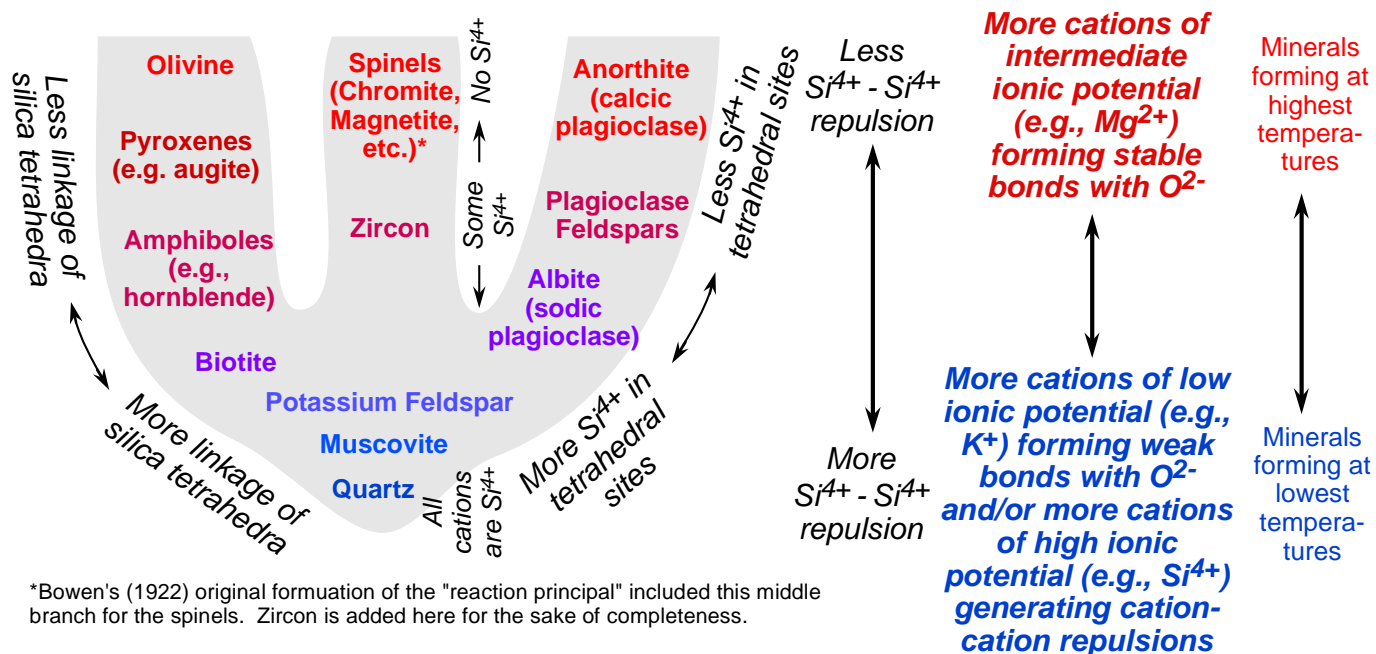


## Bowen's Reaction Series V: A summary explanation

This is the fifth of five pages explaining the order of the minerals in Bowen's Reaction Series. The usual **first minerals to form** are those rich in **cations of intermediate ionic potential**, which bond strongly to  $O^{2-}$  but don't have such highly focused charge that they set up cation-cation repulsions. The usual **later, or lower-temperature, minerals** either have **cations of low ionic potential**, which only bond weakly to  $O^{2-}$ , and/or they have the **cation of high ionic potential**,  $Si^{4+}$ , which generates cation-cation repulsions that destabilize their mineral structures at higher temperatures.



### Contours of ionic potential:

