Typos and Corrections for "A Guide to the Classification Theorem for Compact Surfaces"

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January 7, 2025

1. Page 30, before Definition 3.3, $\max_{i\in I}\{x_i\}$ should be $\max_{i\in I}\{|x_i|\}$.

2. Page 32, in Proposition 3.3, change "for all by finitely many" to "for all but finitely many."

3. Page 33, line -4, change (C1) to (C2).

4. Page 34, line 6, change $h^{-1}|_{s_g}(F)$ to $h^{-1}|_{s_g}$ and h to h^{-1}.

5. Page 56, in Proposition 5.2, second line, H should be G.

6. Page 67, line 2, $H_0(K_5) = 0$ should be $H_0(K_5) = \mathbb{Z}$.

7. Page 87, in the middle of the page, it should be stated that the proof of Proposition 5.8 shows that for a triangulated 2-complex K, orientability of K_g as in Definition 4.6 is equivalent to orientability of K as in Definition 6.4.

8. Page 88, the justification of the fact that distinct canonical complexes K_1 and K_2 are not equivalent is incorrect. The reason from the previous page is that equivalent canonical complexes must have the same type of orientability, the same p, and the same Euler characteristic, and thus the same q.

9. Page 162, the paragraph following the statement of Theorem E.1 is misleading. It states that the Jordan–Schöenflies theorem can be proved using tools from algebraic topology but this is only true of the Jordan's curve theorem. The proof of the Jordan–Schöenflies theorem uses topological techniques. The proof given by Bredon mentioned in our text (Theorem 19.11 in Bredon) is an adaptation of a proof due to Morton Brown: A proof of the generalized Schöenflies theorem, *Bulletin of the AMS*, Volume 66, Number 2 (1960), pages 74-76. An earlier elementary proof of the Jordan–Schöenflies theorem was given by Stewart Cairns: An elementary proof of the the Jordan–Schöenflies theorem, *Proceedings of the AMS*, Vol. 2, No. 6 (1951), pages 860-867.

As pointed out by Edwin Moise, most proofs of the triangulation theorem for surfaces make use of the Jordan–Schöenflies theorem. This method may be simpler but is in a way misleading. Indeed, in dimension 3, the Jordan–Schöenflies theorem fails, but the triangulation theorem still holds. Thus one should not get the impression that the triangulation theorem for surfaces depends on the Jordan–Schöenflies theorem. A proof of the triangulation theorem for surfaces not dependent on the Jordan–Schöenflies theorem is given in Moise (Chapter 8) *Geometric topology in dimension* 2 *and* 3. Springer–Verlag, GTM No. 47, 1977. The Jordan–Schöenflies theorem is also proved in Moise; see Chapters 9 and 10.