

# The role of attention in learning

Andres Quiñones

March 29, 2023

## Scenario with only presence/abscence features

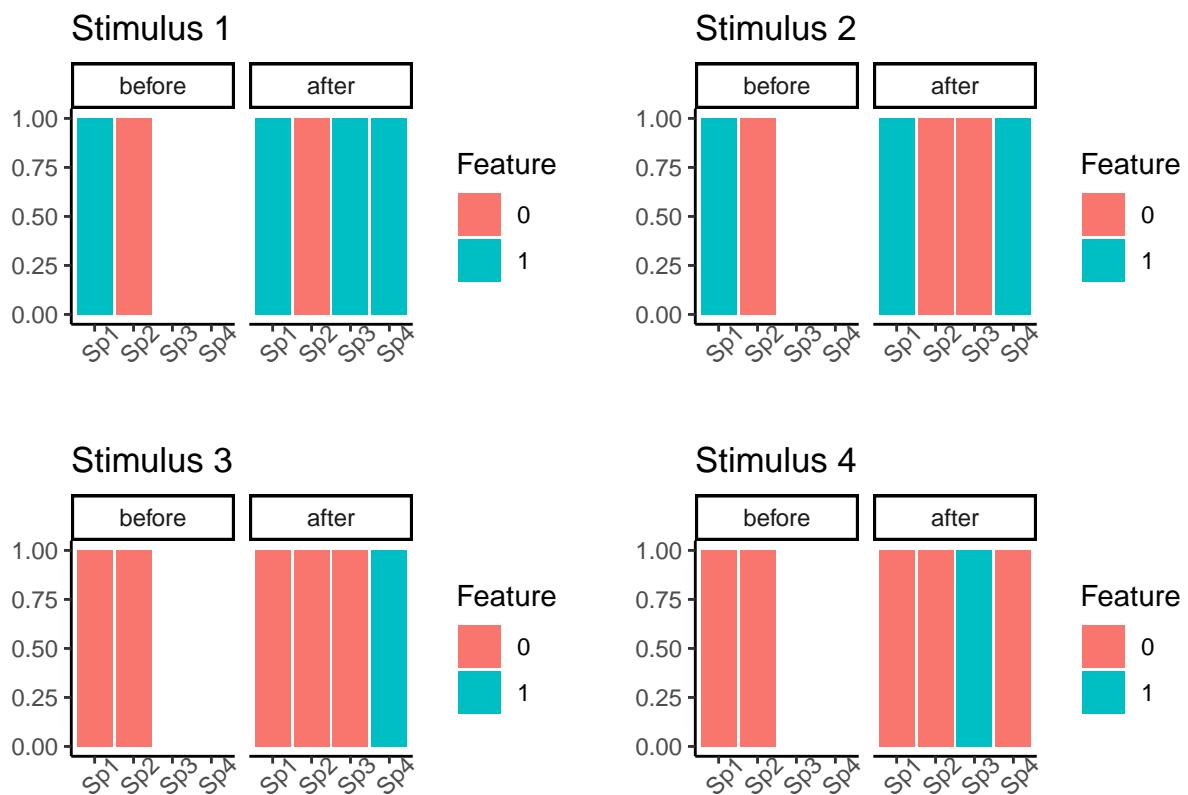


Figure 1: Frequency of features of the four different stimuli in the four different species. Only the first two species are randomly assigned in the first half of the simulation. All four species are randomly chosen in the second half of the simulations.

