Supplementary Online Material
Schwitzgebel & Cushman, "Expertise in Moral Reasoning? Order Effects on Moral Judgment in Professional Philosophers and Non-Philosophers"

Doctrine of Double Effect Cases

Push scenarios (used in Q1-Q2 and Q14-Q17; based in part on Cushman et al. 2006)

Jane is standing on a footbridge over the railroad tracks when she notices an empty boxcar rolling out of control. It is moving so fast that anyone it hits will die. Ahead on the track are five people. There is a person standing near Jane on the footbridge, and he weighs enough that the boxcar would slow down if it hit him. (Jane does not weigh enough to slow down the boxcar.) The footbridge spans the main track. If Jane does nothing, the boxcar will hit the five people on the track. If Jane pushes the one person, that one person will fall onto the track, where the boxcar will hit the one person, stop because of the one person, and not hit the five people on the track.

Pushing the one person is:

1	2	3	4	5	6	7

Extremely			Neither Good			Extremely
Morally			Nor Bad			Morally
Good						Bad

Luke is driving a motorboat when he notices five swimmers drowning in the distance. If Luke does not drive toward them at top speed he will not arrive in time, and all five will die. There is a passenger on board the boat, so the boat is too heavy to drive at top speed. If Luke pushes the passenger, the passenger will tumble off the back of the boat. This passenger cannot swim and will drown. But the boat will be light enough for Luke to drive at top speed and save the five drowning swimmers. If Luke does not push the passenger, the one passenger will stay safely on the boat, but the five swimmers will drown.

Pushing the one person is:

1	2	3	4	5	6	7

Extremely			Neither Good			Extremely
Morally			Nor Bad			Morally
Good						Bad

Lisa is a doctor in the intensive care unit of her hospital. An earthquake strikes, and Lisa is trapped in a room with six critically ill patients. One patient is on a life-support machine and can live for several days. The other five patients will die without immediate care from rescue crews.

The only way for Lisa to signal for immediate help from rescue crews is to move the one patient off of his life support machine, causing him to die, and therefore triggering an alarm system into "code red." Only a "code red" alarm will attract the rescue teams immediately. If Lisa moves the patient, the one patient on the life-support machine will die, but rescue crews will come immediately and the other five patients will live. If Lisa does not move the patient, the one patient on the life-support machine will live, but rescue crews will not arrive in time and the other five patients will die.

Turning off the life support machine is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Andy is a firefighter inside a deadly blaze in an orphanage. He is in a room with five children, and they must be evacuated immediately or the smoke will choke them. The only way to evacuate the children is through the window. However, another firefighter put a toddler strapped to a hospital crib on the small platform outside the window, waiting to be rescued. The platform is too small to hold the crib and the children. Andy can just reach the one toddler on the platform through the window. If Andy pushes the one toddler, the one toddler and the crib will fall off the platform, and this will make enough room for the five children. The one toddler will die, but the five children will be safely evacuated. If Andy does not push the one toddler, the five children will die.
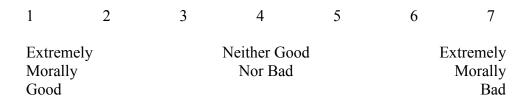
Pushing the toddler is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Switch scenarios (used in Q1-Q2 and Q14-Q17):

Vicki is standing by the railroad tracks when she notices an empty boxcar rolling out of control. It is moving so fast that anyone it hits will die. Ahead on the main track are five people. There is one person standing on a side track that doesn't rejoin the main track. If Vicki does nothing, the boxcar will hit the five people on the main track, but not the one person on the side track. If Vicki flips a switch next to her, it will divert the boxcar to the side track where it will hit the one person, and not hit the five people on the main track.

Flipping the switch is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Bill is driving a motorboat when he notices five swimmers drowning in the distance. If Bill does not drive toward them at top speed he will not arrive in time, and all five will die. In order to drive at top speed, Bill must accelerate quickly. Accelerating quickly will also cause a passenger to tumble off the back of the boat. This passenger cannot swim and will drown. But Bill will save the five drowning swimmers. If Bill does not accelerate quickly, the one passenger will stay safely on the boat, but the five swimmers will drown.

