Thus Q is singular — it is the cone over a conic curve, with vertex p.

⌈ By the result on P???, $Q = V_3 \cap (\bigcup_{x\in L} T_x(X))$
$= \bigcup_{x\in L} (V_3 \cap T_x(X)) = \bigcup_{x\in L} \tilde{f}_L(\pi^{-1}(x))$

= The set of lines passing $p = (X_0^2 + X_1^2 + X_2^2 = 0)$
= The cone over a smooth conic curve.

⌋

Away from the inverse image $\tilde{f}_L^{-1}(p)$, $\tilde{f}_L$ is as before one-to-one except on the locus of lines in X meeting L and as we shall see later, the vertex p of Q lies in the closure E_L of the image of this locus.

⌈ $\tilde{f}_L|_{\pi^{-1}(x)} : \pi^{-1}(x) \longrightarrow \tilde{f}_L(\pi^{-1}(x)) = V_3 \cap T_x(X)$ is isomorphic since $\pi^{-1}(x)$ & $V_3 \cap T_x(X)$ are isomorphic to $\mathbb{P}^1$, and $L = \{[*,*,0\cdots 0]\}$ $V_3 = \{[0,0,*\,*\cdots *]\}$ $\Rightarrow \tilde{f}_L(\eta_1) \neq \tilde{f}_L(\eta_2)$ if $\eta_1 \neq \eta_2 \in \pi^{-1}(x)$. $\tilde{f}_L(\pi^{-1}(x)) \cap \tilde{f}_L(\pi^{-1}(x')) =$
$V_3 \cap T_x(X) \cap V_3 \cap T_{x'}(X) = V_3 \cap T_x(X) \cap T_{x'}(X) = V_3 \cap (\bigcap_{x\in L} T_x(X))$

$= p$, and since $\tilde{f}_L(L')$ is $\overline{L, L'} \cap V_3$, $\tilde{f}_L$ is one-to-one except on $\bigcup_{L'\in B_L} L' \cup \tilde{f}_L^{-1}(p)$.

⌋