



Fig. 3. A generative model of handwritten characters. (A) New types are generated by choosing primitive actions (color coded) from a library (i), combining these subparts (ii) to make parts (iii), and combining parts with relations to define simple programs (iv). New tokens are generated by running these programs (v), which are then rendered as raw data (vi). (B) Pseudocode for generating new types ψ and new token images $I^{(m)}$ for $m = 1, \dots, M$. The function $f(\cdot, \cdot)$ transforms a subpart sequence and start location into a trajectory.