Moore's paradox and hedging with 'I believe': An attempt.

or: 'I believe' in a ranking-theoretic analysis of 'believe'

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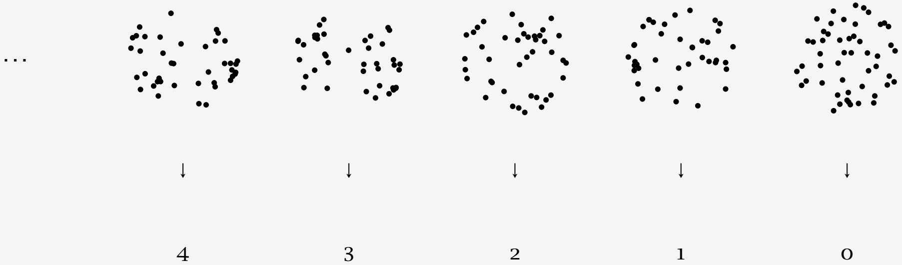
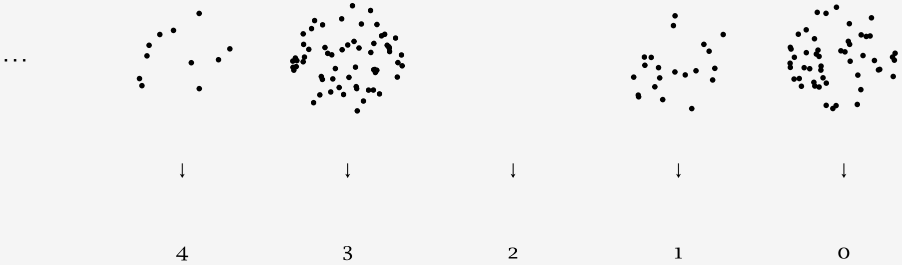
Questioning Speech Acts
Konstanz, September 14 – 16, 2017

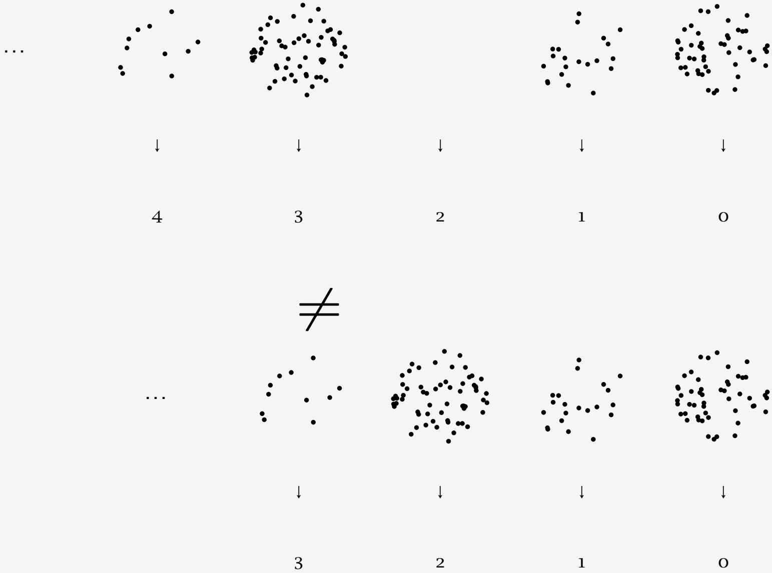
A pointwise ranking function



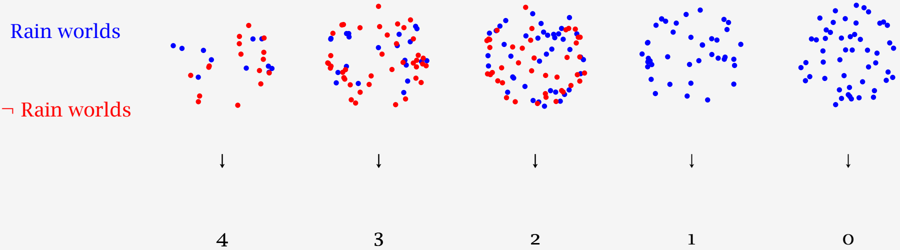
Another pointwise ranking function



Numbers matter



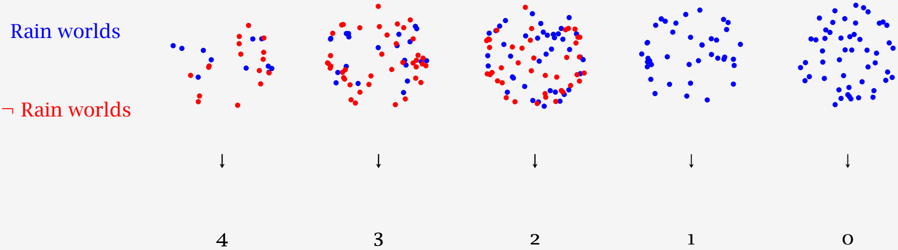
Lifting to propositions



Definition 2: for any non-empty $A \subseteq W : \kappa^{\uparrow}(A) = \min \{\kappa(w) \mid w \in A\}$

- $\kappa^{\uparrow}($**It is not raining**$) = 2$
- $\kappa^{\uparrow}($**It is raining**$) = 0$

