

Instructions

Given three images, A, A' and B, You will need to answer:

- Which candidate (B') out of {C1, C2, C3, C4} is similar to B the same way A' is similar to A?

To answer it, you'll need to choose a candidate:

1. understand what is the key difference between A and A'.
2. Map this difference to B.
3. Verify: $B \rightarrow B'$ has the same difference as $A \rightarrow A'$.

The main difference between the images, can be one of the roles in the image:
(1) verb; (2) agent; (3) item; (4) vehicle; (5) victim; (6) tool; (7) food.

Explanation for each of the roles will be provided below.

Image Roles

The main difference between the images can be one of the roles in the image:

1. Verb (“Emptying” in the left image)
2. Agent (“Man” in the left image)
3. Item (“water” in the left image)
4. Victim (“player” in the right image)
5. Tool (“chair” in the right image)
6. Vehicle
7. Food



EMPTYING	
AGENT	MAN
ITEM	WATER
CONTAINER	BUCKET
DESINATION	GROUND
TOOL	HAND
PLACE	OUTDOORS

ATTACKING	
AGENT	MAN
VICTIM	PLAYER
TOOL	CHAIR
PLACE	STADIUM

Agent – Example 1:

Analogy

A



www.shutterstock.com - 40974919

A'



dreamstime.com

Candidates

C1



C2

B



B'



C3

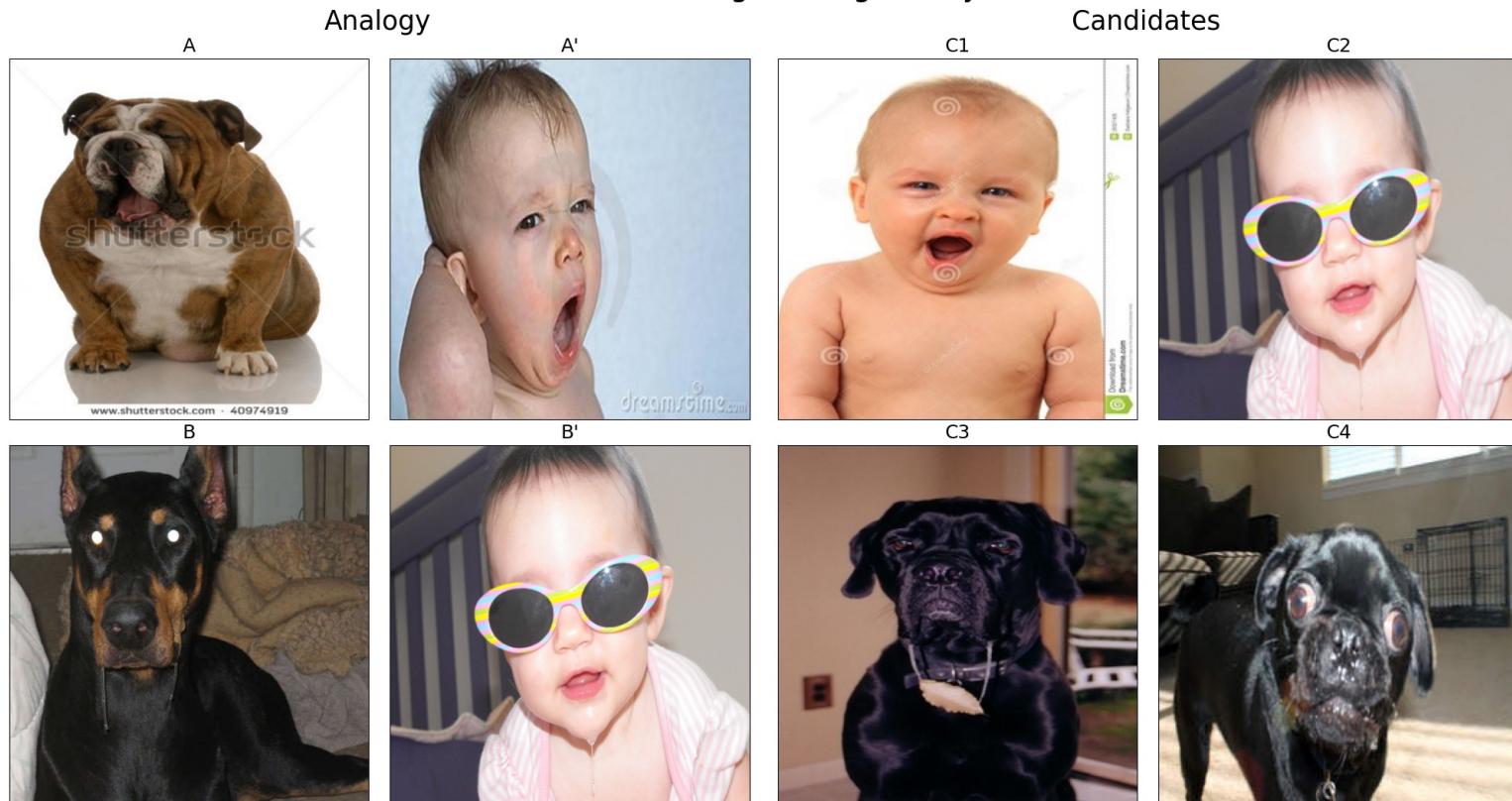


C4



Agent – Example 1:

difference: agent, dog->baby



Answer: C2 (A baby drooling).

Difference A,A': A dog yawning, changed to a baby yawning. **Agent** changed: dog → baby.