Accelerating quickly is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Helen is a doctor in the intensive care unit of her hospital. An earthquake strikes, and Helen is trapped in a room with six critically ill patients. One patient is on a life-support machine and can live for several days. The other five patients will die without immediate care from rescue crews. The only way for Helen to signal for immediate help from rescue crews is to turn off the main power supply to the room, which will trigger an automatic alarm system, but will also turn off the life-support machine. If Helen cuts off the main power supply, the one patient on the life-support machine will die, but rescue crews will be alerted and the other five patients will live. If Helen does not cut off the main power supply, the one patient on the life-support machine will live, but rescue crews will not arrive in time and the other five patients will die.

Cutting of the main power supply is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Mike is a firefighter inside a deadly blaze in an orphanage. He is in a room with five children, and they must be evacuated immediately or the smoke will choke them. The only way to evacuate the children is through the window, and the only possible way to open the window is to

smash it hard with a beam of wood. However, another firefighter put a toddler strapped to a hospital crib on a large platform outside the window, waiting to be rescued. If Mike smashes the window with the beam, the beam is sure to knock the crib and that one toddler off the platform, and the one toddler will die, but the five children will be safely evacuated. If Mike does not smash the window with the beam, the five children will die.
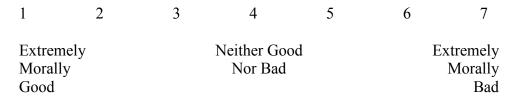
Smashing the window is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

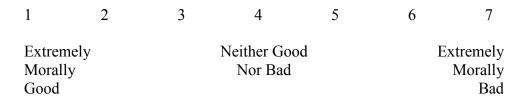Action/Omission Cases

Action scenarios (used in Q6-Q9):

Eric is visiting a new public aquarium and he goes into a diving pod in one of the exhibits. Suddenly, there is an earthquake and part of the aquarium collapses, pinching off the oxygen flow through his diving pod supply line. However, right next to him is another diver whose oxygen supply line is undamaged. Eric realizes that in the chaos he could switch the supply line from the other visitor's pod to his own. If he does not switch the supply line, he risks running out of oxygen and dying before he can escape from the aquarium, but switching the supply line would mean putting the other visitor's life at risk, since the other visitor might not be able to escape from the aquarium quickly enough.

Switching the supply line is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Fred is on a cruise in the Pacific when the boat strikes an iceberg and he is thrown overboard. The ship begins to sink and there is general panic. A life vest is tossed near to Fred, but another passenger, who is clearly not a strong swimmer, grabs it first. Fred is a strong swimmer, but without a vest he realizes his chances of surviving are significantly less. He also realizes that he could quickly snatch the vest away from the other man and put it on himself. No other means of rescue are at hand, and if they try to share the vest, it will be useless to both of them. If Fred quickly snatches the vest away from the man near him, the man will surely drown soon.

Snatching the vest is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Take Vest, second-person variant:

You are on a cruise in the Pacific when the boat strikes an iceberg and he is thrown overboard. The ship begins to sink and there is general panic. A life vest is tossed near to another passenger, Fred, but you, who are clearly not a strong swimmer, grab it first. Fred is a strong swimmer, but without a vest he realizes his chances of surviving are significantly less. He also realizes that he could quickly snatch the vest away from you and put it on himself. No other means of rescue are at hand, and if the two of you try to share the vest, it will be useless to both of you. If Fred quickly snatches the vest away from you, you will surely drown soon.

Snatching the vest is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good

Omission scenarios (used in Q6-Q9):

Chris is visiting a new public aquarium and he goes into a diving pod in one of the exhibits. Suddenly, there is an earthquake and part of the aquarium collapses, pinching off the oxygen flow through the diving pod supply line of another diver right next to him. However, Chris's own supply line is undamaged. Chris realizes that in the chaos he could switch the supply line from his own pod to the other visitor's pod. If he does not switch the supply line, the other visitor risks running out of oxygen and dying before he can escape from the aquarium, but switching the supply line would mean putting his own life at risk, since Chris might not be able to escape from the aquarium quickly enough.

Keeping the supply line himself is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Alex is on a cruise in the Pacific when the boat strikes an iceberg and he is thrown overboard. The ship begins to sink and there is general panic. A life vest is tossed near to Alex, and he quickly grabs it. He is a strong swimmer, but without the vest he realizes his chances of surviving are significantly less. Near him is a man without a vest who is clearly not a strong swimmer. No other means of rescuing that man are at hand, and if they try to share the vest, it will be useless to both of them. If Alex does not give up the vest, the man near him will surely drown soon.

