Reader Report
Reading: MorganWinship
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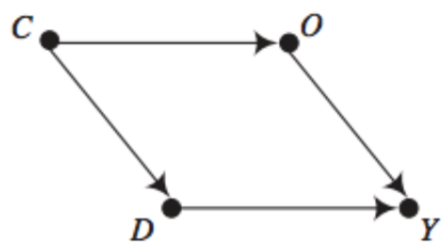
Suppose we have a causal graph like this, the effect of D on Y can be broken into two categories. One is the direct causal effect from D to Y and the other one is the association between D and Y through C and D. The goal of back-door blocking is to remove the second association, without adjusting any confounders. (106). While this seems like clever strategy, apparently it does not apply to colliders. In fact, not only does it not remove associations, but create new ones.



Some definitions:
Pearl defined back door criterion as the following(2009 a): A set S is admissible (or "sufficient") for adjustment if two conditions hold:
1) No element of S is a descendant of D.
2) The elements of S "block" all "back-door" paths from D to Y , namely all paths that end with an arrow pointing to D.
MorganWinship pointed out that there could be a collider situation within the "block" set for criteria 2. In that case the conditioning on a collider unblock the blocked path. I think the chapter did a good job explaining criteria 2, so I won't attempt to summarize it, but rather, I want to discuss the intuition behind the first criteria.
At first glance, criteria 1 seems a bit ad hoc. One intuition this chapter provides is that if we have an adjustment N that is a descendent of D, i.e. $D->N->Y$ N would "rob" the causal effect of D on Y. However, this seems less satisfactory, if a researcher has drawn an accurate causal graph, they would not want to incorporate N in the conditioning set in the first place. I am curious if there is any fundamental intuitions behind criteria 1?