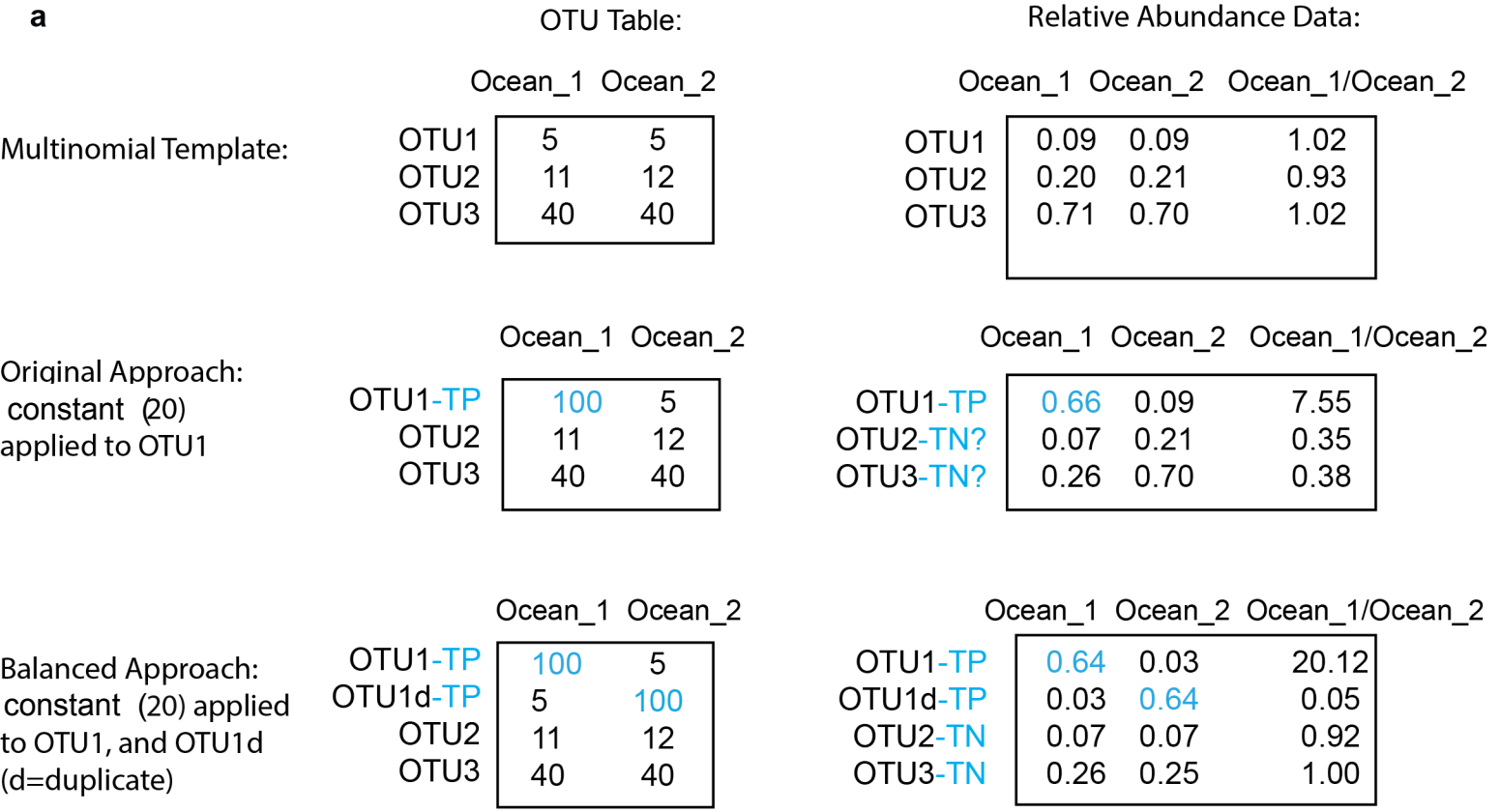
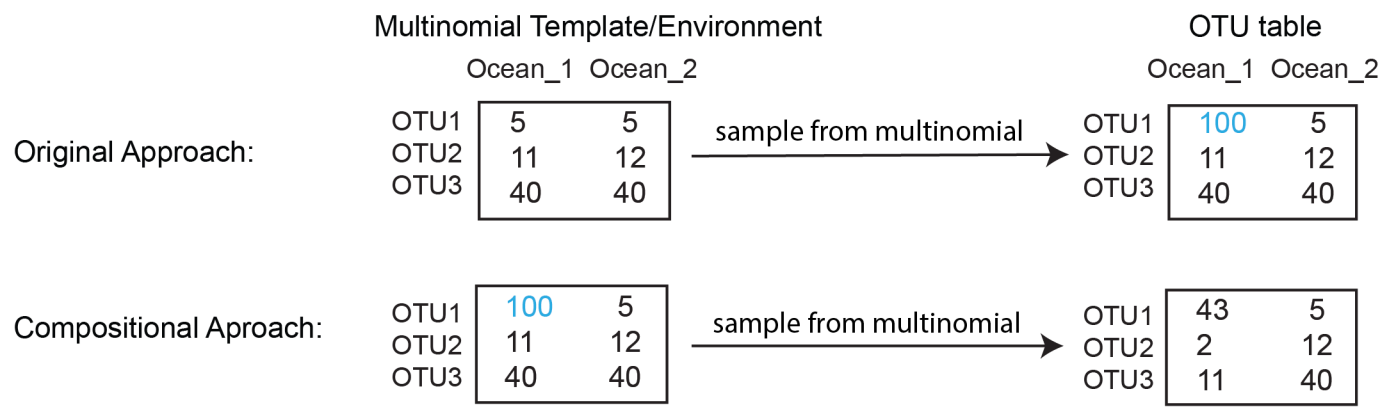
a


OTU Table:
Relative Abundance Data:
Multinomial Template:
Ocean_1 Ocean_2
OTU1 5 5
OTU2 11 12
OTU3 40 40
Ocean_1 Ocean_2 Ocean_1/Ocean_2
OTU1 0.09 0.09 1.02
OTU2 0.20 0.21 0.93
OTU3 0.71 0.70 1.02
Original Approach:
constant (20)
applied to OTU1
Ocean_1 Ocean_2
OTU1-TP 100 5
OTU2 11 12
OTU3 40 40
Ocean_1 Ocean_2 Ocean_1/Ocean_2
OTU1-TP 0.66 0.09 7.55
OTU2-TN? 0.07 0.21 0.35
OTU3-TN? 0.26 0.70 0.38
Balanced Approach:
constant (20) applied
to OTU1, and OTU1d
(d=duplicate)
Ocean_1 Ocean_2
OTU1-TP 100 5
OTU1d-TP 5 100
OTU2 11 12
OTU3 40 40
Ocean_1 Ocean_2 Ocean_1/Ocean_2
OTU1-TP 0.64 0.03 20.12
OTU1d-TP 0.03 0.64 0.05
OTU2-TN 0.07 0.07 0.92
OTU3-TN 0.26 0.25 1.00

b


Multinomial Template/Environment
OTU table
Ocean_1 Ocean_2
Original Approach:
OTU1 5 5
OTU2 11 12
OTU3 40 40
sample from multinomial
OTU1 100 5
OTU2 11 12
OTU3 40 40
Compositional Aproach:
OTU1 100 5
OTU2 11 12
OTU3 40 40
sample from multinomial
OTU1 43 5
OTU2 2 12
OTU3 11 40