Keeping the vest himself is:

1	2	3	4	5	6	7

Extremely
Morally
Good

Neither Good
Nor Bad

Extremely
Morally
Bad

Keep Vest, second-person variant:

You are on a cruise in the Pacific when the boat strikes an iceberg and he is thrown overboard. The ship begins to sink and there is general panic. A life vest is tossed near to another passenger, Alex, and he quickly grabs it. He is a strong swimmer, but without the vest he realizes his chances of surviving are significantly less. You are near him without a vest and you are clearly not a strong swimmer. No other means of rescue are at hand, and if the two of you try to share the vest, it will be useless to both of you. If Alex does not give up the vest, you will surely drown soon.
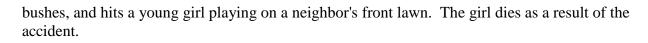
Keeping the vest himself is:

1	2	3	4	5	6	7

Extremely
Morally
Good

Neither Good
Nor Bad

Extremely
Morally
Bad

Moral Luck Cases

Bad luck cases (used in Q10-Q13):

Bruce spends a Saturday afternoon watching the ball game at a local bar. He has a few more drinks than usual, and his friends encourage him to wait a while before he drives home. But Bruce says that he'll be fine, and gets in his car. When he is almost home, driving down a quiet surburban street, Bruce falls asleep at the wheel. His car jumps the curb, crashes through some

bushes, and hits a young girl playing on a neighbor's front lawn. The girl dies as a result of the accident.

Bruce is:

1	2	3	4	5	6	7

Not at all   Substantially   Extremely
Morally   Morally   Morally
Blameworthy   Blameworthy   Blameworthy

Ralph is working at a construction site. His immediate task is to clear concrete bags off the roof of the building. The regulations require that Ralph lower the bags down in groups using a lift, rather than simply throwing the bags over the side. The reason for that rule is clear: Workers cannot see the ground from the roof of the building, so items thrown over the side might land on and kill someone. Ralph knows this, but he is feeling lazy, no one is watching, and he rightly thinks there's only about a one-tenth of one percent (1 in 1000) chance that anybody would be near the side of the building. So Ralph violates the rule and throws the concrete bags over the side. As it turns out, someone happens to be walking near the side of the building and is killed by a falling bag.

Ralph is:

1	2	3	4	5	6	7

Not at all   Substantially   Extremely
Morally   Morally   Morally
Blameworthy   Blameworthy   Blameworthy

Good luck cases (used in Q10-Q13):

John spends a Saturday afternoon watching the ball game at a local bar. He has a few more drinks than usual, and his friends encourage him to wait a while before he drives home. But John says that he'll be fine, and gets in his car. When he is almost home, driving down a quiet surburban street, John falls asleep at the wheel. His car jumps the curb, crashes through some bushes, and hits a tree on a neighbor's front lawn.

John is:

1	2	3	4	5	6	7

Not at all   Substantially   Extremely
Morally   Morally   Morally
Blameworthy   Blameworthy   Blameworthy

Pat is working at a construction site. His immediate task is to clear concrete bags off the roof of the building. The regulations require that Pat lower the bags down in groups using a lift, rather than simply throwing the bags over the side. The reason for that rule is clear: Workers cannot see the ground from the roof of the building, so items thrown over the side might land on and kill someone. Pat knows this, but he is feeling lazy, no one is watching, and he rightly thinks there's only about a one-tenth of one percent (1 in 1000) chance that anybody would be near the side of the building. So Pat violates the rule and throws the concrete bags over the side. As it turns out, no one happens to be near the side of the building and no harm is done.

Pat is:

1	2	3	4	5	6	7

Not at all
Morally
Blameworthy

Substantially
Morally
Blameworthy

Extremely
Morally
Blameworthy

Deontological/Utilitarian Moral Dilemmas

(Q3-Q5; not analyzed in present paper, based on Greene et al. 2001)

Third-person variants:

Cindy is the captain of a military submarine traveling underneath a large iceberg. An onboard explosion has caused her to lose most of her oxygen supply and has injured one of her crew who is quickly losing blood. The injured crew member is going to die from his wounds no matter what happens. The remaining oxygen is not sufficient for the entire crew to make it to the surface. The only way to save the other crew members is to shoot dead the injured crew member so that there will be just enough oxygen for the rest of the crew to survive.

