

The metallic part of the reagent gets complexed with C=O and the carbanion equivalent of alkyl(R^1) or H is transferred to the trigonal carbon from the side of R_s (route a) in preference to that of R_M (route b) to give (2).

Although no mechanistic rationalization has been claimed, it is reasoned that C=O being complexed with the reagent become effectively the bulkiest group and is thus better placed between R_s and R_M .

Felkin-Anh- Model:-

Cram's Rule although correctly predicts the stereochemical course of the reactions, often fails to give quantitative assessment regarding asymmetric induction. In that aspect Felkin-Anh- Model gives better interpretations.

In this model, two reactive conformations (A) and (B) (Fig-2) have been considered in which either the largest(R_L) or the most electron-withdrawing group at C_α is placed at right angle to the C=O double bond. Between the two, the first with R_M opposing C=O and R_s gauche to R is usually preferred.

The non-bonded interactions which involve R' and R_s (rather than R' and R_M) are thus minimized.