

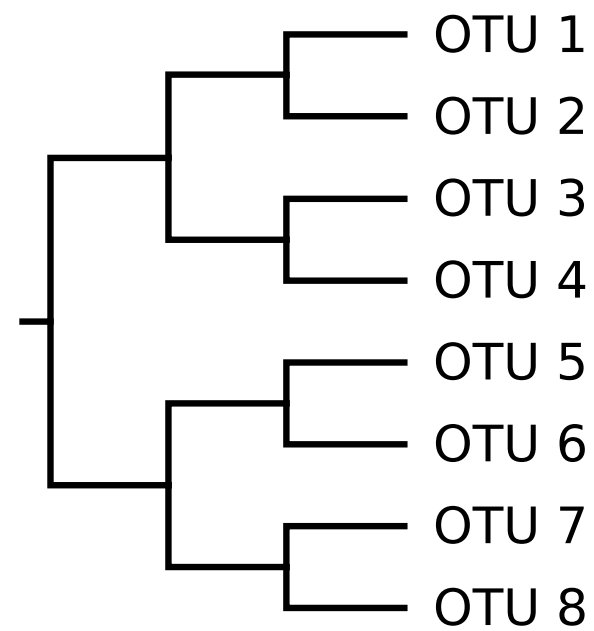
a

OTU Table

	S1	S2	S3	S4
OTU 1	1	1	1	1
OTU 2	1	1	1	1
OTU 3	1	1	2	2
OTU 4	1	1	2	2
OTU 5	0	0	3	0
OTU 6	0	0	1	4
OTU 7	3	3	0	0
OTU 8	3	3	0	0

Case

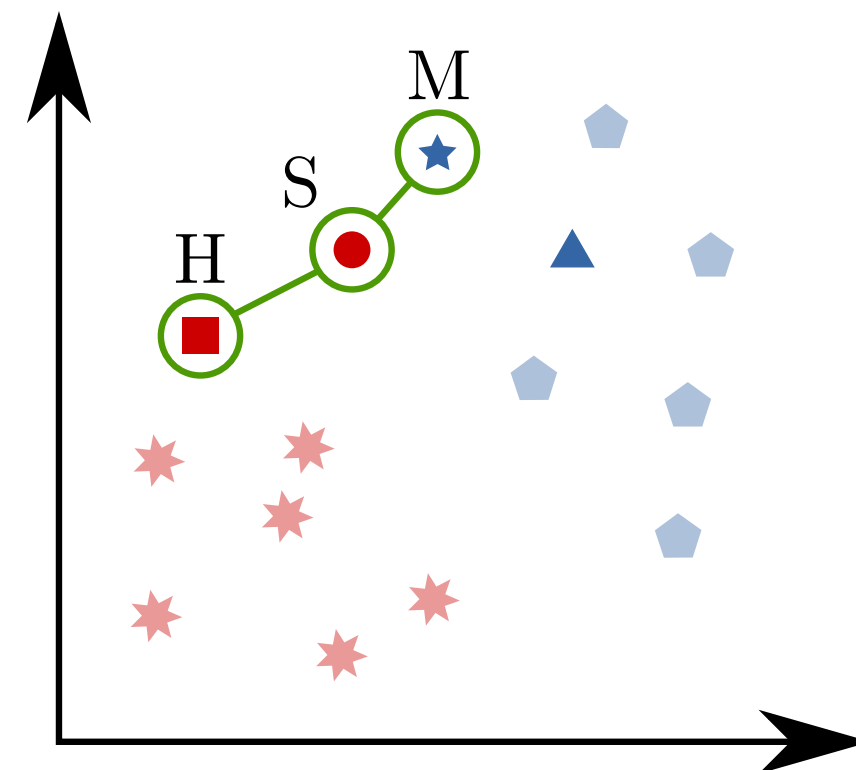
Control

Phylogenetic Tree  $T$ 

b



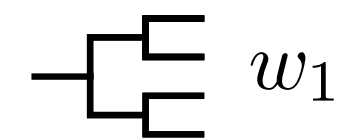
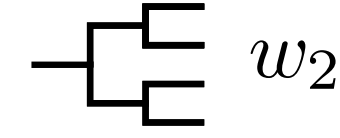
c



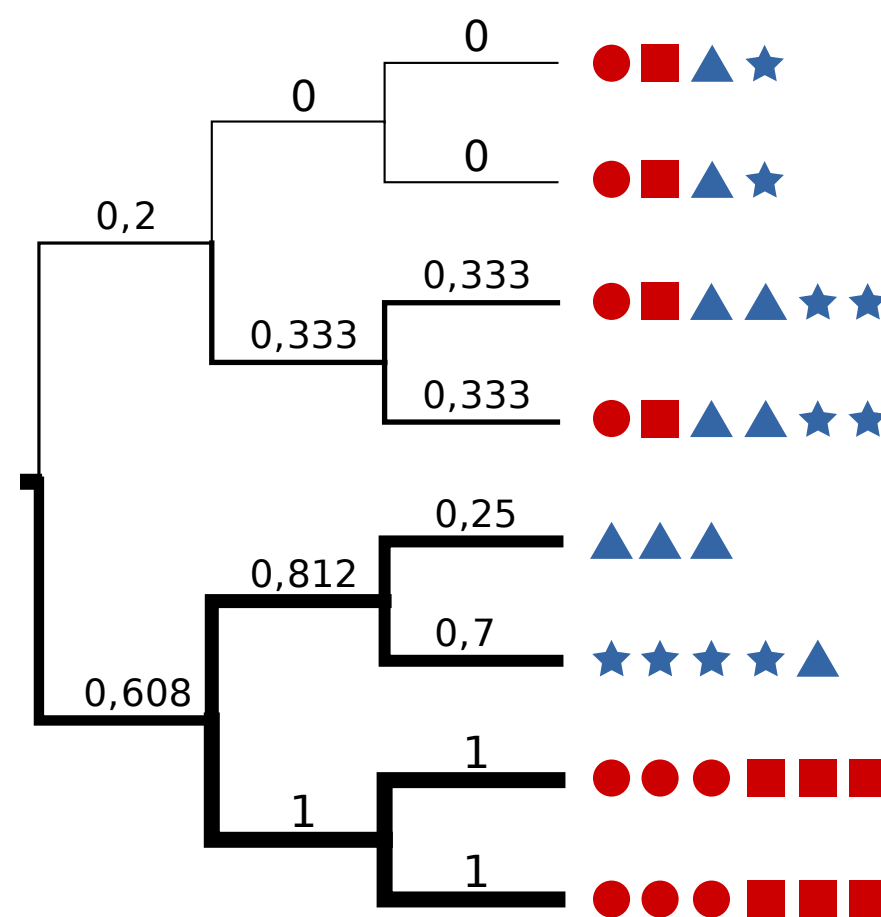
d

for each subtree  $T_i$  of  $T$ 

$$w_i = w_i - \frac{d(T_i, S, H)}{m} + \frac{d(T_i, S, M)}{m}$$

 $w_1$  $w_2$  $w_3$  $w_4$  $w_5$ ...  $w_i$ 

e



f

