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tedana.readthedocs.io

#1421

INTRODUCTION

Structured noise, is a fundamental problem in fMRI. Multi-echo fMRI acquisition^{1,2} and denoising^{3,4} methods use data from the additional echoes to empirically identify and remove fluctuations that are unlikely to contain BOLD signal.



1. Open software in a best practice based development framework to test and improve multi-echo methods

2. Makes multi-echo fMRI denoising methods more accessible and understandable

3. A community and resources for people interested in multi-echo fMRI whether or not they use tedana software

Multi-echo questions: <https://neurostars.org> with 'multi-echo' or 'tedana' tags

Subscribe to the tedana (low volume) newsletter: <http://tinyletter.com/tedana-devs>

Join the conversation: <https://gitter.im/ME-ICA/tedana>

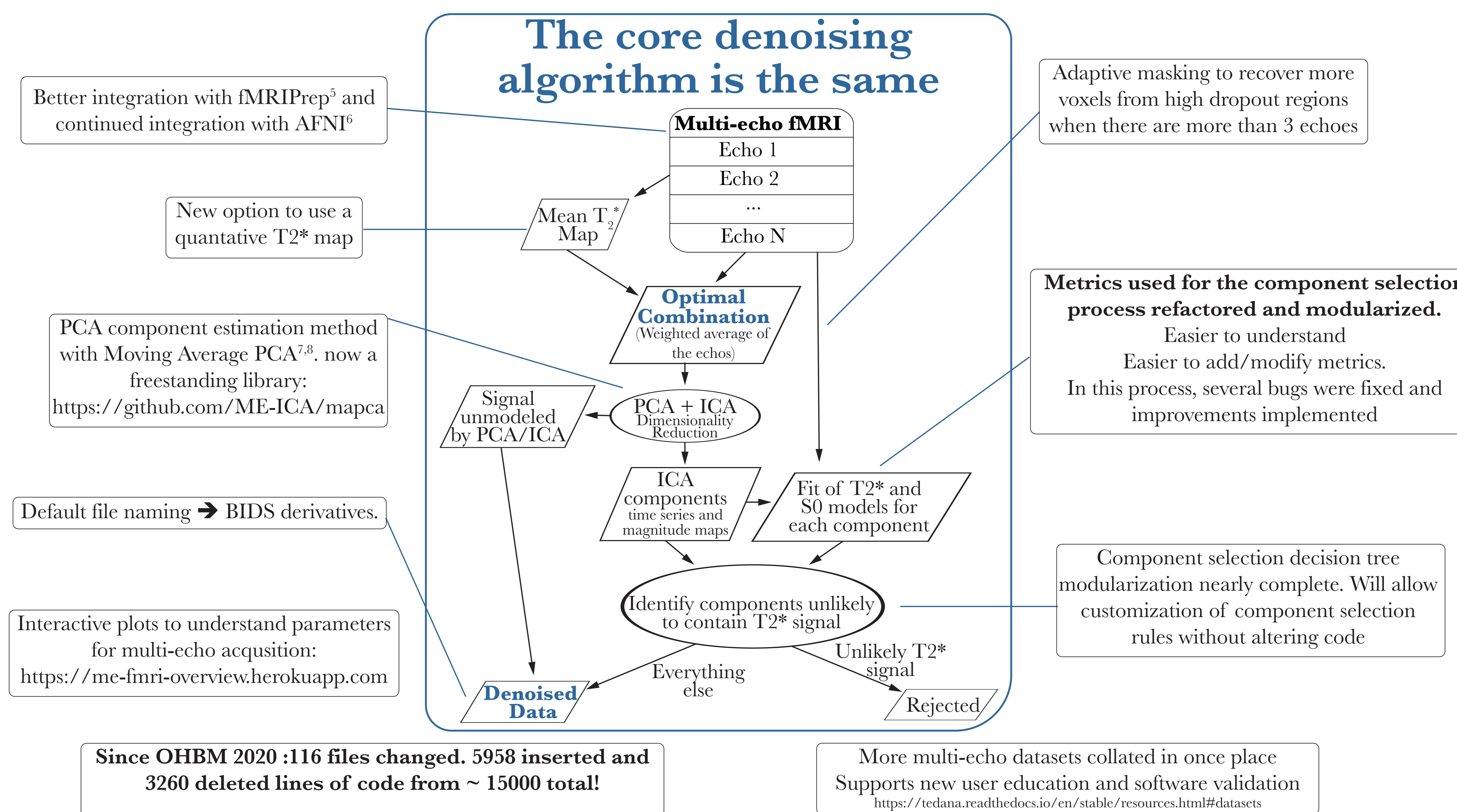
Code and resources are open source. Contribute at: <https://github.com/ME-ICA/tedana>

