**Executed: getCurvesForExp2Seqs('ABC', maxMotifLength = 3, delta = 0.75, alpha = 0.35)**

**Original (wrong) definition of l\_x = log(length(seq)), should be length(seq)**

**A close up of a map

Description automatically generated**

**Executed: getCurvesForExp2Seqs('ABC', maxMotifLength = 3, delta = 0.75, alpha = 0.35)**

**Fixed findRandomness: l\_x was defined as length(seq)**

A close up of text on a white background

Description automatically generated

Random(X) of sequences normalized by Random(X\_max) of that length. Note that there is an effect of a violation event, but that effect diminishes as a function of when it occurs. Also note that now random(X) can take negative values. The problem of a violation only causing a bump and then staying at that level (s. first figure) is fixed.

**Executed: getCurvesForExp2Seqs('ABC', maxMotifLength = 3, delta = 0.75, alpha = 0.35)**

**l\_x was defined as log(length(seq)), curves unnormalized**

A picture containing text

Description automatically generated

**Executed: getCurvesForExp2Seqs('ABC', maxMotifLength = 3, delta = 0.75, alpha = 0.35)**

**Random(x) was defined as -length(seq) – log(P(x|regular)), curves unnormalized**

A picture containing text

Description automatically generated

Random(x) curves go down for deterministic sequences because -l(x) dominates log(P(X|regular)). For random sequences, the two approximately cancel / go up slightly.

**Executed: getCurvesForExp2Seqs('ABC', maxMotifLength = 3, delta = 0.75, alpha = 0.35)**

**Random(x) was defined as -length(seq) – log(P(x|regular))/log(3), curves unnormalized**

A picture containing text

Description automatically generated

Random(x) curves go down for deterministic sequences because -l(x) dominates log(P(X|regular)). For random sequences, the two approximately cancel / go up slightly.

**Desired behavior:**

* **Familiarity preference flips to novelty preference**

**A screenshot of text

Description automatically generated**