**Compression and the origins of Zipf's law for word frequencies**

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Here we sketch a new derivation of Zipf's law for word frequencies based on optimal coding. The structure of the derivation is reminiscent of Mandelbrot's random typing model but it has multiple advantages over random typing: (1) it starts from realistic cognitive pressures (2) it does not require fine tuning of parameters and (3) it sheds light on the origins of other statistical laws of language and thus can lead to a compact theory of linguistic laws. Our findings suggest that the recurrence of Zipf's law in human languages could originate from pressure for easy and fast communication.

Legea lui Zipf demonstrează că cuvintele frecvente sunt mai scurte, iar cuvintele rare sunt mai lungi - un principiu de optimizare natural al limbajului.