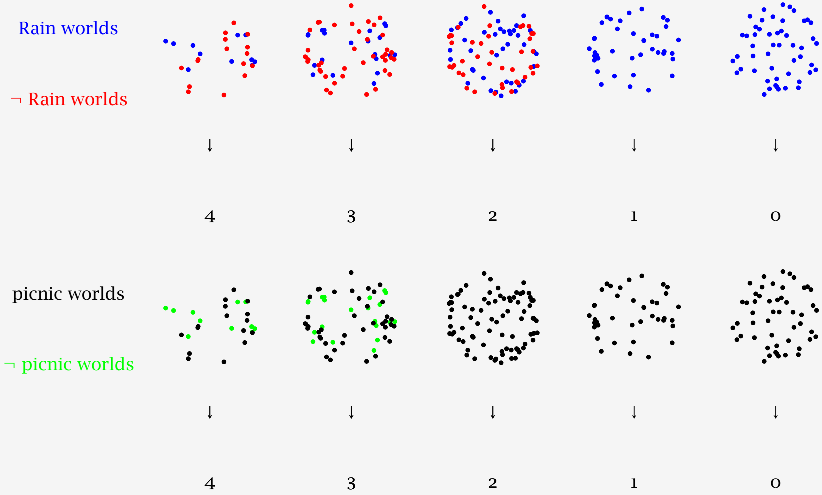
Positive ranks



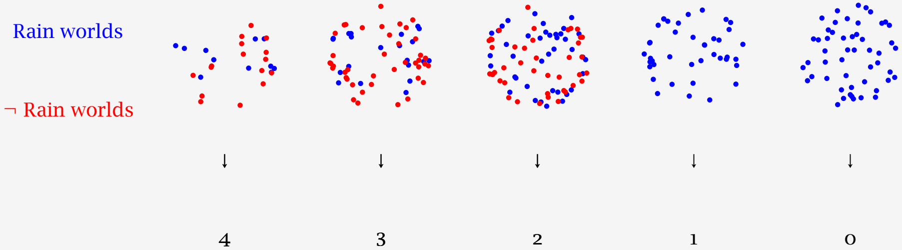
Definition 3: Positive rank = negative rank of complement

- κ^{+}(**It is not raining**) $= 0$
- κ^{+}(**It is raining**) $= 2$

Intersecting propositions



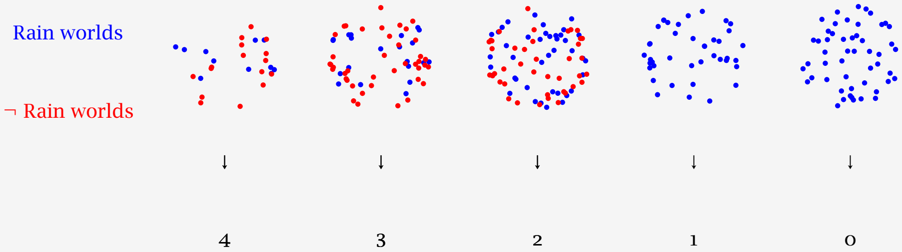
Positive ranks



Definition 3: Positive rank = negative rank of complement

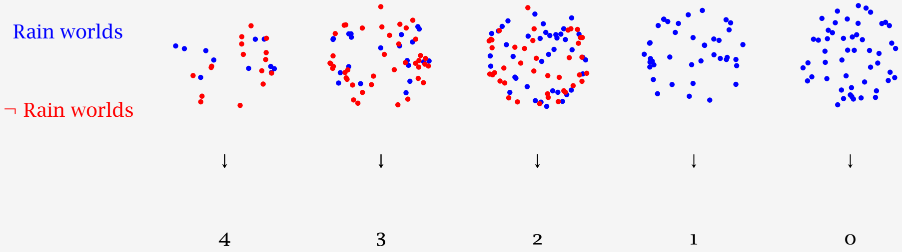
- κ^+(**It is not raining**) $= 0$
- κ^+(**It is raining**) $= 2$

Hedging explained



- Suppose $\beta = 0$ and $\alpha = 3$.
- Then the above rating function can satisfy $C_a + \text{Bel}_a(\phi)$.
- But it does not satisfy $C_a + \phi$.

Moore's paradox explained

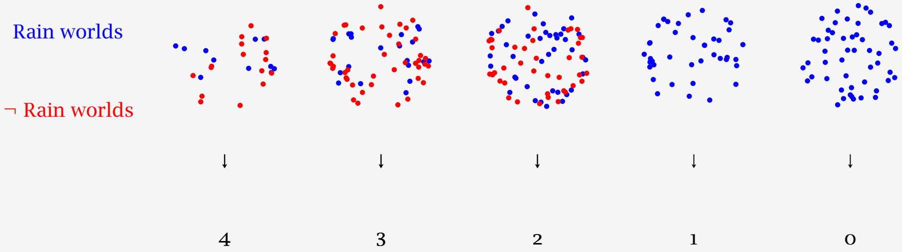


(1) $\neg Rain \wedge \text{Bel}_a(Rain)$

Suppose: $\beta = 0, \alpha = 1$

- Asserting $\neg Rain$ requires $\kappa^+(\neg Rain) > 1 > 0$
- Asserting $\text{Bel}_a(Rain)$ requires $\kappa^+(Rain) > 0$
- Impossible!

Strength explained



(2) $\text{Bel}_a(\neg Rain) \wedge \text{Bel}_a(Rain)$

Suppose: $\beta = 0, \alpha = 1$

- Asserting $\text{Bel}_a(\neg Rain)$ requires $\kappa^+(\neg Rain) > 0$
- Asserting $\text{Bel}_a(Rain)$ requires $\kappa^+(Rain) > 0$
- Impossible!

Closure explained