

## GENERALIZED INTEGRATION OPERATOR BETWEEN THE WEIGHTED DIRICHLET TYPE AND ZYGMUND SPACES

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ABSTRACT. Let  $H(\mathbb{D})$  be the space of all analytic functions on the open unit disc  $\mathbb{D}$  in the complex plane  $\mathbb{C}$ . In this paper, we investigate the boundedness and compactness of the generalized integration operator

$$I_{g,\varphi}^{(n)}(f)(z) = \int_0^z f^{(n)}(\varphi(\xi))g(\xi)d\xi, \quad z \in \mathbb{D},$$

between weighted Dirichlet type spaces and Zygmund spaces, where  $\varphi$  is an analytic self-map of  $\mathbb{D}$ ,  $n \in \mathbb{N}$  and  $g \in H(\mathbb{D})$ .

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