

A sequence $\{t_n\}$, the time that the n -th word is retrieved by a subject for a specified category, and A retention curve of N points $\{R_t\}$, the amount of memory at t , were interpreted as a sample of the size n from the Weibull distribution. Forty five $\{R_t\}$ for rote memory and natural memory were fitted by the simple Weibull form. Thirty six individual sequences $\{t_n\}$ for various categories were analyzed according to two models, parallel and serial searches through the long-term memory. Short retrieval sequences were fitted by the simple Weibull form. Long retrieval sequences were fitted by the mixed Weibull form, which implies that there are two or three Weibull distributions for these words in the long-term memory. Denote by (t) the distribution of time when the crucial condition for the retrieval or forgetting of each item is fulfilled. Compared with the exponential distribution, (t) was found to be slightly more concentrated in the region T close to 0 for retrieval and much more concentrated for forgetting.