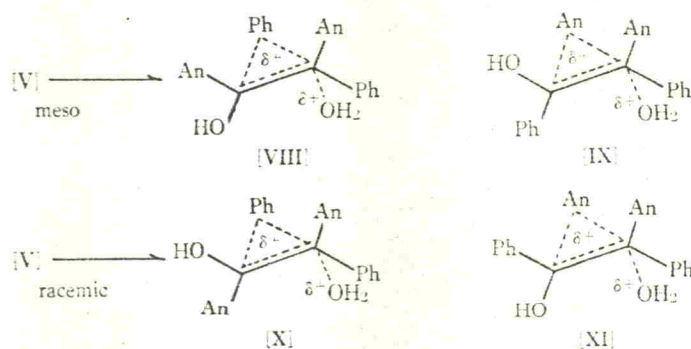


the different behaviors of meso and racemic form remain uncertain and should be elucidated in further investigation. According to the above considerations, the different migratory aptitudes in two isomers are most plausibly explained by the difference of the eclipsing of nonparticipating substituents in the transition states [VIII]~[XI].



In the transition state [VIII], which is formed from meso pinacol with a participating phenyl group, the largest substituents, the *o*-anisyl groups are cis. On the other hand, in [X], from racemic pinacol with a participating phenyl group, two *o*-anisyl groups are trans. Therefore, [VIII] should be less stable than [X]. Considering transition states with a participating *o*-anisyl group, [IX] and [XI], [IX], from meso form, should be more stable than [XI], from racemic form, because in [IX] the largest *o*-anisyl group and the smallest hydroxyl group are cis but in [XI] the *o*-anisyl group and the phenyl group are cis. For this reason, the migratory aptitude of the *o*-anisyl group should be larger in meso form than in racemic form. This prediction seems to be in accordance with what has been observed.