component C_0, which must be a line or a conic.

$\ulcorner$ $n=3$, $d=7$.

$\Rightarrow$ $\dim|\mathcal{J}_{P_0}(3)| = 2 + \omega$ $\Rightarrow$ If $\omega=0$, by 7.13, the points in Γ_0 impose independent conditions on the linear system $|\mathcal{O}_{\mathbb{P}^2}(3)|$. So by assuming $\dim|\mathcal{J}_{P_0}(3)| \geq 3$, and that any ....., we want to get a contradiction $\lrcorner$

"Comments on "If there are two cubics $C, C' \in |\mathcal{J}_{P_0}(3)|$ without a common component"

To use the reciprocity formula I, we need the condition that C should intersect with C' transversely. But I could not prove that C intersects with C' transversely if C & C' don't have a common component. By the remark on P716, more explanations are required. Maybe the authors again are not correct. Anyway, I don't want to judge the authors, but I want to train myself."

Since the linear system of lines has dimension 2, C_0 can not be a conic and so must be a line.

$\ulcorner$ Suppose C_0 is a conic. $\Rightarrow$ $\exists$ a homogeneous polynomial τ on $\mathbb{P}^2$ s.t $(\tau=0) = C_0$. $\deg \tau = 2$.

Since we assume $\dim|\mathcal{J}_{P_0}(3)| \geq 3$, there exists linearly independent $\sigma_1, \sigma_2, \sigma_3, \sigma_4$ homogeneous polynomials of deg 3. s.t $\sigma_1 = \cdots = \sigma_4 = 0$ on Γ_0