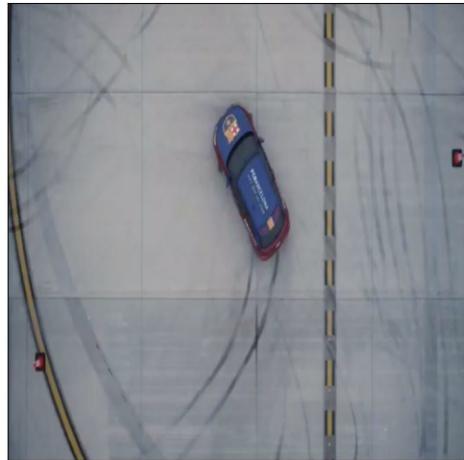
Map difference to B: Dog drooling → Baby drooling.

Additional Explanation: C1 also contains baby, but he is yawning and not drooling. The difference between B,B' should only contain dog → baby, so the other properties in B' should be the same as B.

Agent – Example 2:

Analogy

A



A'

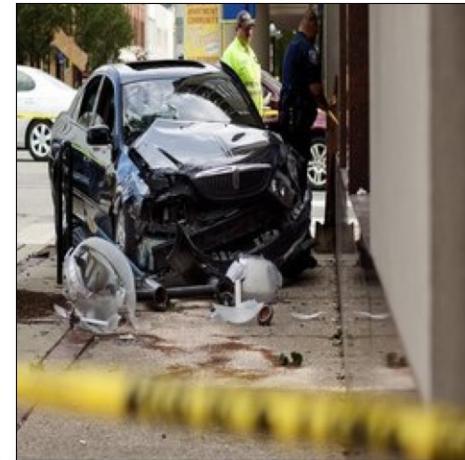


Candidates

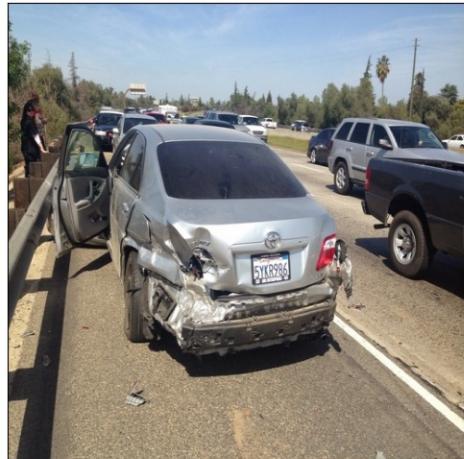
C1



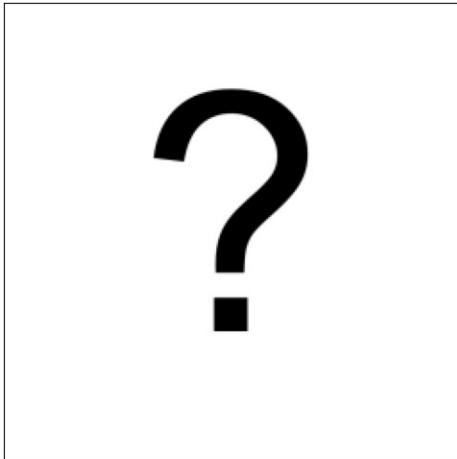
C2



B



B'



C3



C4

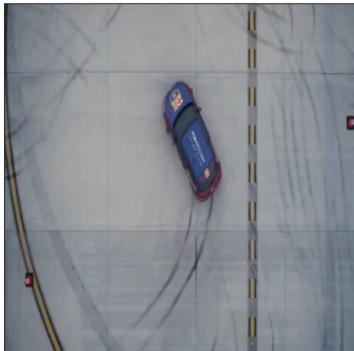


Agent – Example 2:

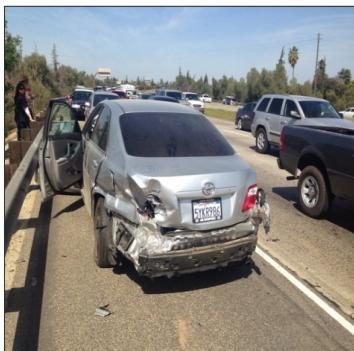
difference: agent, car->motorcycle

Analogy

A



B



Analogy

A'



B'



Candidates

C1



C3



C2



C4



Answer: C3 (motorcycle crash).

Difference A,A': A car drifting, changed to a motorcycle drifting. **Agent** changed: motorcycle → car.
Map difference to B: car crash → motorcycle crash.

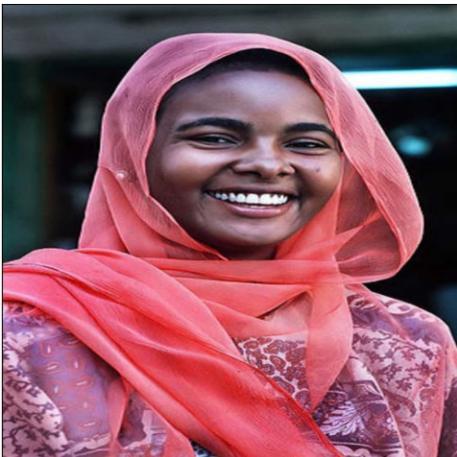
Additional Explanation: C1 also contain motorcycle. However it doesn't seem to crash, and we need B' to be similar to B except the single change of motorcycle → car, meaning that the answer should contain motorcycle crashing.