Shooting the injured crew member is:

1	2	3	4	5	6	7

Extremely
Morally
Good

Neither Good
Nor Bad

Extremely
Morally
Bad

A viral epidemic has spread across the globe killing millions of people. Emma has developed two substances in her home laboratory. She knows that one of them is a vaccine, but she doesn't know which one. She also knows that the other one is deadly poison. Once she figures out which substance is the vaccine she can use it to save millions of lives. Emma has with her two

people who are under her care, and the only way to identify the vaccine is to inject each of these people with one of the two substances. One person will live, the other will die, and Emma will be able to start saving lives with her vaccine.

Injecting the substance is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Nancy is part of a group of ecologists who live in a remote stretch of jungle. The entire group, which includes eight children, has been taken hostage by a group of paramilitary terrorists. One of the terrorists takes a liking to Nancy. He informs her that his leader intends to kill her and the rest of the hostages the following morning. He is willing to help Nancy and the children escape, but as an act of good faith he wants Nancy to kill one of her fellow hostages whom he does not like. If Nancy refuses his offer all the hostages including the children and Nancy herself will die. If she accepts his offer then the others will die in the morning but she and the eight children will escape.

Killing a fellow hostage is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Second-person variants:

Nancy is part of a group of ecologists who live in a remote stretch of jungle. The entire group, which includes you and eight children, has been taken hostage by a group of paramilitary terrorists. One of the terrorists takes a liking to Nancy. He informs her that his leader intends to kill her and the rest of the hostages the following morning. He is willing to help Nancy and the children escape, but as an act of good faith he wants Nancy to kill you, who are one of the fellow hostages whom he does not like. If Nancy refuses his offer all the hostages including you, the children, and Nancy herself will die. If she accepts his offer then the others including you will die in the morning but Nancy and the eight children will escape.

Cindy's shooting you is:

1	2	3	4	5	6	7

Extremely			Neither Good			Extremely
Morally			Nor Bad			Morally
Good						Bad

[Epidemic case always third-person.]

Nancy is part of a group of ecologists who live in a remote stretch of jungle. The entire group, which includes you and eight children, has been taken hostage by a group of paramilitary terrorists. One of the terrorists takes a liking to Nancy. He informs her that his leader intends to kill her and the rest of the hostages the following morning. He is willing to help Nancy and the children escape, but as an act of good faith he wants Nancy to kill you, who are one of the fellow hostages whom he does not like. If Nancy refuses his offer all the hostages including you, the children, and Nancy herself will die. If she accepts his offer then the others including you will die in the morning but Nancy and the eight children will escape.

Nancy's killing you is:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Extremely			Neither Good			Extremely
Morally			Nor Bad			Morally
Good						Bad

Additional Doctrine of Double Effect Variants

Drop scenarios (Q14-Q17; not analyzed in present paper; based in part on Cushman et al. 2006)

Alice is standing by the railroad tracks when she notices an empty boxcar rolling out of control. It is moving so fast that anyone it hits will die. Ahead on the track are five people. There is one person standing on a footbridge, and he weighs enough that the boxcar would slow down if it hit him. (Alice does not weigh enough to slow down the boxcar.) The footbridge spans the main track. If Alice does nothing, the boxcar will hit the five people on the track. If Alice flips a switch next to her, it will release a trapdoor on the footbridge and the one person will fall onto the track, where the boxcar will hit the one person, stop because of the one person, and not hit the five people on the track.
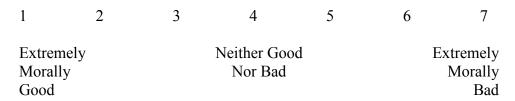
Flipping the switch is:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Extremely			Neither Good			Extremely
Morally			Nor Bad			Morally
Good						Bad

Al is driving a motorboat when he notices five swimmers drowning in the distance. If Al does not drive toward them at top speed he will not arrive in time, and all five will die. There is a passenger on board the boat, so the boat is too heavy to drive at top speed. If Al turns hard, the passenger will tumble off the back of the boat. This passenger cannot swim and will drown. But the boat will be light enough for Al to drive at top speed and save the five drowning swimmers. If Al does not turn hard, the one passenger will stay safely on the boat, but the five swimmers will drown.

