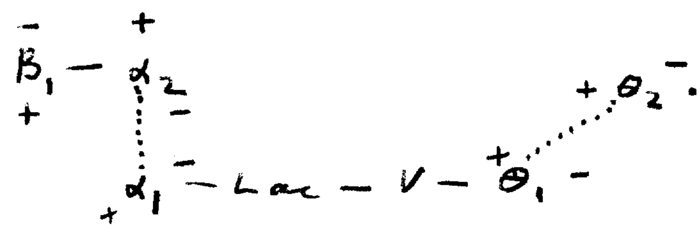
Spurious linkage.

Call B + M α_1 + α_2 resp.
and T & L θ_1 + θ_2 ~~resp.~~ resp.

1. $\alpha_1 - Lac - V - \theta_1$ is established.

Since B_1 is external to these, but does not segregate at random, it must be linked either to α_1 (extr.) or α_2:

I

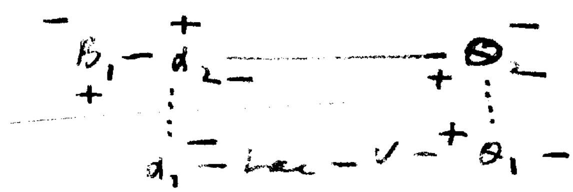


on either hypothesis, $\theta_1^- \geq \theta_1^+$ which is denied.

& $\alpha_1^- \geq \alpha_1^+$

and α_2 may be linked to θ_2:

II.



On scheme I, $\theta_2^- = \theta_2^+$ (i.e. either T^- or L^-).

and $\alpha_2^- = B_1^-$

Conceivably, $\alpha_2^- = M^-$ (no data). but neither T^- nor L^- = T^+ or L^+. ∴ n.g.

On scheme II $B_1^- \theta_2^- = \alpha_2^- > ++$.   data on B_1L, B_1T. freq.?? if $\alpha_2 = M$.

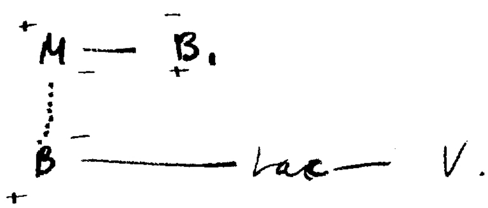
also possible: $\alpha_2 - B_1$ ——— θ

If there is a single linkage group, the map is consistent.

If there is more than one, with spurious linkage engendered by technique, call B-M α and T-L β. There is at least:

α_1 — Lac – V — θ_1.

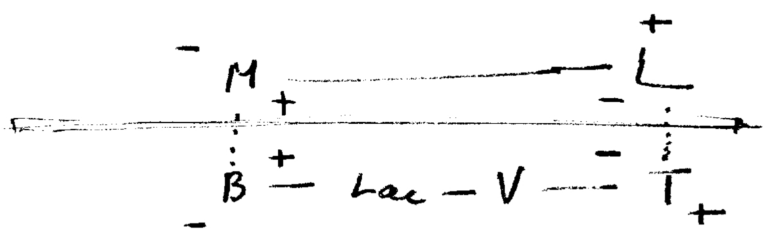
only alt for B_1 in view of ratio is:



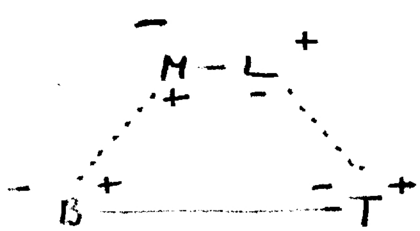
Then $M^+B_1^- = M^-B_1^+$
exc. for recomb.

since M^- is not $= B_1^-$
n.g.

or



M^+L^- (or M^+T^-) have to be shown to be infrequent. + v.v.



$\longrightarrow L^- \gg L^+$

or

... are only alternatives.