

Supplemental Material for submission “Do Objects in Real-World Images Have a Canonical Name?”

Anonymous EMNLP-IJCNLP submission

1 Dataset: Supplementary Information

Figures 1 and 2 contain the instructions for our subjects in the first round and rounds 2-4, respectively. After the first round, based on the opt-out annotation, we kept images that met all the following conditions (thresholds were estimated via manual inspection):

- they were not marked as occluded by any subject;
- “Bounding box is unclear” was marked at most twice;
- at most 17% of elicited names were in plural form (to remove cases where the bounding box contains several objects);
- the most frequent elicited name is of the same domain as the VisualGenome name.

This yielded 25,596 images, discarding 5,497. Table 1 gives an overview of the collection synsets, grouped into the 7 domains, and Table 2 shows the 7 domains together with the top 10 VG names.

Domain	Synsets				
buildings	house ₁ (364)	bridge ₁ (297)	shelter ₁ (169)	restaurant ₁ (58)	
	outbuilding ₁ (31)	hotel ₁ (19)	housing ₁ (17)	place_of_worship ₁ (12)	
people	woman ₁ (1768)	man ₁ (1167)	male_child ₁ (853)	athlete ₁ (396)	
	child ₁ (333)	creator ₂ (11)	professional ₁ (5)		
home	furnishing ₂ (5355)	vessel ₃ (525)	kitchen_utensil ₁ (132)	crockery ₁ (92)	
	cutlery ₂ (82)	tool ₁ (72)	lamp ₁ (34)		
clothing	shirt ₁ (968)	overgarment ₁ (786)	dress ₁ (199)	headdress ₁ (135)	
	neckwear ₁ (65)	robe ₁ (27)	glove ₂ (7)	footwear ₁ (5)	
vehicles	aircraft ₁ (1208)	train ₁ (957)	car ₁ (727)	motorcycle ₁ (564)	
	truck ₁ (559)	boat ₁ (499)	ship ₁ (38)		
food	dish ₂ (812)	baked_goods ₁ (770)	foodstuff ₂ (280)	vegetable ₁ (48)	
	edible_fruit ₁ (42)	beverage ₁ (23)			
animals_plants	ungulate ₁ (2037)	horse ₁ (833)	feline ₁ (763)	dog ₁ (688)	
	bird ₁ (389)	flower ₁ (44)	rodent ₁ (27)	insect ₁ (12)	
	fish ₁ (11)				

Table 1: Overview of our dataset: Synset nodes for each domain (subscript indicates synset number; number of instances in parentheses).

vehicles	food	animals_plants	home	buildings	people	clothing
train (954)	pizza (518)	giraffe (915)	bed (888)	house (340)	boy (853)	shirt (904)
car (642)	cake (261)	horse (822)	bench (714)	bridge (274)	man (806)	jacket (451)
plane (485)	bread (186)	cat (754)	table (687)	dugout (91)	woman (766)	coat (267)
airplane (479)	sandwich (153)	dog (654)	desk (672)	tent (53)	girl (650)	dress (190)
motorcycle (466)	bun (143)	zebra (461)	counter (516)	restaurant (33)	lady (342)	hat (77)
truck (465)	cheese (110)	cow (324)	couch (366)	overpass (23)	guy (330)	t-shirt (62)
boat (450)	donut (78)	bird (295)	chair (365)	grill (22)	child (230)	tie (51)
jet (106)	salad (70)	sheep (216)	carpet (307)	garage (18)	batter (110)	blazer (43)
aircraft (85)	sauce (68)	bull (48)	bowl (219)	hotel (16)	kid (85)	hood (26)
van (76)	apple (33)	flower (40)	curtain (182)	castle (14)	skateboarder (80)	cap (20)

Table 2: Overview of our ManyNames dataset: Top-10 VG names for each domain (number of instances in parentheses).

Task:
Please name the object in the red box with the **first name that comes to mind**.

- Make sure to identify the correct object: **the single object that the box marks**. It is the one that the **box fits tightly around**.
- If you cannot name the object, click one of the options below the textbox.

