

Participant Information Sheet

Project title:	Web color palettes using MCMC with people
Principal investigator:	Christopher Lucas
Researcher collecting data:	Benedicty Mambi

This study was certified according to the Informatics Research Ethics Process, RT number **2019/63278**. Please take time to read the following information carefully. You should keep this page for your records.

Who are the researchers?

Benedicty Mambi, 4th Year Computer Science and Mathematics Student at the University of Edinburgh

Christopher Lucas, Chancellor's Fellow / Lecturer in the School of Informatics at the University of Edinburgh

What is the purpose of the study?

The aim of the project is to find the highly aesthetically pleasing colour combinations for categorical data visualisation. There will be a focus on web data visualisation tools, using the cognitively inspired probabilistic model Monte Carlo Markov Chains with People. The results of this project could be applied to existing colour palettes, used for data visualisation on websites or web applications, allowing for greater flexibility in colour choice for web designers or data analysts, looking to create aesthetically favourable dataset visuals.

Why have I been asked to take part?

We are looking for participants who claim not to have any colour vision deficiency. Participants that satisfy this condition will provide useful information in colour preferences for categorical data visualisation.

Do I have to take part?

No – participation in this study is entirely up to you. You can withdraw from the study at any time, without giving a reason. Your rights will not be affected. If you wish to



withdraw, contact the PI. We will stop using your data in any publications or presentations submitted after you have withdrawn consent. However, we will keep copies of your original consent, and of your withdrawal request.

What will happen if I decide to take part?

If you decide to take part you will be directed to a site that will give show you two bar charts side by side. The left chart will be labelled 'left' and the 'right' chart will be labelled right. After looking at both charts, you will decide which combination of colours create a bar chart that is more aesthetically pleasing, then select that chart.

You will be asked to make 1500 choices.

Compensation.

If coming from Amazon Mechanical Turk, you will be paid £5 for your participation in this study

Are there any risks associated with taking part?

There are no significant risks associated with participation.

Are there any benefits associated with taking part?

Contribution to the study of the preference of colour combinations for categorical data visualisation on the web!

What will happen to the results of this study?

The results of this study may be summarised in published articles, reports and presentations. Quotes or key findings will be anonymized: We will remove any information that could, in our assessment, allow anyone to identify you. With your consent, information can also be used for future research. Your data may be archived for a minimum of 4 years.

Data protection and confidentiality.

Your data will be processed in accordance with Data Protection Law. All information collected about you will be kept strictly confidential. Your data will be referred to by a

unique participant number rather than by name. Your data will only be viewed by the researcher/research team consisting of Benedicty Mambi and Christopher Lucas.

All electronic data will be stored on a password-protected encrypted computer, on the School of Informatics' secure file servers, or on the University's secure encrypted cloud storage services (DataShare, ownCloud, or Sharepoint) and all paper records will be stored in a locked filing cabinet in the PI's office. Your consent information will be kept separately from your responses in order to minimise risk.

What are my data protection rights?

The University of Edinburgh is a Data Controller for the information you provide. You have the right to access information held about you. Your right of access can be exercised in accordance Data Protection Law. You also have other rights including rights of correction, erasure and objection. For more details, including the right to lodge a complaint with the Information Commissioner's Office, please visit www.ico.org.uk. Questions, comments and requests about your personal data can also be sent to the University Data Protection Officer at dpo@ed.ac.uk.

For general information about how we use your data, go to: edin.ac/privacy-research

Who can I contact?

If you have any further questions about the study, please contact the lead researcher, Benedicty Mambi <s1711095@ed.ac.uk>.

If you wish to make a complaint about the study, please contact inf-ethics@inf.ed.ac.uk. When you contact us, please provide the study title and detail the nature of your complaint.

Updated information.

If the research project changes in any way, an updated Participant Information Sheet will be made available on <http://web.inf.ed.ac.uk/infweb/research/study-updates>.

Consent

By proceeding with the study, I agree to all of the following statements:

- I have read and understood the above information.
- I understand that my participation is voluntary, and I can withdraw at any time.



- I consent to my anonymised data being used in academic publications and presentations.
- I allow my data to be used in future ethically approved research.

