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CORRECTION TO "DISCRETE SERIES CHARACTERS AND THE LEFSCHETZ FORMULA FOR HECKE OPERATORS"

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We would like to thank the referee for spotting an error in the formulation of Lemma 1.1(b) in our paper published in Volume 89, Number 3, of the *Duke Mathematical Journal.* We fixed this error and modified Lemma 1.2 and Corollary 1.3 accordingly. Unfortunately, due to an unlikely chain of events, the corrected version of our manuscript was not the one that was typeset, and thus the following corrections are needed. Please accept our apologies.

(A) On page 482 both the statement and proof of Lemma 1.1(b) should be modified. Part (b) of Lemma 1.1 should read "Consider the difference $|R^+| - |R_\omega^+|$. If $\mathbb{R}\omega$ contains a coroot, this difference is odd. If $\mathbb{R}\omega$ does not contain a coroot and if $-1_{X/\mathbb{R}\omega} \in W(R_\omega)$, then this difference is even."

(B) The proof of Lemma 1.1(b) should read "Now we prove (b). First suppose that $\mathbb{R}\omega$ contains a coroot $\alpha^\vee$ and let $w \in W$ denote the reflection in $\alpha^\vee$. We consider the action of w on the set $R/\pm$ obtained from R by taking the quotient by the action of the group $\{\pm 1\}$. Since $w^2 = 1$, we see that $|R^+|$ has the same parity as the number of fixed points of w on $R/\pm$. Let $\beta \in R$. Then $w\beta = \pm\beta$ if and only if $\beta \in R_\omega$ or $\beta^\vee \in \mathbb{R}\omega$. (Of course these alternatives are mutually exclusive.) Therefore the number of fixed points of w on $R/\pm$ is $|R_\omega^+| + 1$, which shows that $|R^+| - |R_\omega^+|$ is odd, as desired."

(C) The statement of Lemma 1.2 on page 484 should be modified as follows. The first sentence in the statement, namely, "Fix $x \in X$," should be replaced by "Let x be a regular element in X." The last sentence in the statement of Lemma 1.2, which begins "Moreover, $\tilde{\lambda}$ is R_ω-regular ...," should be replaced by "Moreover, $\tilde{x}$ is regular relative to R_ω and $\tilde{\lambda}$ is R_ω-regular."

(D) The proof of Lemma 1.2 should be modified as follows. On page 485 the sentence on line 5, namely, "From parts (b) and (c) ...," should be replaced by "From Lemma 1.1(c) we see that $\varepsilon(C, C')$ is -1 if $|R^+| - |R_\omega^+|$ is odd and is 1 otherwise." Moreover, a new paragraph should be added to the end of the proof, after "... coincides with $-2\psi_{R_\omega}(C_0^\omega, \tilde{x}, \tilde{\lambda})$," as follows.

"Thus we have shown that

$$\psi(C_0, x, \lambda) - \psi(C_0, x, \lambda') = \begin{cases} -2\psi_{R_\omega}(C_0^\omega, \tilde{x}, \tilde{\lambda}) & \text{if } |R^+| - |R_\omega^+| \text{ is odd,} \\ 0 & \text{otherwise.} \end{cases} \tag{1.2}$$

From equality (1.2) and Lemma 1.1(b) we see that Lemma 1.2 holds whenever $-1_{X/\mathbb{R}\omega} \in W(R_\omega)$. Using only equality (1.2), we prove Corollary 1.3 below.