Make sure to avoid the **mistakes** exemplified below:





	<p>Object Name: <input type="text" value="man"/></p> <p>If you cannot name the object, please specify the reason:</p> <p>Image quality:</p> <p><input type="radio"/> Object occluded / not recognizable</p> <p><input type="radio"/> Bounding box is unclear</p> <p><input type="radio"/> Other: <input type="text" value="Please specify the reasons"/></p>	<p>BAD---the box is marking the jacket, not the man</p> <p>Good options (examples): jacket, coat, shirt</p>
	<p>Object Name: <input type="text" value="man"/></p> <p>If you cannot name the object, please specify the reason:</p> <p>Image quality:</p> <p><input type="radio"/> Object occluded / not recognizable</p> <p><input type="radio"/> Bounding box is unclear</p> <p><input type="radio"/> Other: <input type="text" value="Please specify the reasons"/></p>	<p>BAD---the box is marking the car, not the motorcycle</p> <p>Good options (examples): car, suv, automobile</p>
	<p>Object Name: <input type="text" value="Enter an object name"/></p> <p>If you cannot name the object, please specify the reason:</p> <p>Image quality:</p> <p><input checked="" type="radio"/> Object occluded / not recognizable</p> <p><input type="radio"/> Bounding box is unclear</p> <p><input type="radio"/> Other: <input type="text" value="Please specify the reasons"/></p>	<p>OK, too (since the car is occluded)</p>
	<p>Object Name: <input type="text" value="hard hat"/></p> <p>If you cannot name the object, please specify the reason:</p> <p>Image quality:</p> <p><input type="radio"/> Object occluded / not recognizable</p> <p><input type="radio"/> Bounding box is unclear</p> <p><input type="radio"/> Other: <input type="text" value="Please specify the reasons"/></p>	<p>BAD---this is not a name, only hat is.</p> <p>Good options (examples): hat, helmet, headgear...</p>

Figure 1: Instructions for AMT annotators for the first round.

YouNameIt! Instructions (Click to collapse)

Task: Please name the object in the red box with the **first name that comes to mind**.

- Make sure to identify the correct object: **the single object that the box marks**. It is the one that the **box fits tightly around**.
- For more advice please see the FAQ below.

Make sure to avoid the **mistakes** exemplified below:




	<p>Object Name: <input type="text" value="man"/></p>	<p>BAD---the box is marking the jacket, not the man</p> <p>Good options (examples): jacket, coat, shirt, clothing, ...</p>
	<p>Object Name: <input type="text" value="motorcycle"/></p>	<p>BAD---the box is marking the car, not the motorcycle</p> <p>Good options (examples): car, suv, vehicle, automobile, ...</p>
	<p>Object Name: <input type="text" value="hard hat"/></p>	<p>BAD---this is not a name, only hat is.</p> <p>Good options (examples): hat, helmet, headgear...</p>

Figure 2: Instructions for AMT annotators for rounds 2 to 4. They were accompanied by the FAQ in Figure 3

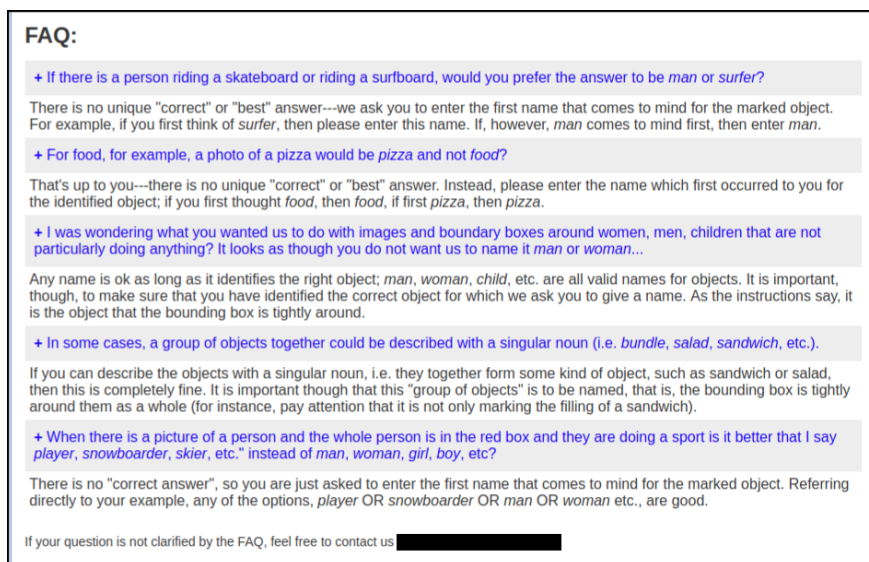


Figure 3: FAQ accompanying the instructions for AMT annotators for rounds 2 to 4.