$= t_{\bar{i}j}(\alpha)$ is given as follows:

$$T(\alpha\, dz_1 \wedge \cdots d\hat{z}_i \cdots \wedge dz_n \wedge d\bar{z}_1 \wedge \cdots \wedge d\hat{\bar{z}}_j \wedge \cdots d\bar{z}_n)\, \Phi$$

$$= T(\alpha\, dz_1 \wedge \cdots \quad) \left(\frac{\sqrt{-1}}{2}\right)^n (-1)^{\frac{n(n-1)}{2}} \frac{1}{n!}\, dZ \wedge d\bar{Z}$$ see p 80

$$= \frac{\sqrt{-1}}{2}\, t_{\bar{i}j}(\alpha)\, dz_i \wedge d\bar{z}_j \wedge dz_1 \cdots d\hat{z}_i \cdots d\hat{\bar{z}}_j \cdots d\bar{z}_n$$

$$= \frac{\sqrt{-1}}{2}\, t_{\bar{i}j}(\alpha)\, dz_1 \cdots \wedge d\bar{Z}\, (-1)^{n+i+j-1}.$$

$$\Rightarrow \quad t_{\bar{i}j}(\alpha) = \left(\frac{\sqrt{-1}}{2}\right)^{n-1} C_n\, T(\alpha\, d\hat{z}_i\, d\hat{\bar{z}}_j), \text{ where } C_n = \frac{(-1)^{\frac{n(n-1)}{2}}}{n!}.$$

$$\Rightarrow \quad t_{\bar{i}j}(\bar{\alpha}) = \left(\frac{\sqrt{-1}}{2}\right)^{n-1} C_n\, T(\bar{\alpha}\, dz_1 \cdots d\hat{z}_i \cdots d\hat{\bar{z}}_j)$$

$$\Rightarrow \quad \overline{t_{\bar{i}j}(\bar{\alpha})} = \left(\frac{\sqrt{-1}}{2}\right)^{n-1} (-1)^{n-1} C_n\, \overline{T(\bar{\alpha}\, d\hat{z}_i \cdots d\hat{\bar{z}}_j \cdots)}$$

$$= \left(\frac{\sqrt{-1}}{2}\right)^{n-1} (-1)^{n-1} C_n\, T(\alpha\, d\hat{\bar{z}}_i \cdots d\hat{z}_j \cdots)$$

$$= \left(\frac{\sqrt{-1}}{2}\right)^{n-1} (-1)^{n-1} C_n\, T(\alpha\, d\hat{z}_j \cdots d\hat{\bar{z}}_i)\, (-1)^{(n-1)^2}$$

$$= \left(\frac{\sqrt{-1}}{2}\right)^{n-1} (-1)^{(n-1)^2+(n-1)} C_n\, T(\alpha, \cdots d\hat{z}_j \cdots d\hat{\bar{z}}_i \cdots)$$

$$= t_{\bar{j}i}(\alpha)$$

$$\Rightarrow \quad \overline{t_{\bar{i}j}}(\alpha) = t_{\bar{j}i}(\alpha) \iff T \text{ is real.}$$

Define T positive by

$$C_n (\sqrt{-1})^{n-p} \left(\frac{1}{2}\right)^{n-1} T(\eta \wedge \bar{\eta}) \geq 0 \quad \text{for } \eta \in A_c^{n-p,0}(M)$$

Compare with P66 Definition Lelong.