Verb – Example 1:

Analogy



A¹



Candidates



C2

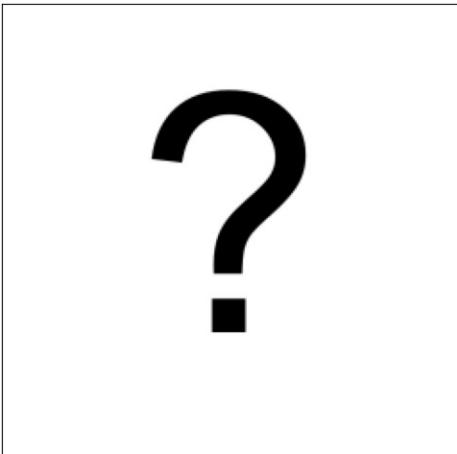


B



shutterstock . 85078534

B¹



C3



C4



Verb – Example 1:

difference: verb, shivering->smiling

Analogy

A



A'



Candidates

C2



B



B'



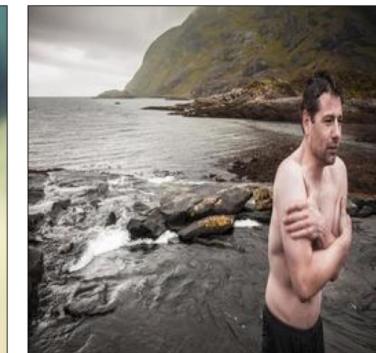
C1



C3



C4



Answer: C2 (man smiling).

Difference A,A': A woman shivering, changed to woman smiling. **Verb** changed: shivering → smiling.

Map difference to B: man shivering → man smiling.

Additional Explanation: C3 also contain person smiling. However it is not a man like in B. We need B' to be similar to B except the single change of shivering → smiling, meaning that the answer should contain a man smiling.

Verb – Example 2:

Analogy

A



A'



Candidates

C2



B



B'



C1



C3



C4



Verb – Example 2:

difference: verb, frowning->whirling

Analogy



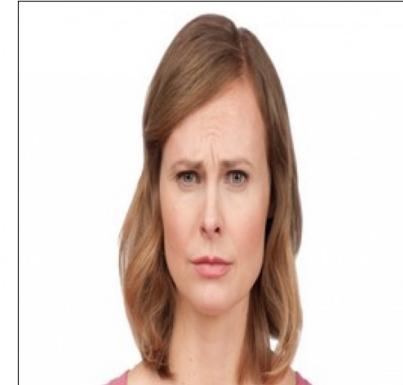
A



A'



C1



C2



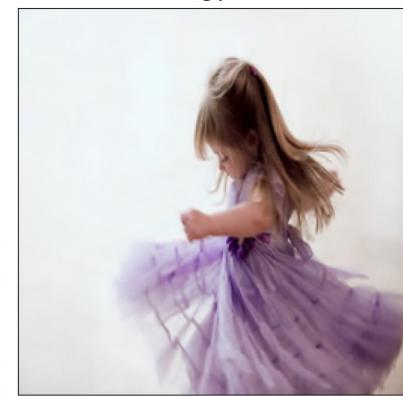
B



B'



C3



C4

Answer: C4 (girl whirling).

Difference A,A': A man frowning, changed to man whirling. Verb changed: frowning → whirling.

Map difference to B: girl frowning → girl whirling.

Item – Example 1:

Analogy

A



Candidates

C2



B



C1



C4



Item – Example 1:

difference: item, horse->man

Analogy



A



A'

Candidates



C1



C2



© Can Stock Photo - csp3789904

B



B'



C3



C4

Answer: C4 (man patting a man).

Difference A,A': People whipping a horse, changed to people whipping a man. Item changed: horse → man.

Map difference to B: man patting a horse → man patting a man.

Tool – Example 1:

Analogy

A



A'



Candidates

C2



B



B'



C3

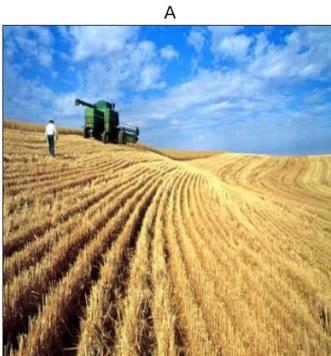


C4

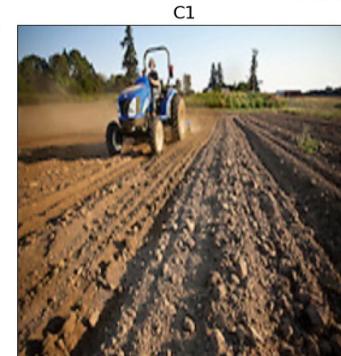


Tool – Example 1:

Analogy



Candidates



Answer: C2 (People's hand soiling land.).

Difference A,A': A tractor harvesting, changed to people's hand harvesting. **Tool** changed: tractor → people's hand.

Map difference to B: Tractor soiling land → People's hand soiling land.

Additional Explanation: C3 also seem to show people processing land with their hands. How can we be sure that B is soiling? The land in B seem to be empty, before soiling, and there is nothing to harvest in it. The people in C3 seem to harvest. The verb in B should be the same as the verb in B', so if by contrary it would be B'=C3, the difference would be tractor harvesting → people's hand harvesting, which is not the case because the tractor isn't harvesting. If we choose C2 it would make sense: tractor soiling → people's hand soiling.

