

Transform elements from the real line (ξ_1, ξ_2, ξ_3) to an ordered probability space $(\theta_1 < \theta_2 < \theta_3)$

0 is the lower bound of the smallest element

With 3 elements in the stick, the smallest one cannot be larger than $\frac{1}{3}$

Step 1:
 $\theta_1 = \left(\frac{1}{3} - 0\right) \Phi(\xi_1) + 0$

θ_1 is the lower bound for the second element

The upper bound is the length of the remaining stick $(1 - \theta_1)$ divided by the number of remaining elements

Step 2:
 $\theta_2 = \left(\frac{(1 - \theta_1)}{2} - \theta_1\right) \Phi(\xi_1) + \theta_1$

Step 3:
The value of the last element is the remainder of the stick

