**Proposal for a New Edition**

**Title:** Learn R: As a Language

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**Weak and strong points in current edition:**

1. - Although the book focuses on the R language itself, given the intended audience, the basic programming concepts need to be explained from the ground up.
2. - The overall focus of the is on the language and grammar. However, the chapter on plotting with ggplot2 is closer to a cookbook of plotting recipes.
3. - The chapter on model fitting and statistic summaries is brief and could have more depth and include a few additional procedures to demonstrate a broader range of methods.
4. + Building a solid understanding of R before briefly introducing the ‘tidyverse’. My views are similar of those of Matloff, although possibly less extreme (https://github.com/matloff/TidyverseSkeptic).
5. + Fills a gap in the available books by emphasizing the use of the R language in scripts, while still presenting the whole scope of the language.

**List of major potential changes and additions:**

1. **(Improve clarity)** The main step towards better explaining the basic constructs and elements of the R grammar will be the addition of diagrams and flow charts integrated into improved textual descriptions. Chapters….
2. **(Improve consistency)** Removing part of the case examples on plotting with ‘ggplot2’ and expanding on the structure of ggplot objects, how the different objects are connected and when they are “activated”. Use package ‘gginnards’ to demonstrate how ggplots work, their structure and when rendering takes place.
3. **(New) Chapter on statistics.** Expand the explanations and add a table listing the various accessors for fitted model objects.
4. **(New) Chapter on statistics.** Add quantile regression with ‘quantreg’ and major axis regression with ‘smatr’. Give more emphasis to numerical approximation and bootstrapping methods and some of their applications.

**List of minor potential changes and additions:**

1. **(Exists online, not in 1st ed)** Chapter 2 Data Visualization: Remove soft introduction to %>% operator (from Ch 3 Data Wrangling) since this only confused readers. Instead we now use preprocessed alaska\_flights and early\_january\_weather data frames loaded from moderndive package (v0.5.3).

**Questionnaire:**

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| **1) What is your general opinion of the book? What are its main strengths and weaknesses? Please give details.** |
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| **2) Please explain how you have used the book for teaching in the past. What was the course title, and what students were on it? Did you use the whole book or selected chapters? Did you supplement with any other materials?** |
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| **3) Please suggest any specific improvements to the book – material that could be added, revised, restructured, or deleted.** |
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| **4) Do you have any comments on the proposed revisions outlined by the authors above?** |
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| **5) Do you believe there is scope for a new edition of the book? Would you, for example, use the new edition for your teaching?** |
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| **6) What are the key related and/or competing titles? How do they compare with this book?** |
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| **7) Do you have any additional comments to help improve the book?** |
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