Vehicle – Example 1:

Analogy

A



A'



Candidates

C1



C2



B



B'



C3

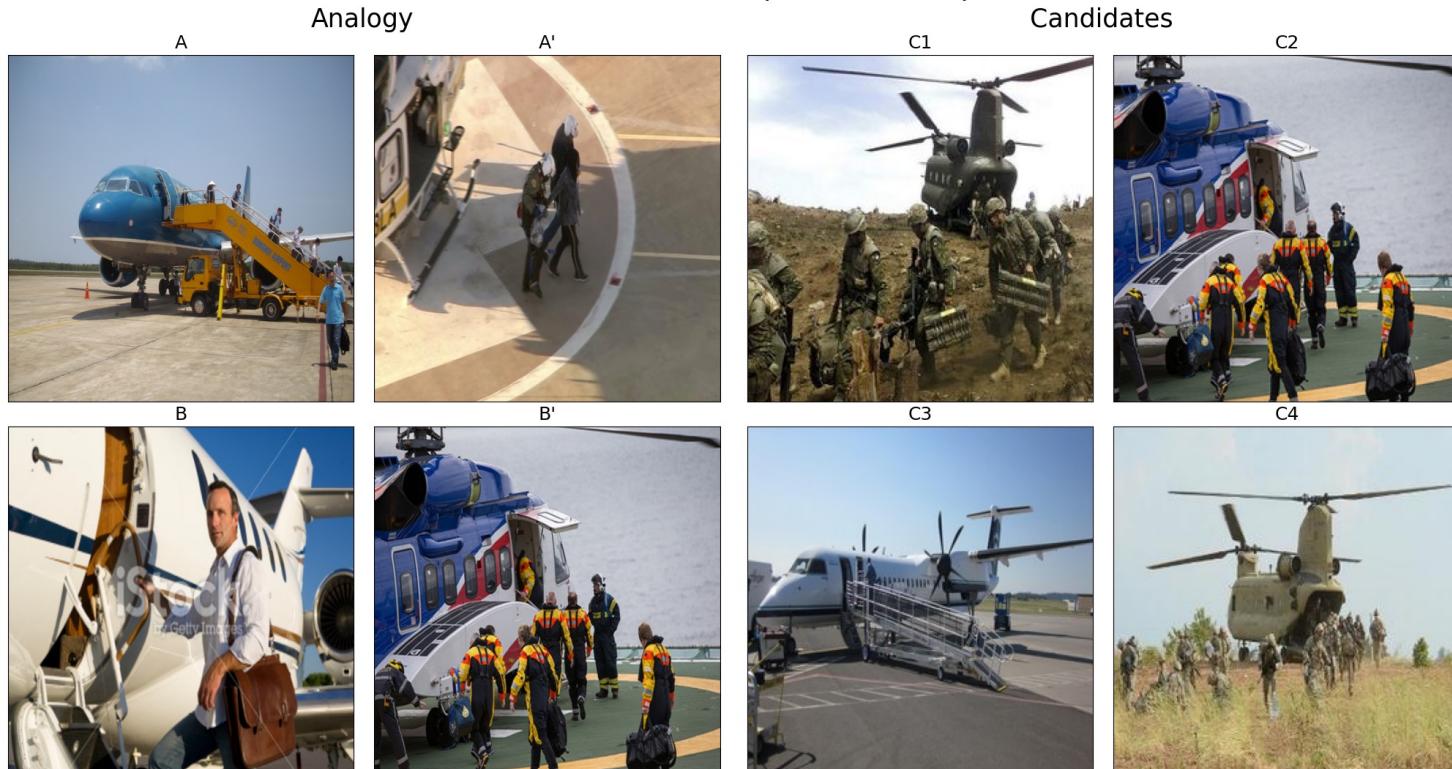


C4



Vehicle – Example 1:

difference: vehicle, airplane->helicopter



Answer: C2 (People boarding a helicopter).

Difference A,A': People going down from an airplane, changed to people getting down from a helicopter. **Vehicle** changed: airplane → helicopter.

Map difference to B: People boarding an airplane → People boarding a helicopter.

Additional Explanation: C1 and C4 also shows helicopter, but it includes people getting off from it, not boarding. B actually include single person, not multiple people, but there isn't contradicting candidate, so the option that makes the most sense is C2.

Victim – Example 1:

Analogy

A



A'



Candidates

C2



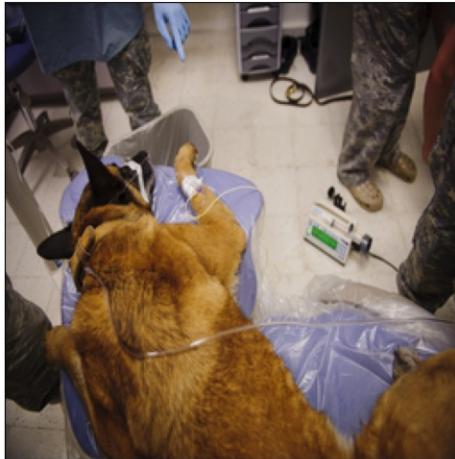
B



B'



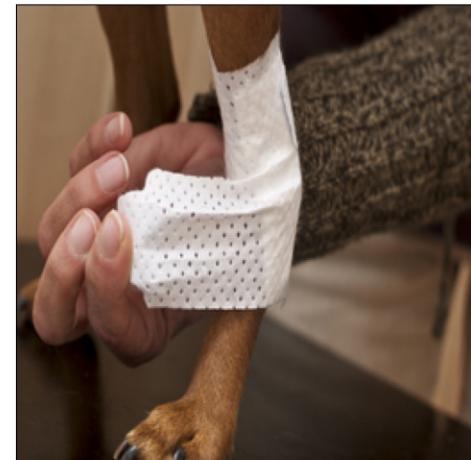
C1



C3



C4



Victim – Example 1:

difference: victim, man->dog

Analogy

A



B



A'



B'



Candidates

C1



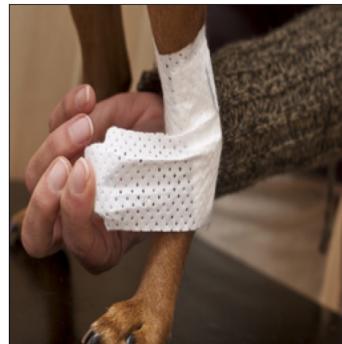
C3



C2



C4



Answer: C1 (Dog lying in a hospital room.).

