the models we've talked about and run in R have all included main effects only: these simply tell you about the effect of *a single variable* on your outcome variable (potentially while controlling for other additional variables)
- however, often we're interested in **interactions**: cases where the effect of one variable *depends* on the value of another variable

Linear models: interactions

- Let's look at an example where `enjoyment` of restaurant take-out (the DV) is predicted by two variables: `Yelp rating` and `restaurant type`
- visualizing these variables all together provides some evidence that there might be an interaction



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- unsurprisingly, you can also have **continuous-by-continuous** interactions and **categorical-by-categorical** interactions
- we'll go through all three of these types of models today