

Figure R1: Visualization of attention maps of slot attention before and after self-modulation on COCO [27] (Fig. 3 in paper). The attention maps *before* self-modulation have been updated.

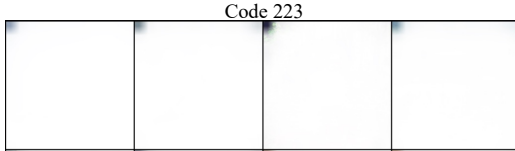


Figure R2: Visualization of a code trained on COCO [27] that associates with the top-left patch.

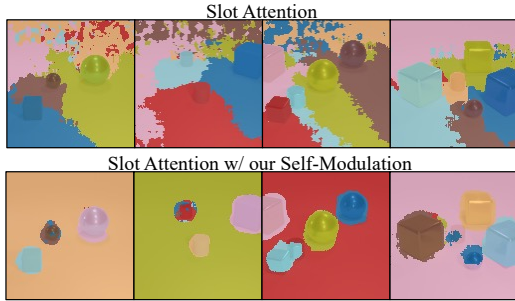


Figure R3: Visualizations of predictions on CLEVR6 of slot attention [28] and slot attention with our self-modulation.

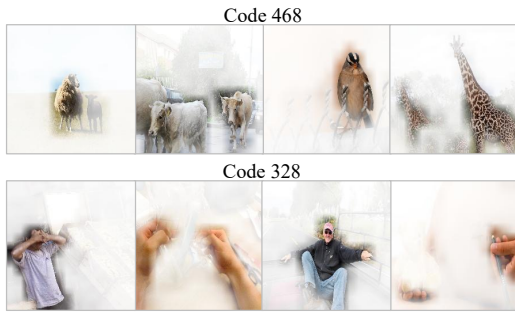


Figure R4: Visualization of the codebook on COCO [27]. The codebook also learns super-categories such as ‘animals’ and ‘human’.

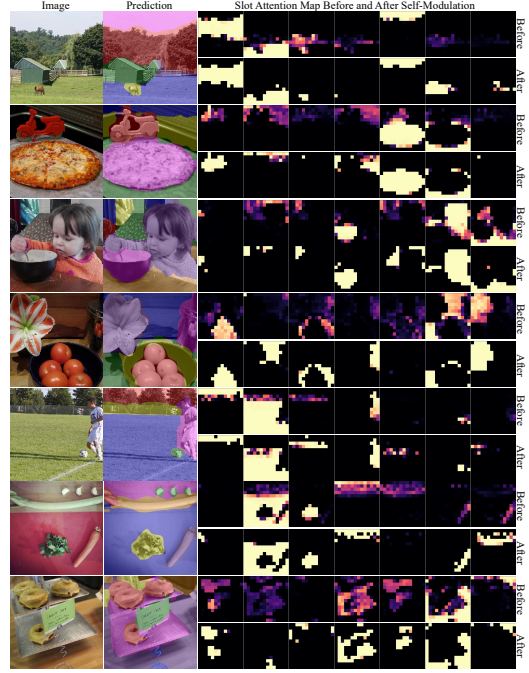


Figure R5: Visualization of attention maps of slot attention before and after self-modulation on COCO [27] (Fig. B.5 in paper). The attention maps *before* self-modulation have been updated.

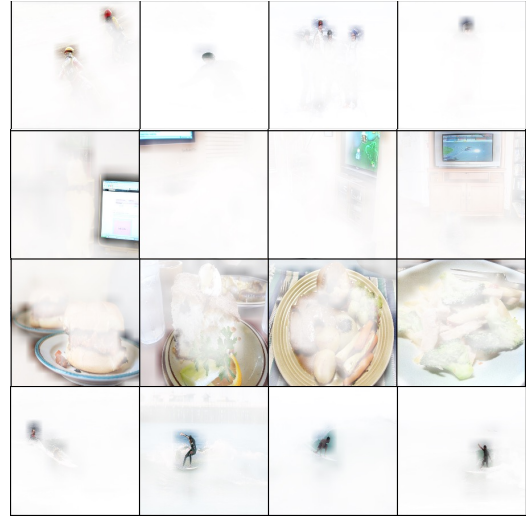


Figure R6: Visualization of K-means clusters on slot representations from DINOSAUR [30] on COCO [27]. The first cluster captures ‘hat’, the second ‘electronic displays’, the third ‘plate holding food’, and the fourth ‘person enjoying water activities’.

Table R1: Comparison with DINOSAUR [30] on MOVI-C and -E [14] with corrected mIoUs.

Method	MOVI-C				MOVI-E			
	FG-ARI	mBO <sup>i</sup>	mIoU		FG-ARI	mBO <sup>i</sup>	mIoU	
DINOSAUR [30]	55.7	42.4	-	-	-	-	-	-
DINOSAUR reprod	54.7±4.1	41.9±1.8	48.4±1.4	41.0±2.1	53.8±2.1	34.5±1.7	36.7±1.7	33.6±1.9
Ours	<b>58.9±5.1</b>	<b>46.8±2.4</b>	<b>53.1±1.7</b>	<b>45.9±2.5</b>	<b>59.7±3.1</b>	<b>39.3±1.8</b>	<b>41.3±1.6</b>	<b>38.3±1.9</b>