Difference A,A': A man getting medical care with a bondage, changed to a dog getting medical care with a bondage. **Victim** changed: man → dog.

Map difference to B: Man lying in a hospital room → Dog lying in a hospital room.

Additional Explanation: A' might look like a toy dog, but there isn't a contradicting candidate (another toy dog) so we may assume it's simple a dog. C4 also seem to include a dog, but the situation of the dog in C1 looks more like the situation of the person in B.

Food – Example 1:

Analogy

A



A'



C1



C2



B



B'



C3



C4



Food – Example 1:

difference: food, chicken->vegetable



Answer: C2 (Vegetable on a grill).

Difference A,A': A chicken fried in a pan, changed to a vegetable getting fried in a pan. Food changed: chicken → vegetable.

Map difference to B: Chicken on a grill → Vegetable on a grill.

Additional Explanation: C1 & C2 also includes vegetables, but fried in a pan, not grilled.

Harder Cases

Try it, it's important!

- The following cases are harder and are less well-defined. You might need a bit of improvisation and using common-sense.
- In addition, **as in the real annotation task, we won't provide you with the analogy category, you'll need to infer it yourself.**

Example 1:

Analogy

A



A'



Candidates

C1



C2



B



B'



C3

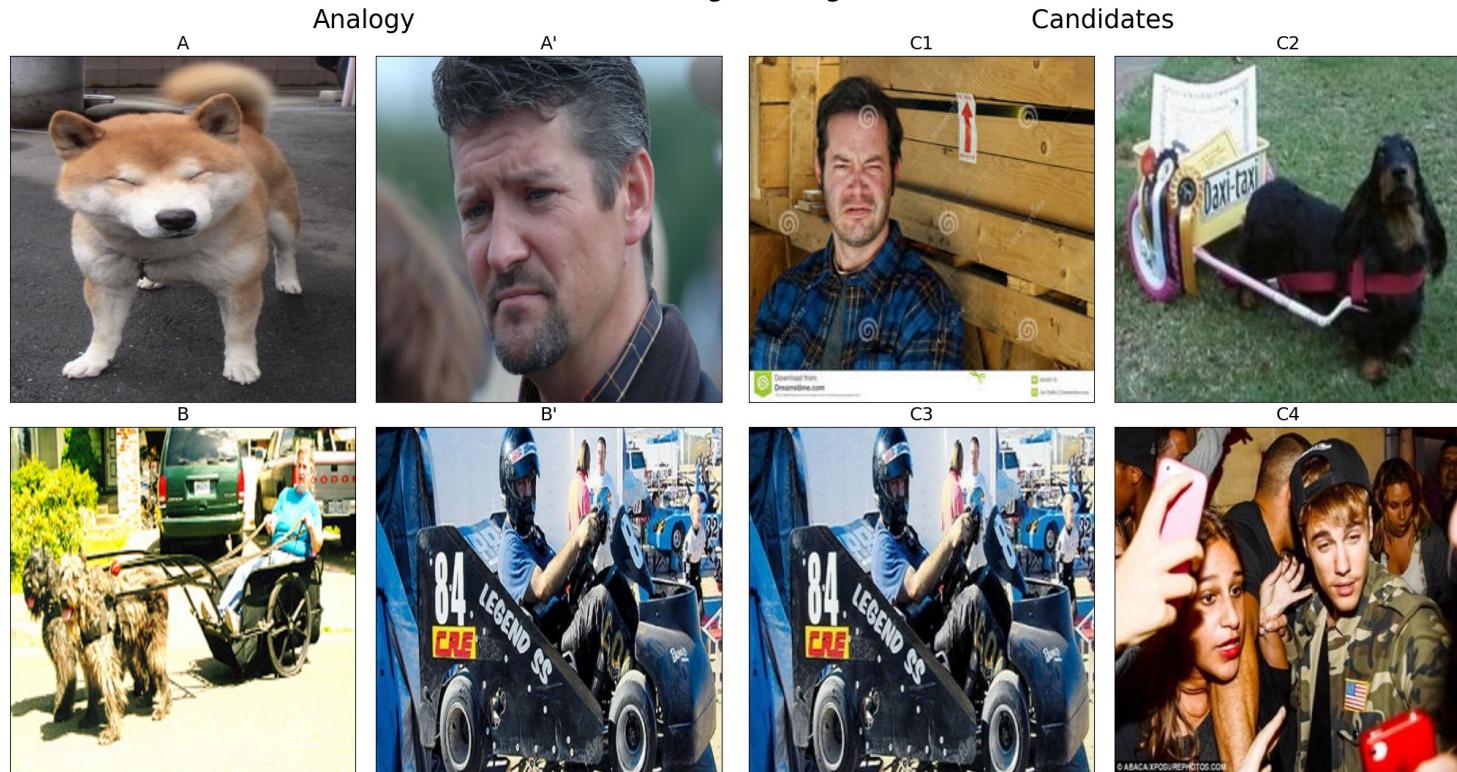


C4



Example 1:

difference: agent, dog->man



Answer: C3 (Man driving a cart).

Analogy category the main difference between A and A' seem to be the agent.

Difference A,A': A dog tilting his head, changed to a man tilting his head. **Agent** changed: dog → man.

Map difference to B: Dogs driving a cart → Man driving a cart.

Additional Explanation: B actually includes dog driving a man, but we focus on the fact that they are causing a cart to move. The only candidate that seem to make a cart move is C3.

