I distinguish four types of corrections, in order of increasing seriousness:

(Extra) Additional information that was not available at the time of writing, or that I did not know about.

(Improve) Typographical issues, where what is written is still correct, but there is a nicer way of phrasing it, or I could choose a better symbol.

(Typo) Typographical errors, where I have spelled a word wrongly, used the wrong symbol, and so on.

(Error) Errors in proofs or statements.

When I give each correction, I will label it with one of these monikers.

To avoid confusion with the bibliography from the book, the bibliography here will follow an author-year format, with other references meaning those in the book.

(Extra) p. 96. There has been progress on the Morita–Frobenius conjecture, at least over \( \mathcal{O} \). In very recent work, only available on the arXiv so far [Liv19], Livesey has found examples of blocks with arbitrarily large Morita–Frobenius number over \( \mathcal{O} \), so the possibility (i) from the list on this page cannot occur. This fits with my guess on p. 97. As there are, as of yet anyway, no examples of \( k \)-Morita equivalent blocks that are not \( \mathcal{O} \)-Morita equivalent, this might well also imply the \( k \) version of the Morita–Frobenius number has no global bound.

Recent progress on the interaction between \( k \)- and \( \mathcal{O} \)-Morita equivalences has been made by Eisele [Eis19]. He has shown that the Picard groups over \( \mathcal{O} \) are always finite. I didn’t mention Picard groups in the text, because I was working almost exclusively over \( \mathcal{O} \), but this is good progress towards the conjecture that two blocks are equivalent over \( k \) if and only if they are over \( \mathcal{O} \). (That \( \mathcal{O} \) implies \( k \) is not so hard to see.)

(Error) p. 186 At the end of Section 8.2, I mention the vertices of Specht modules labelled by hook partitions. In fact, whereas [558] deals with Specht modules, it also considers simple modules, since the Specht modules are simple in the cases considered there. The rest of that paragraph,
the results of Danz, Giannelli, Müller and Zimmermann (from [149, 151, 444]), all consider the simple modules labelled by hook partitions. Thus replace Specht by simple in this paragraph. In fact, the case for Specht modules is still unresolved. Giannelli, Lim and Wildon in 2016 [GLW16] found the vertices for the Specht module $S^{(k,p-1,p)}$ for $k \equiv 1 \mod p$ and $k \not\equiv 1 \mod p^2$. If the Specht module is simple, as in the results above from [558], more or less complete information about the modules (vertices, Green correspondents, complexities and so on) was found by Danz and Lim [DL17].

References