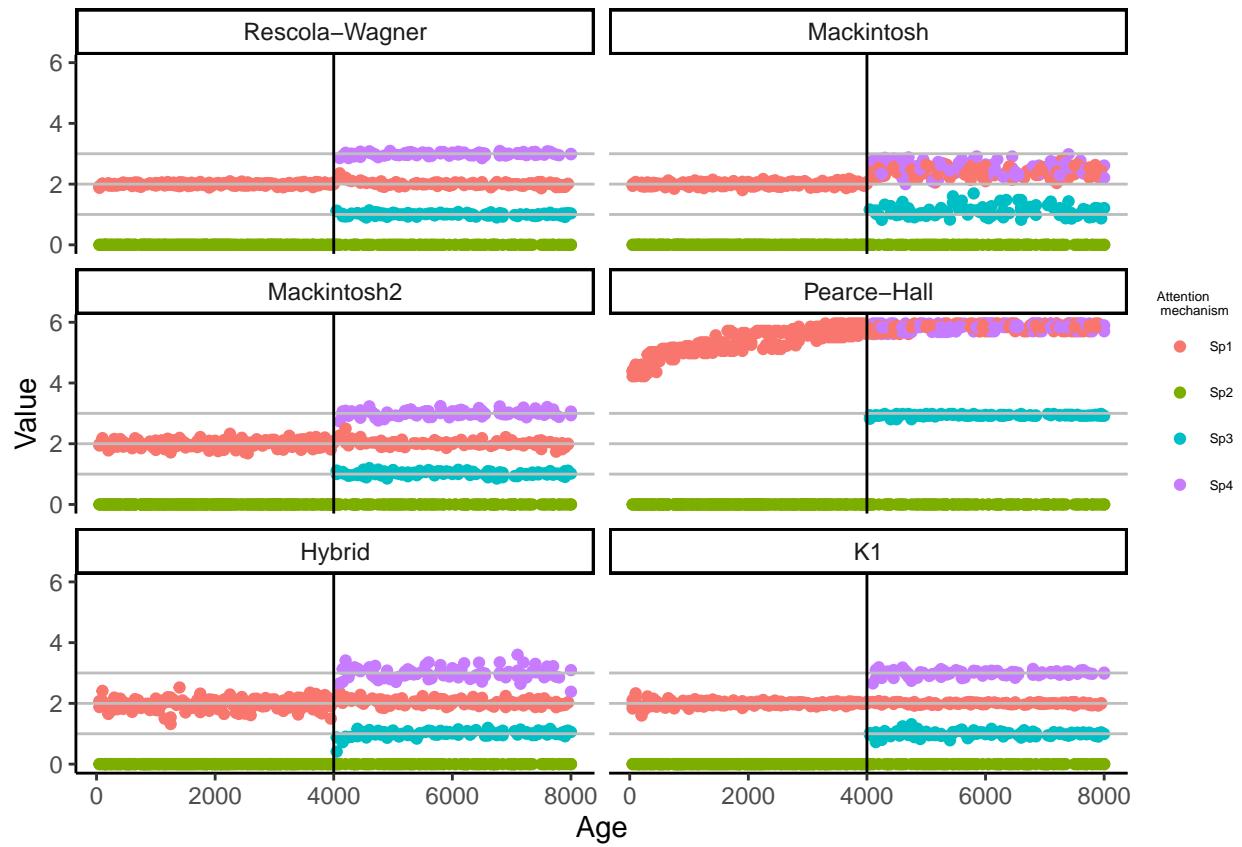


Figure 2: Dynamics of value estimation for the four species. Grey lines correspond to the real value of the four species.