Example 2:

Analogy

A



A'



Candidates

C1



C2



B



B'



C3

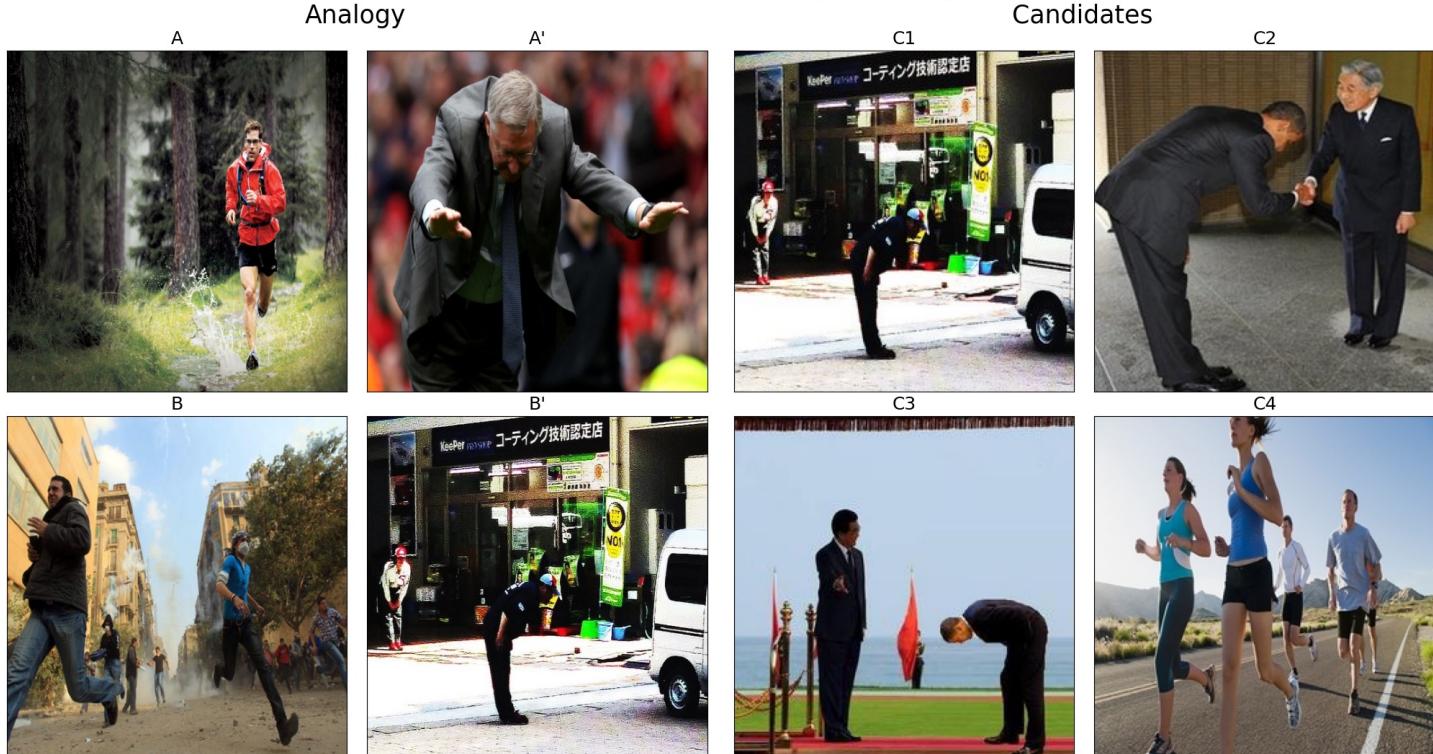


C4



Example 2:

difference: verb, running->bowing



Answer: C1 (Man bowing).

Analogy category the main difference between A and A' seem to be the verb.

Difference A,A': A man running, changed to a man bowing. Verb changed: running → bowing.

Map difference to B: Man running → Man bowing.

Additional Explanation: C2 and C3 also include a man bowing. The difference is that C2 and C3 is tagged as "The president of united states" (Barak Obama) instead of "man". We agree that there might be 3 correct answers here, but if we understand that C2 and C3 are unique in that way, we might exclude them and choose C1 correctly.

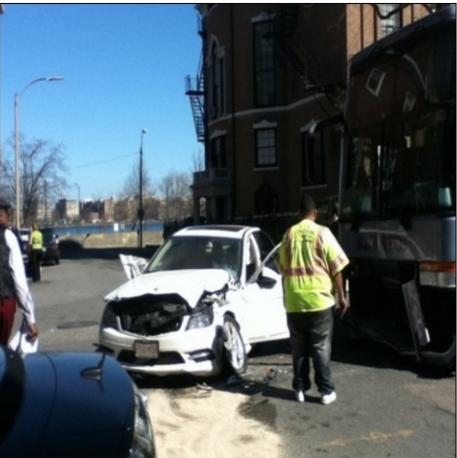
Example 3:

Analogy

A



A'



Candidates

C1



C2



B



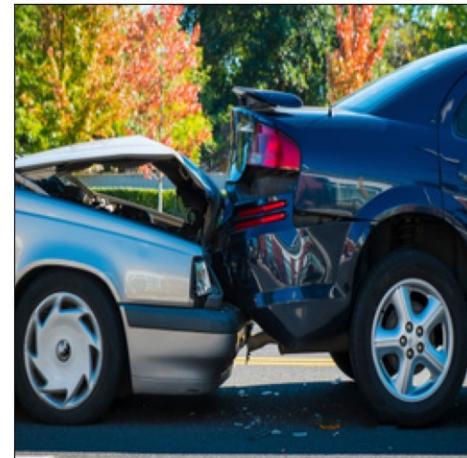
B'



C3



C4



Example 3:

difference: item, motorcycle->car

Analogy

A



A'



B



B'



Candidates

C1



C3



C2



C4



Answer: C3 (Car being towed).