REFERENCES

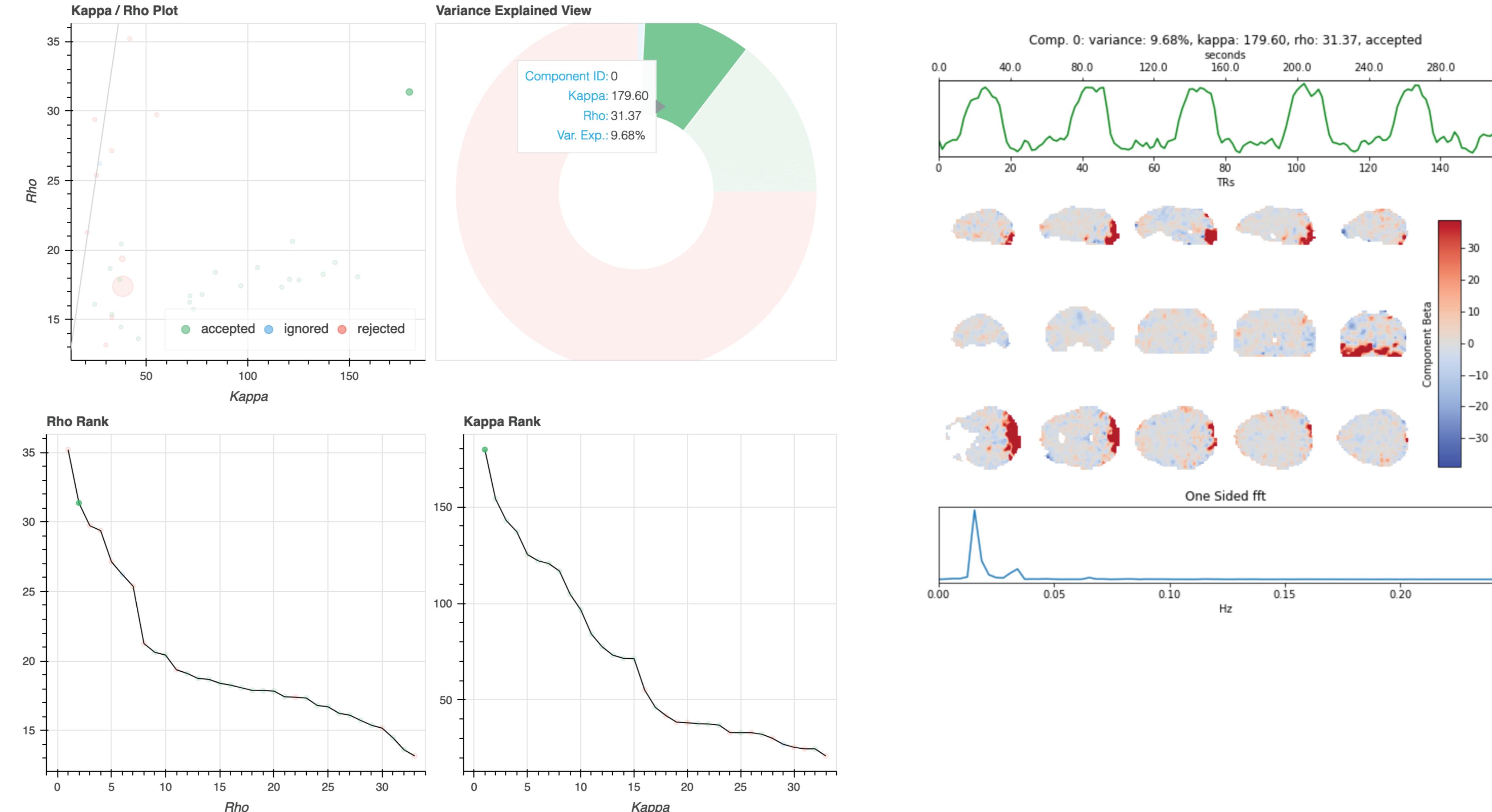
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- <https://trendscenter.org/software/gift/>

Other useful resources and a list of 132 publications using multi-echo fMRI is at: <https://tedana.readthedocs.io/en/latest/resources.html>

A YEAR OF MAJOR CHANGES UNDER THE SURFACE



INTERACTIVE REPORTS OF RESULTS



Interactive report lets users examine and understand the output. Improved visualization and stability of the reports

Report from 5-echo data. Each component appears on a kappa (T2* weighting) vs rho (S0 weighting) scatter plot, line plots, and as a share of variance. Clicking on a component shows the ICA component time series and map.

Documentation at: <https://tedana.readthedocs.io/en/latest/reporting.html>

Interact with the report at: <https://github.com/ME-ICA/ohbm-2021-multiecho>

GOVERNANCE CHANGES

Original Tedana Governance

Benevolent Dictator For Life (BDFL) structure