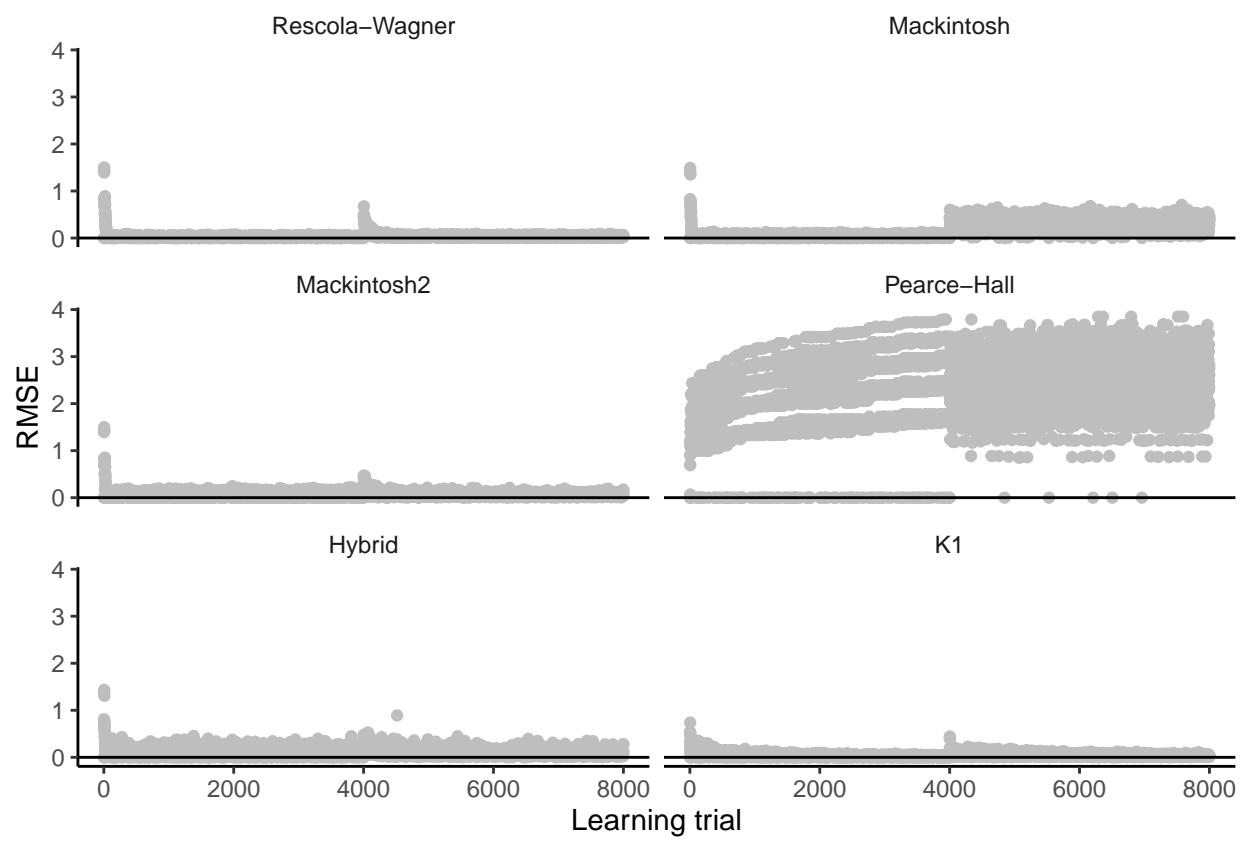


Figure 3: Root Mean Square Error (RMSE) for the four mechanisms of attention.