Analogy category the main difference between A and A' seem to be the item/vehicle.

Difference A,A': A motorcycle crash, changed to a car crash. Item/vehicle changed: car → motorcycle.

Map difference to B: Motorcycle being towed → Car being towed.

Additional Explanation: Image A seem to include both motorcycle and a car. In this case the main difference might be a motorcycle. To verify it, we can look at B: It includes a motorcycle. If by contrary we chose another main difference between A and A', it wouldn't make sense with B containing motorcycle.

Example 4:

Analogy

A



A'



Candidates

C2



B



B'



C3

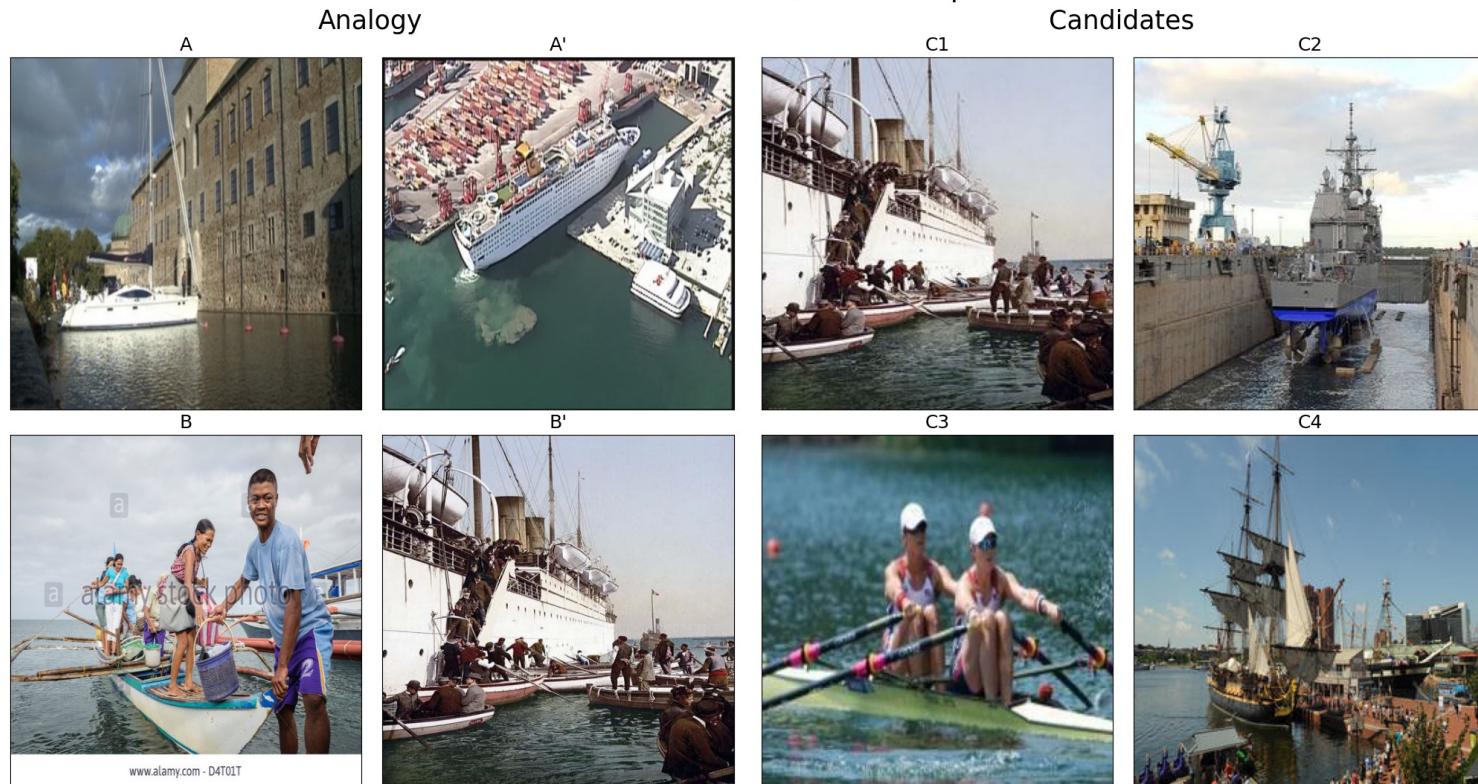


C4



Example 4:

difference: vehicle, boat->ship



Answer: C1 (People getting down a ship).

Analogy category the main difference between A and A' seem to be the vehicle.

Difference A,A': A boat sailing, changed to a ship sailing. **Vehicle** changed: boat → ship.

Map difference to B: People getting down a boat → People getting down a ship.

Additional Explanation: Images C2 and C4 also include ships, but the people actions / situation in C1 looks more similar to the action / situation in B.

Example 5:

Analogy

A



A'



Candidates

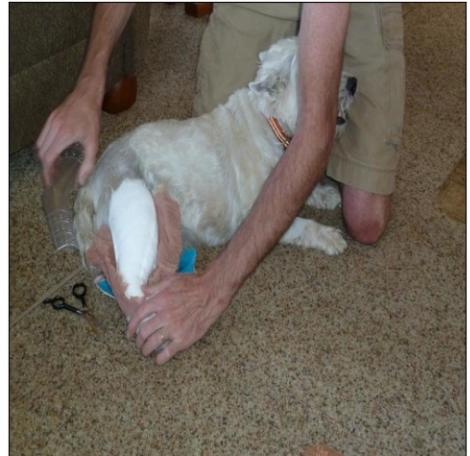
C1



C2



B



B'



C3



C4



Example 5:

difference: victim, dog->man



Answer: C2 (Man getting medical care with a bondage).

