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CORRECTION TO
“A NOTE ON AZUMAYA’S THEOREM”

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$e_\alpha\Lambda$ in the seventh line from bottom on Page 158 should be read $e_\alpha r(N)$. To complete the proof of Proposition 1, the following should be added to the end of the proof of Proposition 1.

Nextly we will show that if Λ is a left self cogenerator ring the left socle of Λ contains the right socle of Λ . Let S_l (resp. S_r) denote the left (resp. right) socle of Λ . Let $x \in \Lambda$ such that $x\Lambda$ is a minimal right ideal, and I be a maximal right ideal of Λ which contains $l(x)$. Then Λ/I is isomorphic to some $I_\beta = \Lambda y_\beta$, and we have a homomorphism $\Lambda x \rightarrow \Lambda y_\beta$ which maps x to y_β . Then the same argument as the proof of Lemma 3 shows that $y_\beta\Lambda \subseteq x\Lambda$. Since $x\Lambda$ is minimal, $y_\beta\Lambda = x\Lambda$, and $x = y_\beta z$ for some $z \in \Lambda$. Then Λx is minimal, since it is a homomorphic image of Λy_β which is a minimal left ideal. Hence $x \in S_l$, and we see $S_r \subseteq S_l$.

Since $r(N) \supseteq S_l$, $r(N) \supseteq S_r$. Then Λ is an essential extension of $r(N)$ as right ideal, since Λ is an essential extension of S_r by Lemma 3. Consequently $e_\alpha\Lambda$ is an essential extension of $e_\alpha r(N)$, and we see $e_\alpha\Lambda$ is an essential extension of $x_\alpha\Lambda$.