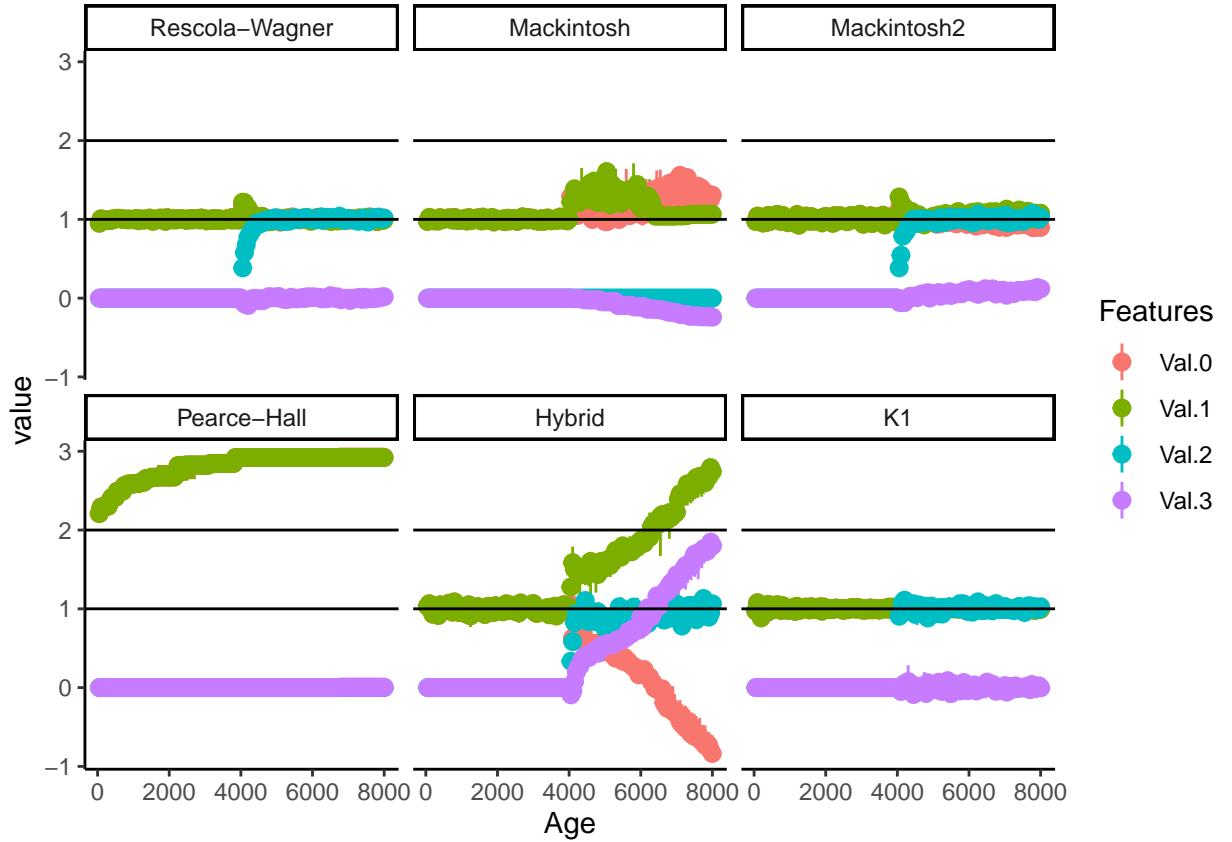
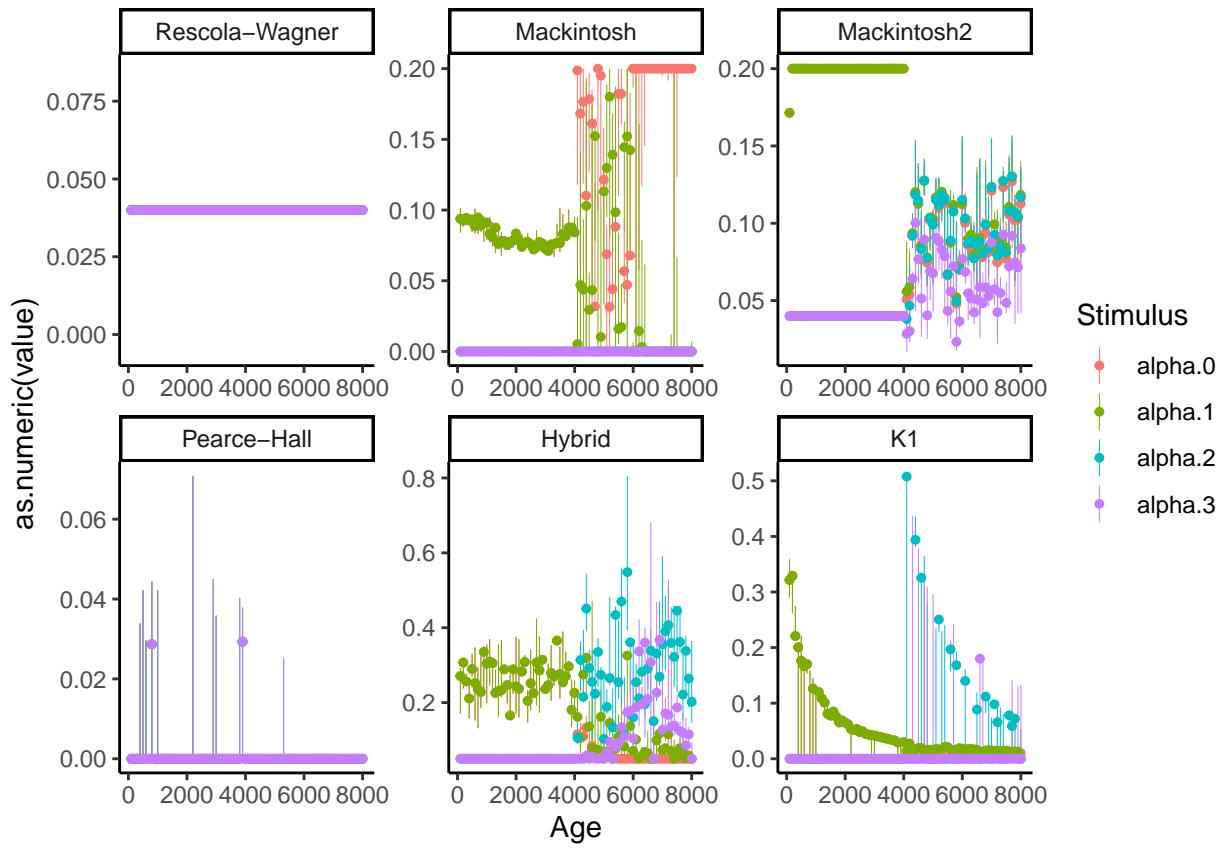


Figure 4: Dynamics of the values associated with the different features of the two stimuli dimensions for the full information scenario. In the legend the first number of the labels corresponds to the stimuli dimension index, and the second to the feature index. The black lines show the real value of the objects.



