# Errata in “Modern approaches to the invariant-subspace problem”

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May 28, 2016

**If you find any more, please let us know!**

Page 87, line 1. ‘less that’ should be ‘less than’.
Page 92, first displayed equation. The final $|h(z)|^2$ should be just $|h(z)|$.
Page 154, line 5, should read $\phi(T)f = \sum_{n\in\mathbb{Z}} \hat{\phi}(n)T^n f$.
Page 163, end of proof of Theorem 5.4.4. A better way to show that $\Delta(f, 1/q) = 0$ on $S$ implies non-cyclicity is to notice that $\Delta(\phi, 1/q) = 0$ on $S$ for all $\phi$ in the cyclic subspace generated by $f$. We may suppose that $S \subset (0, 1/q)$, and then note that for the function $g = \chi_{(0,1/q)}$ the determinant $\Delta(g, 1/q)$ is just a nontrivial polynomial on $(0, 1/q)$, and hence nonzero a.e. So $g$ is not in the cyclic subspace generated by $f$.
Page 177, Lemma 6.2.6. The hypothesis on $S$ should be that it is not the sum of a multiple of the identity and a compact operator.
Similarly, the remark following the lemma should read “Clearly, the case that $S$ is a multiple of the identity plus a compact operator is covered by Theorem 6.1.2.”
Page 187, Line -11: It says $\|Tz_n - t_0\|$, but it should be $\|Bz_n - t_0\|$.
Page 187, Line -1: The instances of $t_0$ in that line should be $t_1$.
Page 188, Line 2: It says $Ax_0 - t_0 = Ax_0' - t_0$, but $t_0$ should be $t_1$ in both instances.
Page 199, Line -6. It says $f_0\chi_{X_1^{(1)}}$, but it should be $f_0\chi_{X_1^{(2)}}$.
Pages 222–224. As pointed out by Prof. L. Kérchy, there is a problem in Lemmas 8.3.5 and 8.3.6, as $B^j K_B$ is only invariant under $C_\phi^*$ for $j = 0$ (in general, it fails to be invariant by a rank-one perturbation). Theorem 8.3.7 is correct as stated, but it seems that the proof in [156] is the simplest available at present.