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ERRATA FOR *SYZYGIES OF SEMI-REGULAR SEQUENCES*

KEITH PARDUE AND BENJAMIN RICHERT

There are some problems in [3] that lead to unnecessary confusion. The main problems include a simple minded (but easy to fix) error in the proof of Theorem 3.6, our failure to expose the main point in that proof, notational problems in the proof of Theorem 4.4 and a gap in that proof. Fortunately, these theorems are true, but the paper is not up to our standards. We accept responsibility for our lapse and regret the confusion that our readers have suffered. We are grateful to C. Diem and J. Shan for bringing some of these problems to our attention and to P. Roberts for telling us the lemma that we give below.

We address the problems in the order in which they appear. In the Introduction, we give an incorrect reference for Stanley's theorem that $x_1^{d_1}, \dots, x_n^{d_n}$, $(x_1 + \cdots + x_n)^{d_{n+1}}$ is a semiregular sequence in characteristic 0. The most common reference for this theorem is Stanley's [5], and we have given this reference elsewhere. But this reference is also incorrect. Indeed, although Stanley discovered this theorem, he never published it. The first appearance of this theorem in print is on page 367 of Iarrobino's [2], where Iarrobino gives credit to Stanley.

We now turn to the proof of Theorem 3.6. In the sixth paragraph, we show that the multiplication by f map from $(S/\tilde{I})_{j-d}$ to $(S/\tilde{I})_j$ is injective for all $j \leq \rho + \varepsilon$. While this is correct, we start the seventh paragraph by asserting that it follows that $(\tilde{I} : f)_j = \tilde{I}_j$ for $j \leq \rho + \varepsilon$. This is false. What is true is that $(\tilde{I} : f)_j = \tilde{I}_j$ for $j \leq \rho + \varepsilon - d$. We are surprised that we published this error. Correcting the error leads to two changes in the eighth paragraph. First, $G_\bullet^{(\rho+\varepsilon-1-d)} \cong H_\bullet^{(\rho+\varepsilon-1-d)}$ replaces $G_\bullet^{(\rho+\varepsilon-1)} \cong H_\bullet^{(\rho+\varepsilon-1)}$. Second, $H_\bullet^{(\rho+\varepsilon-2)}$ must be removed from the displayed chain of isomorphisms.

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