Table 1: Real-world Evaluation Language-conditioned

(D)

(A)

(B)

(B)

| | | Language-conditioned | | | | Goal-conditioned | | | | | |
|--------------|---------------------------------|------------------------|--------------------|------------------------|------------------------|--------------------|------------------------|--------------------|------------------------|------------------------|------------------------|
| | Task | TRA | GRIF | LCBC | Octo | AWR | TRA | GRIF | GCBC | Octo | AWR |
| (A) | open the drawer | 0.80 ^(±0.1) | $0.20^{(\pm 0.2)}$ | 0.60 ^(±0.2) | 0.60 ^(±0.2) | $0.40^{(\pm 0.2)}$ | $0.60^{(\pm 0.2)}$ | $0.60^{(\pm 0.2)}$ | 0.40 ^(±0.2) | 0.50 ^(±0.2) | 0.80 ^(±0.2) |
| (A) | mushroom in drawer | $0.80^{(\pm0.1)}$ | $0.80^{(\pm 0.2)}$ | $0.40^{(\pm 0.2)}$ | $0.00^{(\pm0.0)}$ | $0.60^{(\pm 0.2)}$ | $0.90^{(\pm0.1)}$ | $0.40^{(\pm 0.2)}$ | $0.80^{(\pm0.2)}$ | $0.90^{(\pm0.1)}$ | $0.60^{(\pm 0.2)}$ |
| (A) | close drawer | $0.60^{(\pm 0.2)}$ | $0.60^{(\pm 0.2)}$ | $0.40^{(\pm 0.2)}$ | $0.60^{(\pm 0.2)}$ | $0.40^{(\pm 0.2)}$ | $1.00^{(\pm 0.0)}$ | $0.40^{(\pm 0.2)}$ | $0.80^{(\pm0.2)}$ | $0.60^{(\pm 0.2)}$ | $0.40^{(\pm 0.2)}$ |
| (D) | take the item out of the drawer | $0.60^{(\pm 0.2)}$ | $0.00^{(\pm 0.0)}$ | $0.00^{(\pm 0.0)}$ | $0.20^{(\pm 0.2)}$ | $0.00^{(\pm 0.0)}$ | $0.40^{(\pm 0.2)}$ | $0.00^{(\pm 0.0)}$ | $0.00^{(\pm0.0)}$ | $0.20^{(\pm 0.2)}$ | $0.00^{(\pm 0.0)}$ |
| (B) | put the spoons on towels | 1.00 ^(±0.0) | $0.40^{(\pm 0.2)}$ | $0.20^{(\pm 0.2)}$ | $0.00^{(\pm0.0)}$ | $0.20^{(\pm 0.2)}$ | 1.00 ^(±0.0) | $0.20^{(\pm 0.2)}$ | $0.60^{(\pm 0.2)}$ | $0.40^{(\pm 0.2)}$ | $0.60^{(\pm 0.2)}$ |
| (B) | put the spoons on the plates | $0.80^{(\pm 0.2)}$ | $0.20^{(\pm 0.2)}$ | $0.20^{(\pm 0.2)}$ | $0.20^{(\pm 0.2)}$ | $0.00^{(\pm 0.0)}$ | $1.00^{(\pm 0.0)}$ | $0.00^{(\pm 0.0)}$ | $0.40^{(\pm 0.2)}$ | $0.00^{(\pm 0.0)}$ | $0.80^{(\pm 0.2)}$ |
| (C) | put the corn and sushi on plate | 0.90 ^(±0.1) | $0.00^{(\pm0.0)}$ | $0.40^{(\pm 0.2)}$ | $0.00^{(\pm0.0)}$ | $0.50^{(\pm 0.2)}$ | 0.70 ^(±0.1) | $0.00^{(\pm0.0)}$ | $0.20^{(\pm 0.2)}$ | $0.00^{(\pm0.0)}$ | $0.30^{(\pm0.1)}$ |
| (C) | sushi and mushroom in bowl | $0.80^{(\pm 0.2)}$ | $0.00^{(\pm0.0)}$ | $0.60^{(\pm 0.2)}$ | $0.20^{(\pm 0.2)}$ | $0.60^{(\pm 0.2)}$ | $0.60^{(\pm 0.2)}$ | $0.00^{(\pm0.0)}$ | $0.20^{(\pm 0.2)}$ | $0.40^{(\pm 0.2)}$ | $0.60^{(\pm 0.2)}$ |
| (C) | corn, banana, and sushi in bowl | $0.80^{(\pm0.1)}$ | $0.00^{(\pm0.0)}$ | $0.00^{(\pm0.0)}$ | $0.00^{(\pm0.0)}$ | $0.20^{(\pm0.1)}$ | $0.50^{(\pm0.2)}$ | $0.00^{(\pm0.0)}$ | $0.00^{(\pm0.0)}$ | $0.40^{(\pm 0.2)}$ | $0.50^{(\pm 0.2)}$ |

corn on plate then sushi in pot $\begin{vmatrix} \mathbf{0.70}^{(\pm 0.1)} & 0.00^{(\pm 0.0)} & 0.40^{(\pm 0.2)} & \mathbf{0.60}^{(\pm 0.2)} & 0.20^{(\pm 0.2)} & \mathbf{0.30}^{(\pm 0.1)} & \mathbf{0.20}^{(\pm 0.2)} & 0.00^{(\pm 0.0)} & 0.00^{(\pm 0.0)} \end{vmatrix}$

 $0.00^{(\pm0.0)}$

statistical significance are highlighted

sweep to the right $\begin{vmatrix} 0.80^{(\pm0.1)} & 0.20^{(\pm0.2)} & 0.40^{(\pm0.2)} & 0.40^{(\pm0.2)} & 0.00^{(\pm0.0)} \end{vmatrix} \begin{vmatrix} 0.70^{(\pm0.1)} & 0.40^{(\pm0.2)} & 0.00^{(\pm0.0)} \end{vmatrix} \begin{vmatrix} 0.80^{(\pm0.2)} & 0.80^{(\pm0.2)} \end{vmatrix}$ **1.00**^(± 0.0) 0.00^(± 0.0) 0.00^(± 0.0) 0.60^(± 0.2) $0.20^{(\pm 0.2)}$ $0.40^{(\pm 0.2)}$ $0.40^{(\pm 0.2)}$ $0.40^{(\pm 0.2)}$ $1.00^{(\pm 0.0)}$ fold cloth into the center move bell pepper and sweep towel $0.50^{(\pm 0.2)}$ $0.00^{(\pm 0.0)}$ $0.00^{(\pm 0.0)}$ $0.20^{(\pm 0.2)}$ $0.00^{(\pm 0.0)}$ $0.60^{(\pm 0.2)}$ $0.20^{(\pm 0.2)}$ $0.20^{(\pm 0.2)}$ $0.40^{(\pm 0.2)}$ (A) One step tasks (B) Task concatenation [†]The best-performing method(s) up to (C) Semantic generalization (D) Tasks with dependency