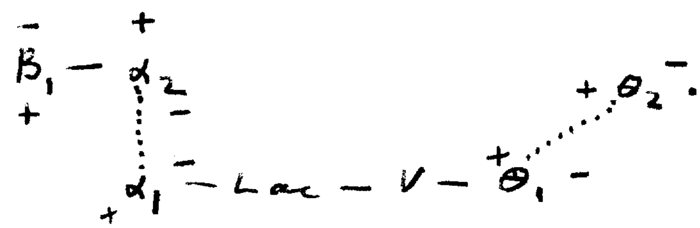
Spurious linkage. Call B + M α_1 + α_2 resp. and T & L θ_1 + θ_2 ~~resp~~ resp.

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 (extra.) or α_2:

I

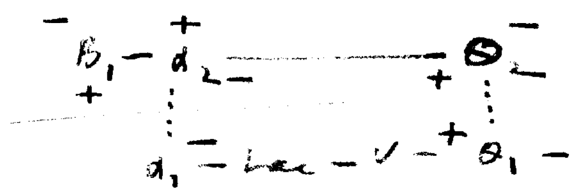


on either hypothesis, $\theta_1^- \geq \theta_1^+$ which is denied.

and α_2 may be linked to θ_2:

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

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 $\alpha_2 = M$.

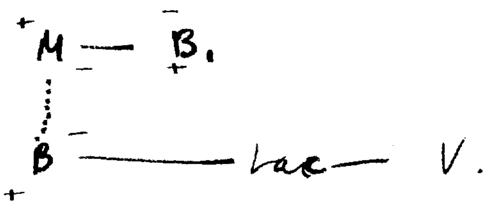
also possible: $\alpha_2 - B_1 ——— \theta$

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:

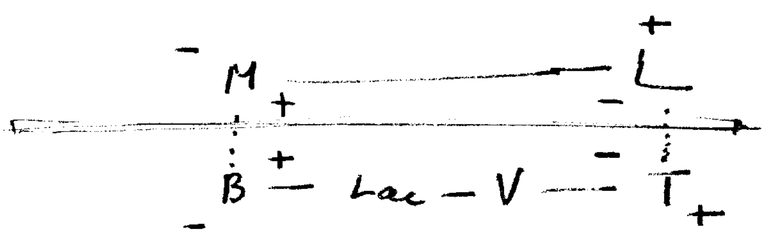
$$\alpha_1 — Lac — V — \theta_1 .$$

only alt for B_1 in view of ratio is:

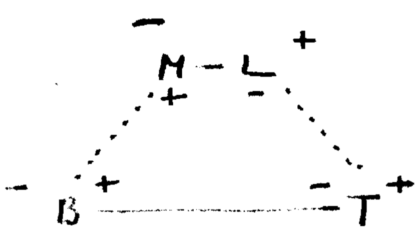


Then $M^+ B_1^- = M^- B_1^+$ exc. for recomb. since M^- is not $= B_1^-$. n.g.

or



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



$\rightarrow L^- \gg L^+$

or

..are only alternatives.