Turning hard is:

1	2	3	4	5	6	7

Extremely
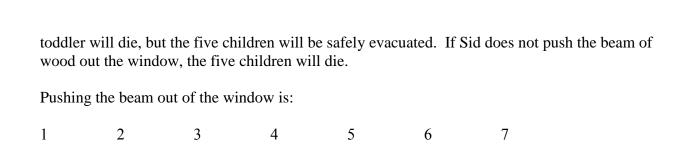Morally
Good

Neither Good
Nor Bad

Extremely
Morally
Bad

Beth is a doctor in the intensive care unit of her hospital. An earthquake strikes, and Beth is trapped in a room with six critically ill patients. One patient is on a life-support machine and can live for several days. The other five patients will die without immediate care from rescue crews. The only way for Beth to signal for immediate help from rescue crews is to turn off the one patient's life support machine, causing him to die, and therefore triggering an alarm system into "code red." Only a "code red" alarm will attract the rescue teams immediately. If Beth turns off the one patient's life support machine, the one patient on the life-support machine will die, but rescue crews will come immediately and the other five patients will live. If Beth does not turn off the one patient's life support machine, the one patient on the life-support machine will live, but rescue crews will not arrive in time and the other five patients will die.

Turning off the life support machine is:

1	2	3	4	5	6	7

Extremely
Morally
Good

Neither Good
Nor Bad

Extremely
Morally
Bad

Sid is a firefighter inside a deadly blaze in an orphanage. He is in a room with five children, and they must be evacuated immediately or the smoke will choke them. The only way to evacuate the children is through the window. However, another firefighter put a toddler strapped to a hospital crib on the small platform outside the window, waiting to be rescued. The platform is too small to hold the crib and the children. By pushing a beam of wood out the window, Sid can knock the crib off the platform, and this will make enough room for the five children. The one

toddler will die, but the five children will be safely evacuated. If Sid does not push the beam of wood out the window, the five children will die.

Pushing the beam out of the window is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Loop scenarios (Q14-Q17; not analyzed in present paper; based in part on Cushman et al. 2006)

Mary is standing by the railroad tracks when she notices an empty boxcar rolling out of control. It is moving so fast that anyone it hits will die. Ahead on the main track are five people. There is one person standing on a side track, and he weighs enough that the boxcar would slow down if it hit him. (Mary does not weigh enough to slow down the boxcar.) The side track rejoins the main track before the five people. If Mary does nothing, the boxcar will hit the five people on the main track, but not the one person on the side track. If Mary flips a switch next to her, the boxcar will hit the one person on the side track, stop because of the one person, and not hit the five people on the main track.

Flipping the switch is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
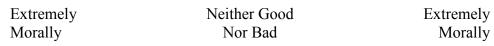Good   Bad

Peter is driving a motorboat when he notices five swimmers drowning in the distance. If Peter does not drive toward them at top speed he will not arrive in time, and all five will die. There is a passenger on board the boat, so the boat is too heavy to drive at top speed. If Peter accelerates quickly, the passenger will tumble off the back of the boat. This passenger cannot swim and will drown. But the boat will be light enough for Peter to drive at top speed and save the five drowning swimmers. If Peter does not accelerate quickly, the one passenger will stay safely on the boat, but the five swimmers will drown.

Accelerating quickly is:

1	2	3	4	5	6	7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally

Good   Bad

Jess is a doctor in the intensive care unit of her hospital. An earthquake strikes, and Jess is trapped in a room with six critically ill patients. One patient is on a life-support machine and can live for several days. The other five patients will die without immediate care from rescue crews. The only way for Jess to signal for immediate help from rescue crews is to turn off the main power supply to the room, which will turn on a backup alarm system that will sound if triggered. Cutting off the main power supply will also turn off the one patient's life support machine, causing him to die, and therefore triggering the backup alarm system into "code red." Only a "code red" alarm will attract the rescue teams immediately. If Jess cuts off the main power supply, the one patient on the life-support machine will die, but rescue crews will come immediately and the other five patients will live. If Jess does not cut off the main power supply, the one patient on the life-support machine will live, but rescue crews will not arrive in time and the other five patients will die.

Cutting of the main power supply is:

1   2   3   4   5   6   7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad

Ken is a firefighter inside a deadly blaze in an orphanage. He is in a room with five children, and they must be evacuated immediately or the smoke will choke them. The only way to evacuate the children is through the window, and the only possible way to open it is to smash it hard with a beam of wood. However, another firefighter put a toddler strapped to a hospital crib on the small platform outside the window, waiting to be rescued. If Ken smashes the window with the beam, the beam is sure to knock the crib and that toddler off the platform. The platform is too small to hold the crib and the children, so this will make enough room for the children. The one toddler will die, but the five children will be safely evacuated. If Ken does not smash the window with the beam, the five children will die.

Smashing the window is:

1   2   3   4   5   6   7

Extremely   Neither Good   Extremely
Morally   Nor Bad   Morally
Good   Bad