ORIGENES

GENETICS FOR CONCORDIA IN A PLURAL WORLD

Aina Vaquer Picó. Bachelor's degree in Genetics.
Universitat Autònoma de Barcelona (UAB)

Universitat Autònoma de Barcelona

INTRODUCTION

THE RAO MODEL WITH HIBRIDIZATION

The most accepted theory for the origin of modern humans is the **Recent Out of Africa with admixture model (RAO + A)**. This model proposes that modern humans originated in Africa and migrated all over the world, mixing with other individuals of the genus *Homo*, such as Neanderthals and Denisovans.

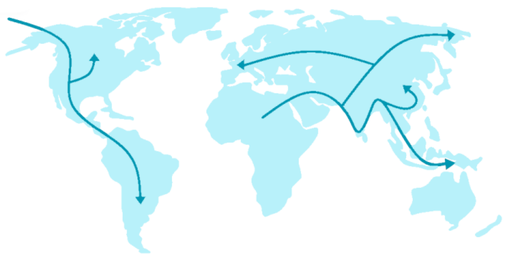


Figure 1. Modern human migrations out of Africa.

How did humans reach America and Oceania?

How could modern humans mix with Neanderthals, if they belong to different species?

Why do we look different from each other?

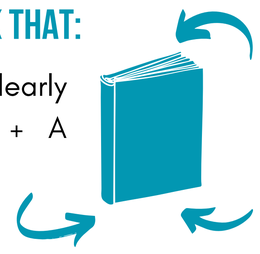
THIS MODEL OUTSIDE OF SCIENCE

- The RAO + A model is not widespread.
- Many people think that modern humans originated independently in every continent.
- Some people relate this independent origin and physical differences to the existence of different races, feeding discriminatory prejudices, which are bound to increase due to the mass migrations that will occur in the upcoming years.
- Educating people on the origin of modern humans is key to avoiding these racial prejudices.
- However, when describing the RAO + A model to them, some of the questions displayed on the left arise, usually due to the lack of a detailed explanation.

OBJECTIVES

WRITING A BOOK THAT:

Explains clearly the RAO + A model



Is understandable for most people → glossary

Can help tearing down some racist prejudices in our migrating world

MATERIALS AND METHODS

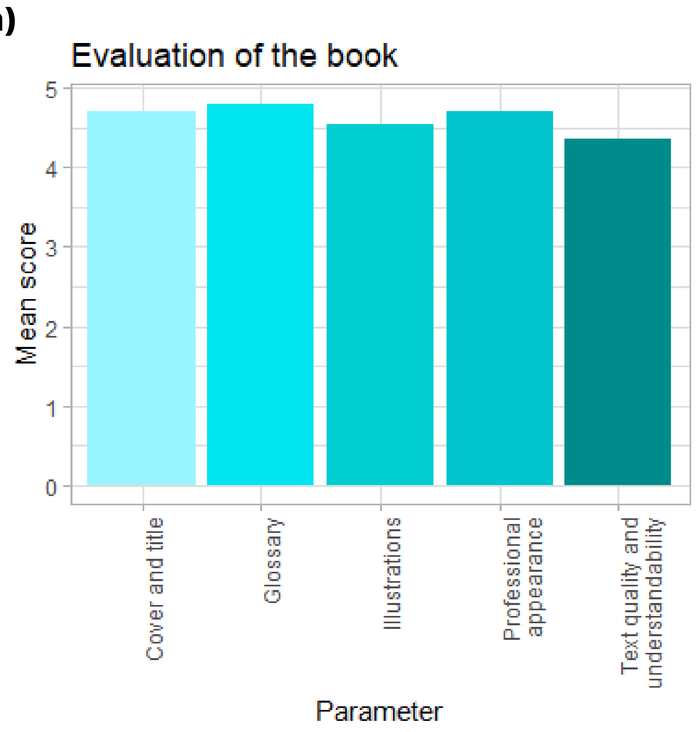
1. Researching and outlining
2. Drafting and revisions
3. Formatting and cover design
4. Proofreading (20 readers)
5. Printing the book (DoxDirect)

RESULTS AND DISCUSSION

ANSWERS FROM THE BETA READERS

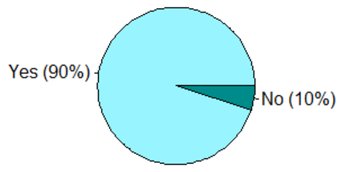
Beta readers were handed an excerpt of the book and asked to fill out a questionary, the answers of which can be seen below:

a)

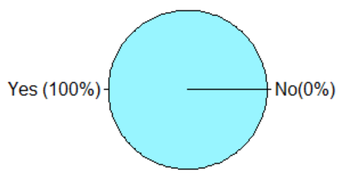


b)

Would you like to read the rest of the book?



Did you learn something new?



Do you think this book can help to fight racism?

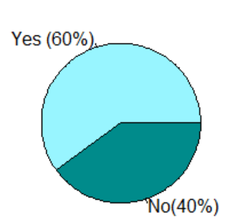


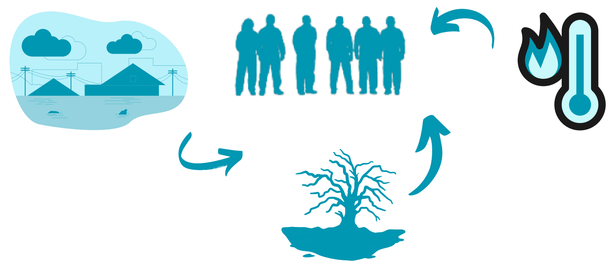
Figure 2. Summary of the answers obtained from the beta readers. A = bar plot of the mean score of different parameters that were evaluated (5 is the highest score). B = answers to three additional questions that were asked to gather the reader's impression of the contents of the book. They are represented in pie graphs.

TARGETED AUDIENCE

- The book has proven to be understandable for the vast majority of people.
- The ideal reader profile is a person over 16 that is interested in the topic.

SOCIAL INTEREST

- The World Bank predicts that, due to climate change, the number of migrations due to bad environmental conditions will increase [1].
- Lots of different people will end up coexisting, and if racist beliefs persist, conflicts will arise.
- This book can help tear down some of the racial prejudices that are based on biological differences, which will set us one step closer to ending this problem.



CONCLUSION

The book written meets the objectives proposed at the beginning of the final project. The feedback from the beta readers indicates that it is easy to read and that it has a professional appearance. All in all, the book should be a useful tool to improve people's understanding of how did modern humans originate, which could help to fight some of the racist prejudices that exist. While it should be seen as one small step among the many needed to significantly eradicate this problem, it is a good place to start.

1. Clement, V., Rigaud, K. K., de Sherbinin, A., Jones, B., Adamo, S., Schewe, J., Sadiq, N., Shabahat, E. (2021). Groundswell Part 2: Acting on Internal Climate Migration. © World Bank, Washington, DC. http://hdl.handle.net/10986/36248 License