

Preface

No one tears a piece of cloth from a new garment and uses it to patch an old garment. For then the new garment would be ruined, and the new patch wouldn't even match the old garment.

Luke 5:36

This book was originally intended to be a very brief survey of the history and progress of *microscale soft robotics*, a rapidly evolving subfield of robotics. To the author's dismay, the task of tracking the subfield's technological origin and enabling factors has rapidly become an overwhelming one due primarily to the subfield's *new-wine-in-new-wineskin* nature quoted above. In short, even at the moderate, centimetric to millimetric length scales, the realization and operation of soft robots turned out to require *out-of-the-box* ideas that are far from simple downscaling of their macroscale counterparts. As emphasized in the main text, the subfield owes tremendously to the explorers of the biological world and visionary researchers unafraid of transplanting one type of technology to another.

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