Scenario with one quantitative dimension and 3 presence/absence features

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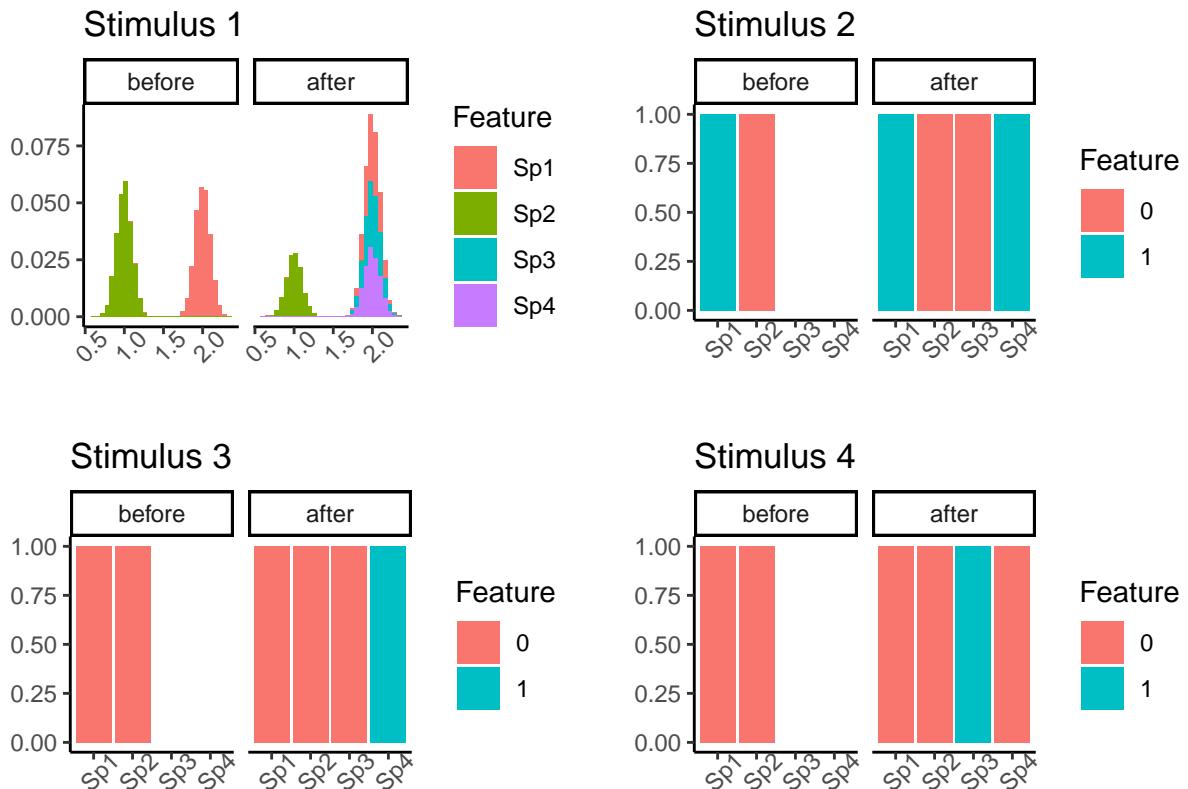


Figure 5: Frequency of features of the four different stimuli in the four different species. Only the first two species are randomly assigned in the first half of the simulation. All four species are randomly chosen in the second half of the simulations.

