In cultural (especially linguistic) transmission across generations, children tend to regularize the often inconsistent rules they face, far more than adults do. One simple way of regularization is what Mandelshtam and Komorova call "frequency boosting". Faced with contradictory language rules for instance, children tend to use the more frequent one more often than they actually encounter it, whereas adults tend to reproduce the observed frequency.

In this paper, the authors develop a very simple algorithm to model how children achieve such frequency boosting. Imagine that different rules can apply to the same situation (think of different pronunciations of a word, for example), and a child is given inconsistent information about which rule should be applied. Basically, the learning algorithm developed by Mandelshtam and Komorova amounts to increment by a fixed number the probability to use a certain rule R whenever R is encountered, and to lower the probability of competitor rules. Through this process, the probability of the most frequent rule quickly reaches the maximum (100%) and will by then remain in the upper range with high probability, thus achieving frequency boosting.

The model does not explain why and how adults, on the other hand, more or less reproduce observed frequencies.