$\Rightarrow \quad \bar\partial K = \pm T_\Delta^0$

Actually we obtain the following

$$\bar\partial K(\pi_1^*\psi \wedge \pi_2^*\varphi) = (-1)^p T_\Delta^0(\pi_1^*\psi\wedge\pi_2^*\varphi) = (\pm) T_\varphi(\psi)$$

$$\bar\partial K(\pi_1^*\psi\wedge\pi_2^*\varphi) = -K_\varphi(\bar\partial\psi) + (-1)^{q-1} K_{\bar\partial\varphi}(\psi)$$
$$= \pm T_\varphi(\psi)$$

"Comment on bitype $(0,*), (n, n-*)$".

The current $T_\Delta^0(\varphi) = \int_\Delta \sum_q \varphi^{(n,n-q),(0,q)}$ is well-defined.

Suppose we have $T(\varphi) = \int_\Delta \varphi^{(n,0)(0,q)}$

$$= \int_{M\times M} (-1)^n \pi_1^*\psi_{0,n,\mu} \wedge \pi_2^*\psi^*_{n,0,\nu} \wedge \varphi \quad \text{—— ①}$$

Consider $\bar\partial T(\varphi) = \pm T(\bar\partial\varphi)$

$$= \int_{M\times M} (-1)^n \pi_1^*\psi_{0,n,\mu}\wedge\pi_2^*\psi^*_{n,0,\nu}\wedge\bar\partial\varphi \quad \text{—— ②}$$

$$= \pm\int_{M\times M} \bar\partial(\pi_1^*\psi_{0,n,\mu}\wedge\pi_2^*\psi^*_{n,0,\nu})\wedge\varphi = 0 \quad \text{— ③}$$

$[\pi_1^*\psi_{0,n,\mu}\wedge\pi_2^*\psi^*_{n,0,\nu}]$ is a cohomology class in $H^{n,n}_{\bar\partial}(M\times M)$

Ah! When we compute ①, ② & ③, we have to use a representative of $[\pi_1^*\psi_{0,n,\mu}\wedge\pi_2^*\psi^*_{n,0,\nu}]$, i.e. a form representing the form. Thus we have a lot of choice and we can not have a representative form only from $A^{(0,n)(n,0)}$ because the current must be independent of the choice of forms representing $[\pi_1^*\psi_{0,n,\mu}\wedge\pi_2^*\psi^*_{n,0,\nu}]$

Not so satisfactory !