

A Trilemma about Deference, Judgment Aggregation and Disagreement

You are wondering whether or not it is going to rain. You have downloaded two weather apps. Intuitively, it is rational for you to

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| Individual Deference | defer to each app individually when its forecast is the only information you have about the weather; |
| Linear Averaging | after checking both apps, assign a credence in rain that is a weighted average of their forecasts; |
| Probable Disagreement | before checking both apps, be less than fully confident that they will issue the same forecast. |

Recently, Gallow (2018) and Bradley (2017) proved independently that an agent whose credence function satisfies Individual Deference, Linear Averaging and Probable Disagreement is probabilistically incoherent. Thus, a Bayesian agent faces a trilemma: she can't defer to two epistemic masters and take a weighted average of their opinions, while be less than fully confident that they won't disagree.

The contribution of this paper is two-fold. First, we show that the problem is very general. In particular, the proof of the Gallow-Bradley result relies on two assumptions: i) the agent consults only two experts, and ii) the agent aggregates the experts' judgments by linear pooling. We show that both assumptions can be relaxed, and the trilemma still obtains. More precisely, we propose the following norm of Compromise for judgment aggregation:

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| Compromise | After consulting n experts, your informed opinion should lie within the interval spanned by their credences. Moreover, you should agree with the most radical expert opinion if and only if it is unanimously shared by all the other experts. |
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We show that if an agent defers to a group of n experts individually, for any finite n , and aggregates their opinions in such a way that satisfies Compromise, then she is rationally required to be confident *a priori* that they won't disagree.

Second, we argue that this trilemma spells trouble for epistemic uniqueness and conciliationism. Intuitively, it is rationally permissible to defer to any group of experts individually without being fully confident that their judgments will converge. In particular, it is permissible to defer to your future self as well as the future self of your epistemic peer, while thinking that peer disagreement is probable. However, if uniqueness is true - that is, every body of evidence supports a unique doxastic attitude - then an agent is rationally required to be confident *a priori* that some large enough group of experts will converge unanimously on the right answer. Similarly, a self-aware conciliationist - one who knowingly conciliates in all peer disagreements by moving her credences towards her peer's - must be confident *a priori* that she and her peer won't disagree.

References

- Bradley, R. (2017). Learning from others: Conditioning versus averaging. *Theory and Decision*, 85(1):5–20.
- Gallow, J. D. (2018). No one can serve two epistemic masters. *Philosophical Studies*, 175(10):2389–2398.