

As found by Guodong Zhou in his thesis Lemma 3.1, Lemma 3.2 and Lemma 3.3 in the paper “Stable endomorphism algebras of modules over special biserial algebras” jointly written with Jan Schröer are incorrect as stated. The problem arises when the core of a graph mapping is simple, and hence has no orientation. The proofs however can be corrected, as was done in a preliminary chapter of Zhou’s thesis.

We state the rectified versions of the corresponding lemmata from Zhou’s thesis.

Lemma 3.1 bis: Let $f : M(C) \longrightarrow M(D)$ be a morphism which factorises through a sum of indecomposable non uniserial projective-injective modules. Then f is a linear combination of two-sided morphisms and of weakly one-sided morphisms with a heart of length 0.

Lemma 3.2 bis: Let $f_j : M(C) \longrightarrow M(D)$ for $1 \leq j \leq \ell$ be the explicit morphisms from $M(C)$ to $M(D)$ which do not factorise through projective modules. If $\text{Ext}_A^1(M(D), M(C)) = 0$, then the images of f_1, \dots, f_ℓ in the stable category form a basis of $\underline{\text{Hom}}_A(M(C), M(D))$ as vector space.

Lemma 3.3 bis: Let $f_a : M(C_1) \longrightarrow M(C_2)$ and $f_b : M(C_2) \longrightarrow M(C_3)$ be two left one-sided morphisms so that $\underline{f_a} \neq 0 \neq \underline{f_b}$. Suppose that the length of C_2 is strictly bigger than 0 and that $\text{Ext}_A^1(M(C_i), M(C_j)) = 0$ for all $1 \leq i, j \leq 3$. Then $f_b \circ f_a \neq 0$ implies $\underline{f_b \circ f_a} \neq 0$.

The proofs of the lemmata appeared in
Guodong Zhou, *Algèbres courtoises et blocs à défaut diédral*, thèse Université de Picardie Jules Verne, juin 2007.