Corrections for some errata

Bob Oliver reviewed this book (called "CSSG" below) for *Bulletin of the AMS* (**48**(2011), 307–313); and in particular, he indicated certain inaccurate statements.

In corresponding email discussions between Bob and the authors, it was decided to publish the relevant corrections in Smith's subsequent book *Subgroup Complexes* (AMS Mathematical Surveys and Monographs, vol. 179, 2011), called "SC" below. Here is an overview of those corrections:

The hypothesis in 5.1.16 of CSSG is insufficient; this insufficiency then propagates to later results using 5.1.16, namely 5.1.17, 5.6.7. and 5.8.4 of CSSG.

The additional hypothesis needed appears as 7.2.5(c) of SC, namely:

For each simplex σ, p divides the order of the stabilizer G_σ.

Further discussion appears in Remark 7.2.6 of SC, notably in part (4) there.

(In particular it is noted that the insufficiency causes no problems in CSSG, since the indicated results appear only for expository purposes—and are not quoted in proving the main results of CSSG. And in any case, the additional hypothesis (c) holds in the situation of those results.)

Oliver's analysis also indicated a sufficient condition alternative to 7.2.5(c), namely:

(c′) The orbit complex K/G has vanishing cohomology in dimensions > 0.

This alternative condition (c′) is indicated in Remark 7.2.6(2) of SC; indeed Lemma 7.3.17 of SC presents Oliver's proof that under Webb's hypothesis (either (a) or (b) of 7.2.5 in SC), the condition (c′) is equivalent to normalizer sharpness for K.

Finally Oliver noted that the statement of 5.8.11 in CSSG does not follow from the reference given there. As a correction, Remark 7.5.2(2) of SC provides an argument due to Oliver, which does establish 5.8.11 of CSSG. (In fact in CSSG, the main results normally establish a full G-homotopy equivalence of the 2-local geometry with one of the standard posets—rather than using the weaker equivalence in 5.8.11).