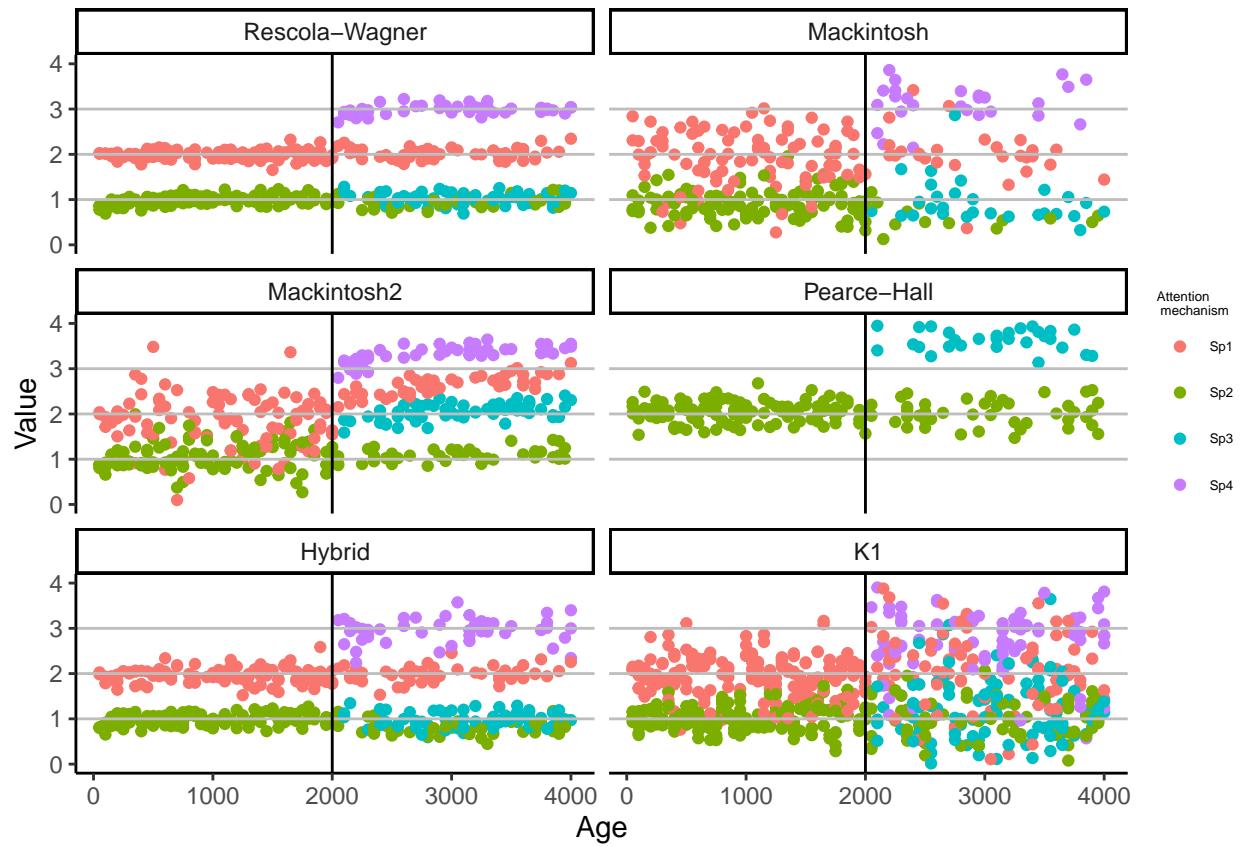


Figure 6: Dynamics of value estimation for the four species objects. Grey lines correspond to the real value of the four species.

