

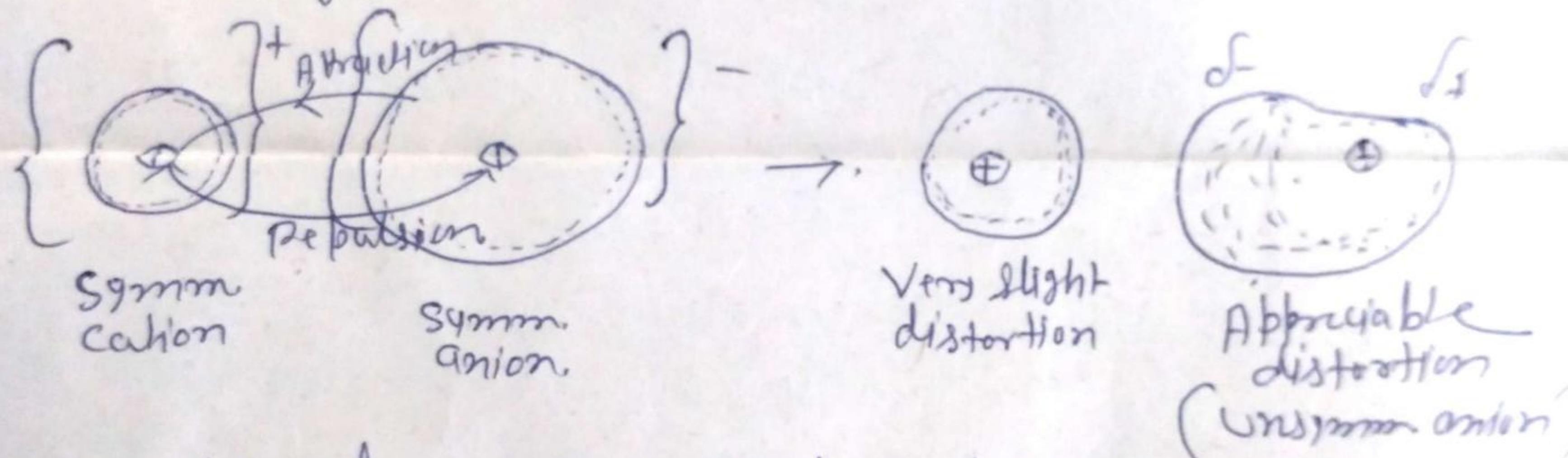
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# Polarisation

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(Change of ionic character to covalent character)

When ~~oppositi~~ two oppositely charged ions of unequal size approach each other closely (during formation of an electrovalent bond), the ion smaller in size attracts outermost  $e^-$  of the other ion and repels its nuclear charge. The net result is distortion or polarisation of the bigger ion. This distortion is usually done by the cation as its size is smaller than the anion. The electron cloud of anion no longer remain symmetrical but is elongated towards the cation.



The ability of a cation to polarise the nearby anion is called polarising power, and the tendency of an anion to get distorted or deformed or polarised by the cation is called polarisability.

Due to polarisation, sharing of electron occur between two ions to some extent and the bond shows some covalent character.

The magnitude of polarisation depends upon a number of factors or the increased covalent character is favoured by a no. of factors. These factors was suggested by Fajan and are known as Fajan's rule.