Analogy category the main difference between A and A' seem to be the victim.

Difference A,A': A dog getting medical care, changed to a man getting medical care. **Victim** changed: dog → man.

Map difference to B: A dog getting medical care with a bondage → Man getting medical care with a bondage.

Additional Explanation: Images C1 and C4 also include men getting medical care, but only C2 seem to be with a bondage, as in image B.

Example 6:

Analogy

A



A'



Candidates

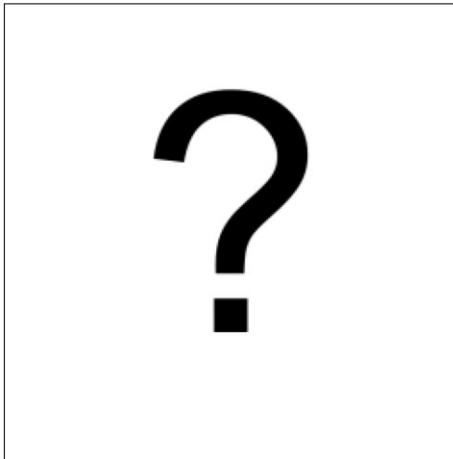
C2



B



B'



C1



C3

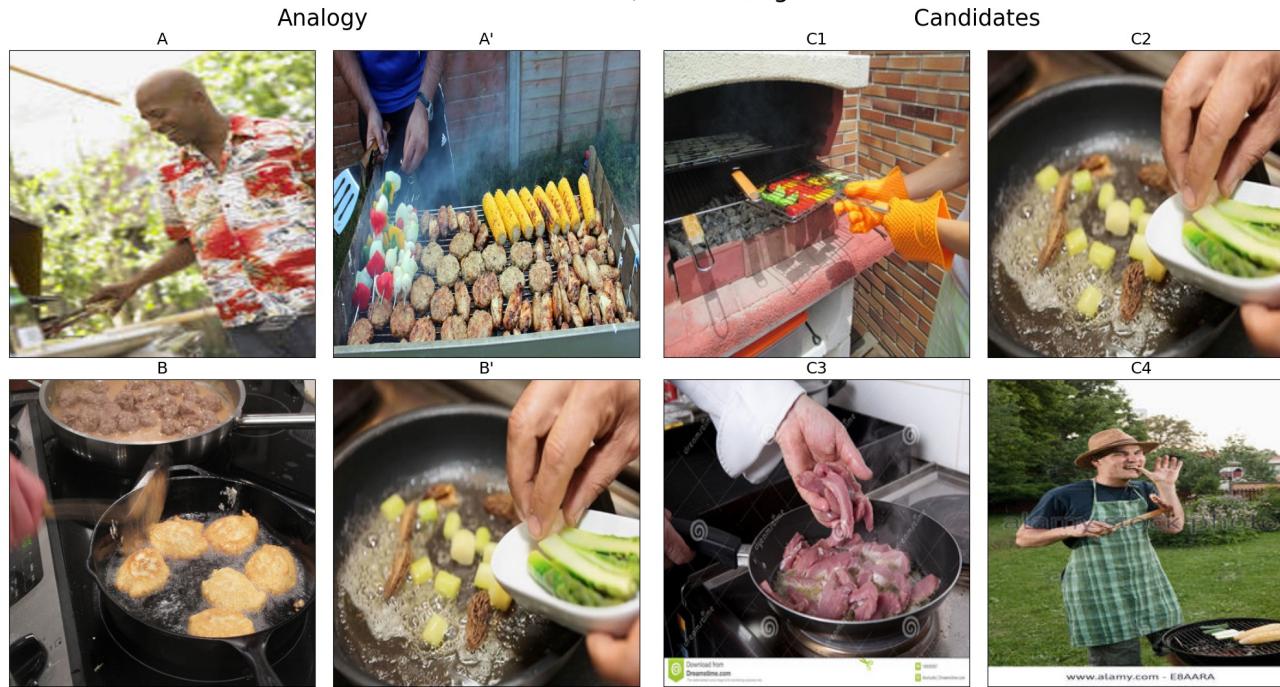


C4



Example 6:

difference: food, meat->vegetable



Answer: C2 (Vegetable being grilled).

Analogy category the main difference between A and A' seem to be the food.

Difference A,A': A X getting grilled, changed to a Y getting grilled. **Food** changed: X → Y.

This is a harder case, We don't really see the food in A, and A' contains both vegetables and meat.

It might be X=vegetable and Y=meat or vice versa. (The distractors also include vegetable or meat, so it seem to be the case). If X=vegetable, than B also should include vegetable. It seem to include some kind of meat, so it seem to be a contradiction. Let's try X=meat and Y=vegetable. It can work - no contradiction yet. **Food** changed: Meat → Vegetable.

Map difference to B: A meat being fried in a pan → Vegetable being fried in a pan.

Additional Explanation: Images C1 & C4 also include vegetable being grilled, but not fried in a pan like B.

Example 7:

Analogy

A



A'



Candidates

C1



C2



B



B'



C3



C4



Example 7:

difference: tool, needle->sewing machine



Answer: C3 (Person sewing with a sewing machine).

Analogy category the main difference between A and A' seem to be the tool.

Difference A,A': Women sewing with needles, changed to women sewing with a sweing machine. **Tool** changed: Needle → Sewing machine.

Map difference to B: Person sewing with a needle → Person sewing with a sewing machine.

Additional Explanation: Image C2 seem to include sewing machine, but C3's situation look more like the situation in B.

Analogy

A



A'



Candidates

C1



C2



B



B'



C3



C4

