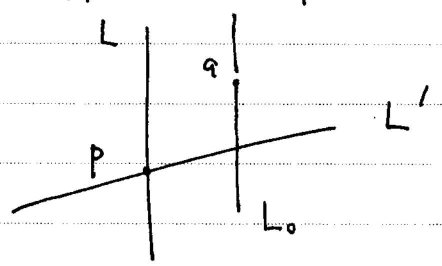
in $\mathbb{P}^3$ meets L_0 in a point, which must be a point of either L or L'; so one of the two is an A-line and the other a B-line.

Pf Let $\langle L, L' \rangle$ be the plane that L & L' span.

① $\langle L, L' \rangle \cap L_0 \ni q$.

Suppose $q \notin L \cup L'$.



$\Rightarrow$ $T_p(\mathcal{S}) \supset \langle L, L' \rangle$ and $q \in T_p(\mathcal{S}) \cap L_0 \subset T_p(\mathcal{S}) \cap \mathcal{S}$

$\Rightarrow$ By the previous argument, $\overline{pq} \subset T_p(\mathcal{S}) \cap \mathcal{S}$. $\Rightarrow$

Contradiction to the fact that $T_p(\mathcal{S}) \cap \mathcal{S} = L \cup L'$.

$\Rightarrow$ $q \in L \cup L'$.

② $\langle L, L' \rangle \supset L_0$

$\Rightarrow$ Again, by the argument ①, $L_0 \subset L$ or $L_0 \subset L'$ since $\langle L, L' \rangle \cap L_0 \subset L \cup L'$.

If $L_0 \cap L \neq \phi$, then $L_0 \cap L' = \phi$. Otherwise,

$L_0 \subset \langle L, L' \rangle$. $\Rightarrow$ $L_0 = L$ or $L_0 = L'$ Contradiction.

$\Rightarrow$ $L_0 \cap L' = \phi$ $\Rightarrow$ One of the two is an A-line and the other a B-line. ⏌

Conversely, if $L \neq L_0$ is an A-line and L' a B-line,