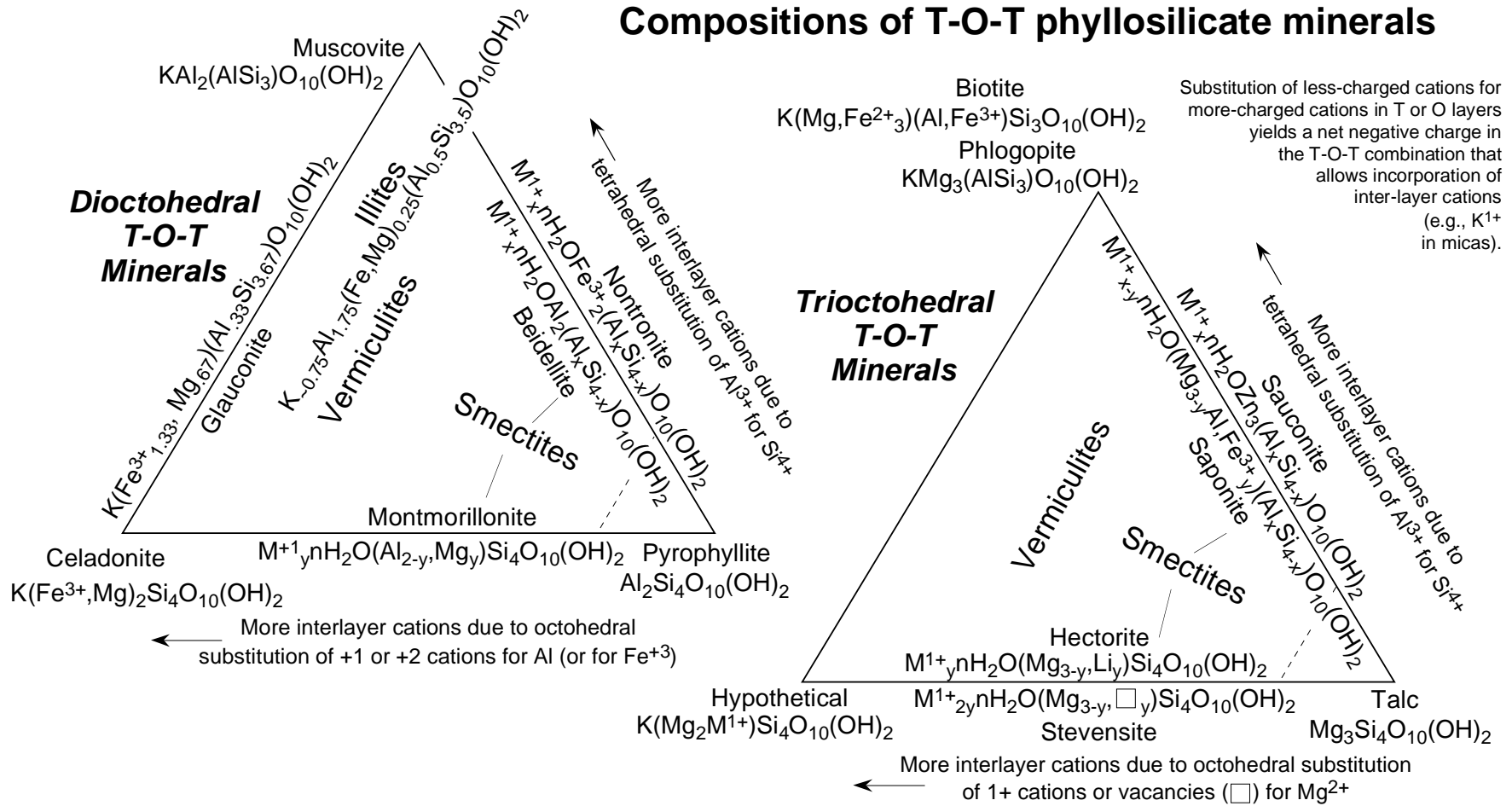
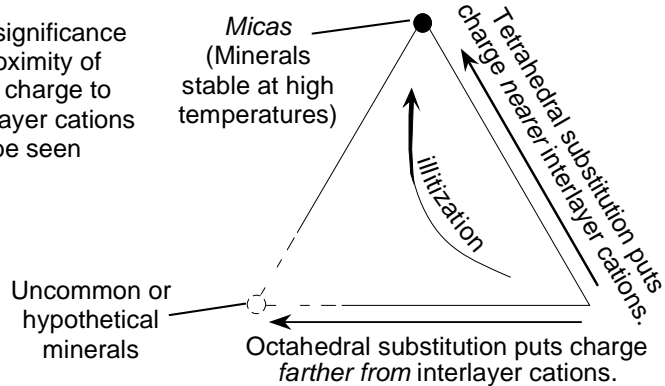


Compositions of T-O-T phyllosilicate minerals



Substitution of less-charged cations for more-charged cations in T or O layers yields a net negative charge in the T-O-T combination that allows incorporation of inter-layer cations (e.g., K^{1+} in micas).

The significance of proximity of layer charge to interlayer cations can be seen here:



Smectite = Montmorillonite + Beidellite + Nontronite + Hectorite + Stevensite + Saponite + Sauconite (+ others)
 = "Swelling Clays" = "Expandable Clays"
 = "Montmorillonite" in archaic broad sense of "montmorillonite"