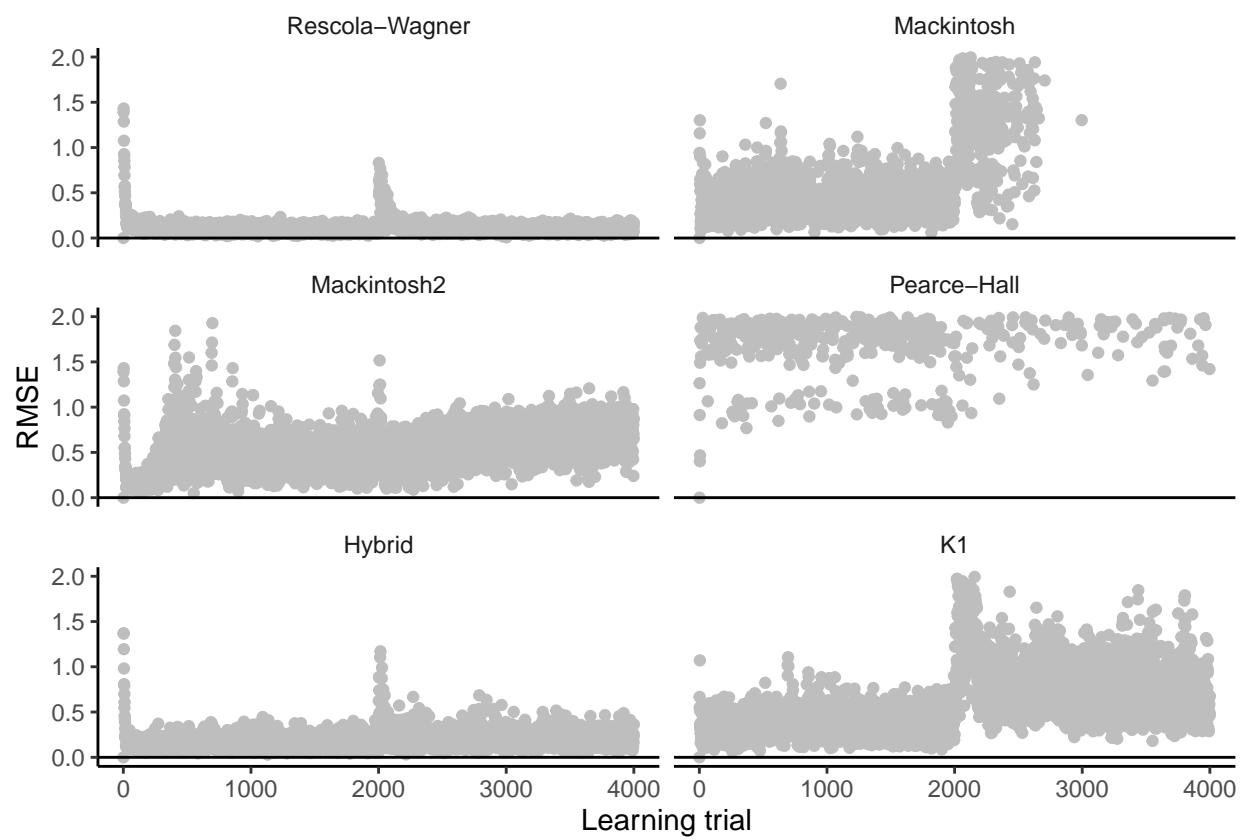


Figure 7: Root Mean Square Error (RMSE) for the four mechanisms of attention.

