

This scatterplot compares the extent of consensus among the panelists on a question to the extent of clear opinion on that question.

For each panelist  $i = 1, \dots, N$  and each question  $j = 1, \dots, M$ , encode  $i$ 's response to  $j$  as agreement ( $r_{ij} = +1$ ), disagreement ( $r_{ij} = -1$ ), or uncertainty ( $r_{ij} = 0$ ). (These calculations ignore strong (dis)agreement.  $r_{ij}$  is not defined if  $i$  left no opinion on  $j$ .) The panelists also recorded their confidence  $C_{ij} \in [1, 9]$  in their answers; we standardize this measure to  $C'_{ij} = C_{ij}/\bar{C}$  and calculate *confidence weights*  $c_{ij} = 1 - \gamma + \gamma C'_{ij}$ , where  $\gamma$  is a tuning parameter, controlled by the user, that interpolates between  $c_{ij} \equiv 1$  and  $c_{ij} = C'_{ij}$ .

Write  $(i, j)$  if panelist  $i$  responded to question  $j$ . The *uncertainty* of question  $j$  is  $\sum_{(i,j)} c_{ij}(1 - |r_{ij}|) / \sum_{(i,j)} c_{ij}$ , the ratio of uncertain responses to all responses. The *consensus* of question  $j$  is calculated, analogously to the  $\tau_a$  statistic, as  $\sum_{(i,j),(i',j)} r_{ij}r_{i'j} / (\sum_{(i,j)} \binom{|r_{ij}|}{2})$ , the (unweighted) ratio of the difference between the numbers of agreements and of disagreements (concordance minus discordance) to the number of pairs of clear responses.