ERRATA

I. Glicksberg and J. Wermer, Remark on Measures Orthogonal to a Dirichlet Algebra, vol. 30 (1963).

We can also prove the Lemma of §5 without use of Proposition 6, by appealing to the following result about measures in the plane, which is proved by Bishop in [3]:

Let μ be a measure of compact support in the z-plane and $|\mu|$ its total variation. Assume that

$$\int \frac{d\mu(z)}{z-\alpha} = 0 \quad \text{whenever} \quad \int \frac{d \ |\mu|}{|z-\alpha|} < \ \infty \ .$$

Then $\mu = 0$.

Proof of Lemma. Let α be any point in the plane with $\int (d|\sigma|)/(|z-\alpha|) < \infty$. If α lies in a bounded complementary component of X or on X, put $C = \int d\sigma/(z-\alpha)$ and set

$$\nu = (z - \alpha)^{-1} \cdot \sigma - C \cdot \lambda_{\alpha} .$$

Then for $n=0,1,2,\cdots$, we get $\int (z-\alpha)^n \cdot d\nu = 0$. Thus $\nu \perp P(X)$. By Proposition 2, then, $(z-\alpha)^{-1} \cdot \sigma \perp P(X)$ and hence $\perp 1$. Thus $\int d\sigma/(z-\alpha) = 0$. If, on the other hand, α lies in the unbounded complementary component of X, then $(z-\alpha)^{-1} \varepsilon P(X)$, and so again

$$\int \frac{d\sigma}{z - \alpha} = 0.$$

By the result on measures stated above, it follows that $\sigma = 0$.

J. W. Moeller, Translation Invariant Spaces with Zero-free Spectra, vol. 31(1964).

Formula (3.8) now reads:

$$(T^{-1}\tilde{l})(x) = \frac{1}{2\pi i} \int_{|\lambda| = \rho} \lambda^{-1} (R_{\lambda}\tilde{l})(x) \ d\lambda$$

where

$$R_{\lambda} = (T - \lambda I)^{-1}, \cdots$$

This formula should actually read

$$(T^{-1}\tilde{l})(x) \,=\, \frac{1}{2\pi i} \int_{|\lambda|^{-1}=\rho} \, \lambda^{-1}(R_\lambda \tilde{l})(x) \,\, d\lambda \,, \label{eq:tau_lambda}$$

where

$$R_{\lambda} = (T - \lambda^{-1}I)^{-1}, \cdots.$$