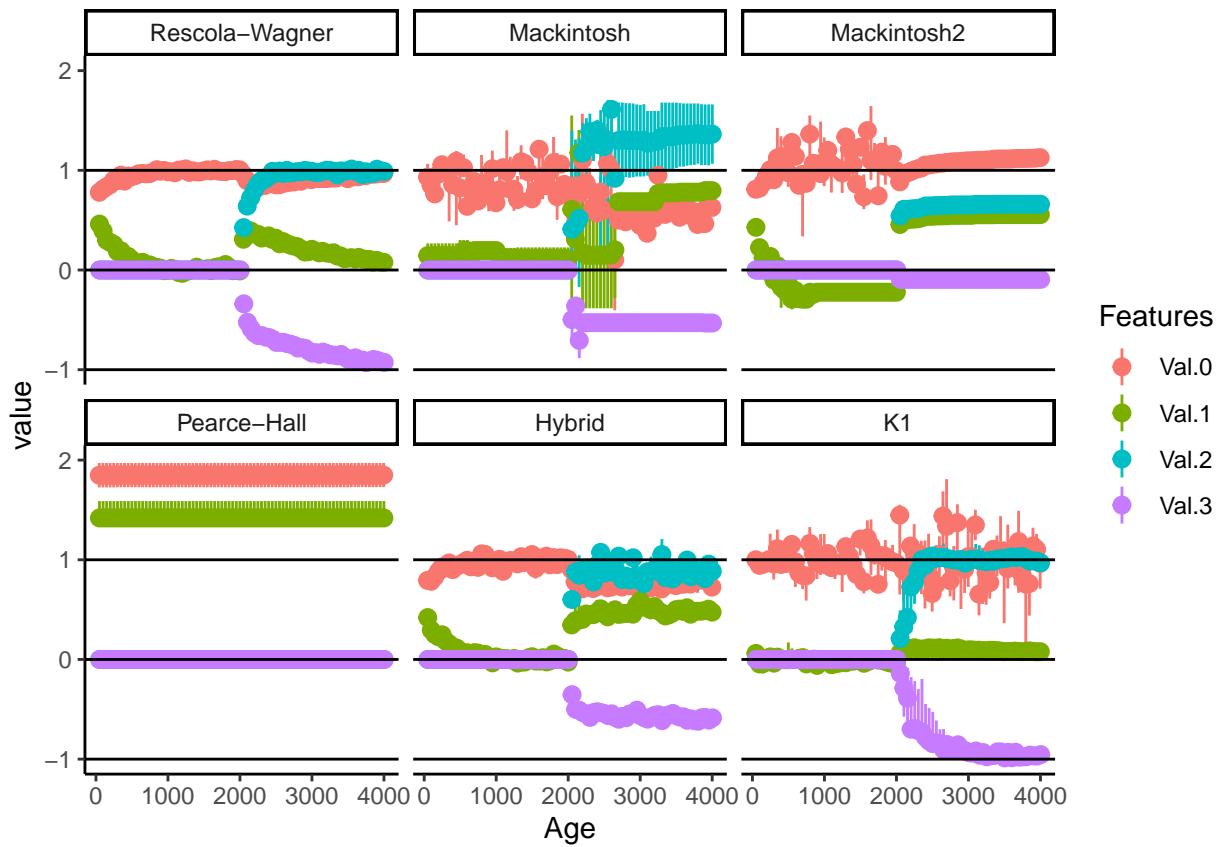


Figure 8: Dynamics of the values associated with the four different stimuli dimensions.

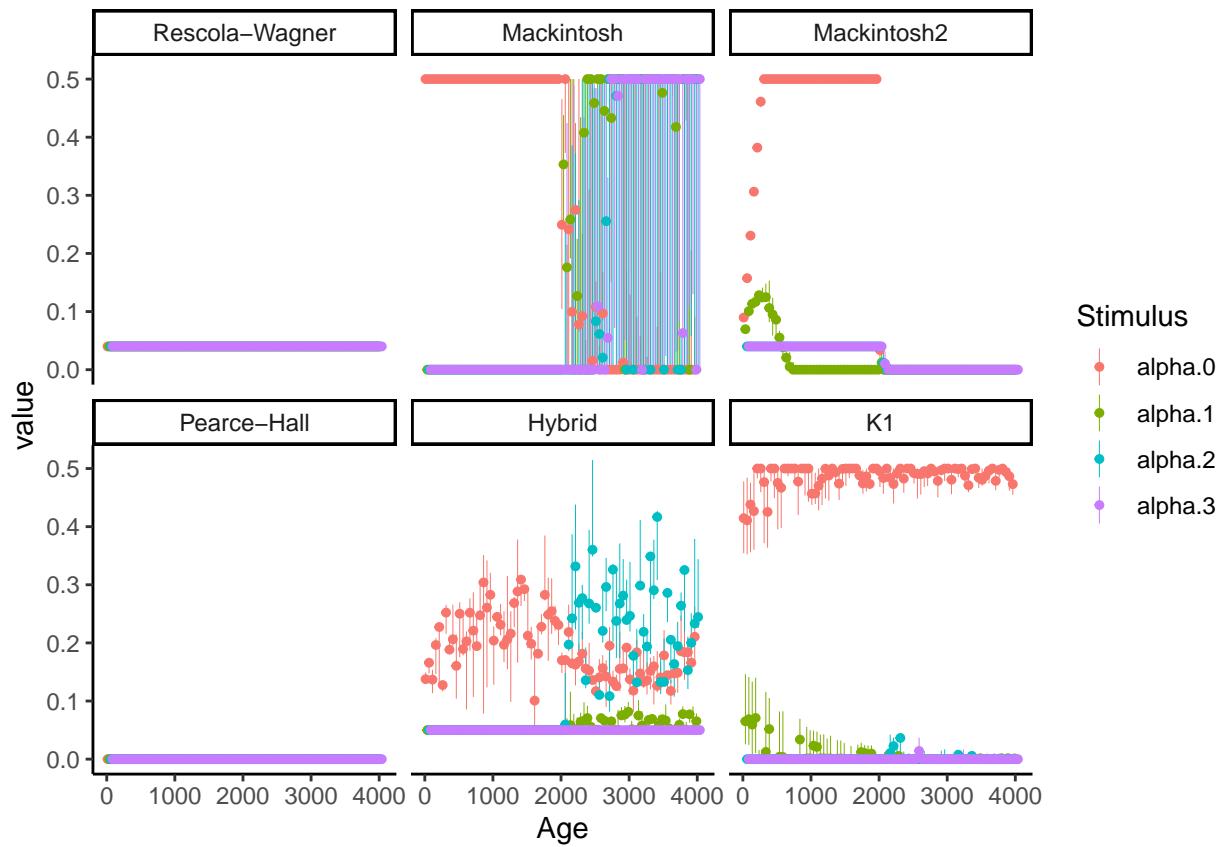


Figure 9: Dynamics of the rate of learning for the four different stimuli.