Preface to the Second Edition

This new edition contains a few additions. The main ones are three new Appendices. Appendix B contains a new characterization of free pro-$\mathcal{C}$ groups, based on work of D. Harbater and K. Stevenson. Appendix C, based on a paper of A. Lubotzky, establishes the basic facts about presentations of finitely generated profinite groups in terms of generators and relators; it complements Section 7.8 where we consider presentations of pro-$p$ groups. Appendix D contains a new self-contained and conceptually simpler approach to the proof of some classical subgroup theorems, like the Nielsen-Schreier and the Kurosh theorems, and some new ones; it is based on a paper of B. Steinberg and the first author.

In general we have maintained the original numeration, with only a couple of exceptions. We have inserted numerous additions throughout the text in the form of new results, better proofs, corrections, etc. We have also enlarged the bibliography. A few more open questions have been added; in the list of these open questions that we collect at the end of the book, we have noted those problems that have been solved after the first edition with comments and references. Theorem 3.5.13 gives a complete solution, due to J-P. Serre, of one of those previously open questions.

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