# Corrigendum to "Some new identities for Schur functions"

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Theorem 5 of [1, p. 496] is not stated correctly. For completeness, here are the correct statements.

**Theorem 5.** *For non negative integers $m$ and $n$,*

$$\sum_{\lambda\subseteq(m^n)} f_\lambda(a,b)s_\lambda(X) = \sum_{\xi\in\{\pm1\}^n} \beta(\xi,a,b)\prod_i x_i^{m(1-\xi_i)/2}$$

*where the coefficient $\beta(\xi,a,b)$ is equal to*

$$\begin{cases} \dfrac{a^m D(\xi,b)}{1-a^{-1}b}\Phi(X^\xi;a^{-1},b) + \dfrac{b^m D(\xi,a)}{1-ab^{-1}}\Phi(X^\xi;a,b^{-1}) & \textit{if } |\xi|_{-1} \textit{ odd},\\[2ex] \dfrac{D(\xi,ab)}{1-ab}\Phi(X^\xi;a,b) + \dfrac{(ab)^m D(\xi,1)}{1-a^{-1}b^{-1}}\Phi(X^\xi;a^{-1},b^{-1}) & \textit{if } |\xi|_{-1} \textit{ even}. \end{cases}$$

Indeed, the second paragraph of the page 505 of [1] should be read as follows :
In the same way, we find for any even size subset $Y\subseteq X$ that

$$d(Y) = -\frac{D(\xi,1)}{1-a^{-1}b^{-1}}\Phi(X^\xi;a^{-1},b^{-1})$$

and for any odd size subset $Y\subseteq X$ that

$$\begin{aligned} a(Y) &= \frac{D(\xi,b)}{1-a^{-1}b}\Phi(X^\xi;a^{-1},b),\\ b(Y) &= -\frac{D(\xi,a)}{1-ab^{-1}}\Phi(X^\xi;a,b^{-1}). \end{aligned}$$

Consequently, the first paragraph of the page 506 of [1] should be read as follows :
On the other hand, we have

$$\beta(\xi,1,0) = \Phi(X^\xi;1,0),$$

$$\beta(\xi,1,-1) = \begin{cases} \Phi(X^\xi;1,-1) & \text{if } m \text{ even},\\ \Phi(X^\xi;1,-1)\prod_i x_i^{(\xi_i-1)/2} & \text{if } m \text{ odd}; \end{cases}$$

and

$$\beta(\xi,0,0) = \begin{cases} 0 & \text{if } |\xi|_{-1} \text{ is odd},\\ \Phi(X^\xi;0,0) & \text{otherwise}. \end{cases}$$

We thank Masao Ishikawa for carefully checking our theorem and pointing out the above mistake.

## References

[1] F. Jouhet and J. Zeng, Some new identities for Schur functions, Adv. in Appl. Math. 27 (2001), no. 2-3, 493–509.