



AN ETHICS GAME IN 3D

Trolley Works

Study guide

Six versions of the trolley problem. Decide what you would do in each one, then think it through.

1 The Switch

Pull a lever to save five?

3 The Loop

The side track loops back

5 The One You Love

The one is your best friend

2 The Footbridge

Push one person to save five?

4 The Transplant

A surgeon's choice

6 The Driverless Trolley

Set the rule for every trolley

No right answers

Nothing in this guide tells you what to choose.

6 scenarios

About 3 to 5 minutes each, then time to talk

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THE SIX SCENES



1 The Switch



2 The Footbridge



3 The Loop



4 The Transplant



5 The One You Love



6 The Driverless Trolley

How to use this guide

- Read the first four sections before you play. They explain how the game works and give you the ideas you will need.
- Each scenario has two pages: one to read before you play it, and one to fill in afterwards. Write on them; they are yours.
- The guide never tells you what to choose, and it doesn't give away what research found: the game shows you that after you decide.
- When you have played all six, compare your answers and look for the principle behind them.

What Trolley Works is

Six versions of one of the most famous puzzles in moral philosophy. In each one you decide what you would do, see what happens, and then think it through.

A trolley is a tram: “trolley” is the American word for it. In the best-known version of the puzzle, a runaway trolley is heading for five workers, and you can switch it onto a side track, where it will hit one worker instead. Philosophers call this the trolley problem.

It sounds like a question with an obvious answer. It isn't, and that is why it has lasted for more than fifty years. Change one detail (how you would stop the trolley, who is on the track, who you are) and many people find that their answer changes too. Working out why is a way of finding out what you really believe about right and wrong.

Trolley Works gives you six versions. Each is a short scene in 3D: a branch line in open country, a footbridge over the line, a hospital ward and a signal box. The people in the scenes are track workers, a stranger, patients and a visitor, and in scenario 5 your best friend.

The scenarios are thought experiments: imagined situations, made simple on purpose. Real emergencies are messy. Nobody knows for certain what will happen, and there is rarely time to think. A thought experiment strips all that away so that one question is left. If a scenario feels unrealistic, that is deliberate: it lets you test one idea at a time.

There is no score, and no answer is marked right or wrong. Thoughtful people disagree about every one of these cases, and one of the philosophers who invented them later changed her mind. What matters is the reasons you can give, and whether they hold up when you test them.

YOUR ROLE

In every scenario, you are the one who can act. You stand by a lever, on a footbridge, at an operating table as the surgeon, or at a signal box, writing the rule that every trolley in the city will follow. A tag in the scene shows where you are.

Each scenario gives you two options: one is to act, the other is not to. Whether not acting counts as a choice is one of the questions the game asks.

WHERE THE SCENARIOS COME FROM

Each one comes from philosophy or research. The game names its source after you decide.

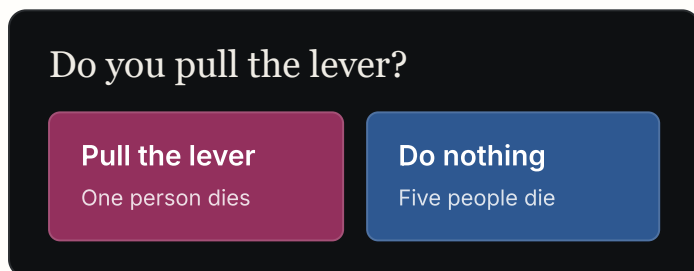
- **The Switch:** the philosophers [Philippa Foot \(1967\)](#) and [Judith Jarvis Thomson \(1985\)](#)
- **The Footbridge:** the philosopher [Judith Jarvis Thomson \(1985\)](#)
- **The Loop:** the philosopher [Judith Jarvis Thomson \(1985\)](#)
- **The Transplant:** the philosopher [Judith Jarvis Thomson \(1976, 1985\)](#)
- **The One You Love:** a question the philosopher [Frank Chapman Sharp](#) put to students from 1905
- **The Driverless Trolley:** the [Moral Machine experiment \(Awad et al., 2018\)](#)

How a scenario works

Every scenario follows the same four steps, and takes about three to five minutes on your own, before any discussion.

1 Read the scenario One short paragraph, over a view of the whole scene. A tag shows where you are. Press Decide when you are ready.	2 Decide The trolley comes in and stops (The Transplant has no trolley). The question appears with one button for each option, and each button says what it costs. A tag over each group shows who that option would harm.	3 See what happens The trolley runs on down the track you chose until it is a step short of the first person it would reach. There everything stops and the colour drains, like a still frame. In The Transplant, it stops at the same kind of moment.	4 Think it through What happened, what research found, and four or five questions to think about and talk over. Then go on to the next scenario.
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STEP 2 IN THE SWITCH: THE CHOICE, AS THE GAME SHOWS IT



The outcome is told, never shown

The game never shows anyone being hit or hurt. The picture stops just before, and what happens next is told in words. Some scenarios are still hard to think about. If one brings up something difficult for you, it is fine to step back from it and talk to your teacher.

The two options

Each option keeps its own colour, on its button and on the tags in the scene: raspberry for acting, blue for not acting. Both are muted, and neither is brighter than the other, so neither looks like the answer you are meant to pick.

Acting **Not acting**

This guide uses the same colours. On the scenario pages, the dot beside each person is the colour of the option that would harm them, as the tags in the game show it.

Play them in order

You can pick any scenario from the list, but they are built to be played from 1 to 6. Each one changes something about an earlier one, and several of the questions afterwards ask you to compare your answer with The Switch (scenario 1).

Getting around

- The bar at the top has a back button, the scenario you are in ("Scenario 2 of 6"), sound, and the menu.
- The menu has Resume, All scenarios, Settings, Sources and Back to the start.
- Settings can make the text larger, reduce motion, and change the volume and the graphics.
- Every control works with the keyboard, and Escape closes the menus.

Leaving part-way

The back button, or All scenarios in the menu, takes you out of a scenario at any point. A scenario you leave before the end starts again from the beginning next time.

On your own or with a class

The title screen has two ways in: Start, to play on your own, and With a class, where your teacher counts hands for each choice.

START

On your own

- Pick a scenario from the list. Each one shows its number, its name and a line about it.
- You make every decision yourself, with one button for each option.
- The list keeps count ("2 of 6 done"), ticks each scenario you finish and offers it again.
- Your answers are kept in the browser on this device. Inside the edu.games player they last until you close the page.

WITH A CLASS

Together

- Your teacher projects the game and chooses With a class.
- At each decision, everyone shows hands for one option and then the other, and your teacher counts them in with the + and – buttons. Then: See what happens.
- The trolley follows the majority. If the vote is a tie, nobody acts, and the game says so.
- The discussion opens with how your class split: a bar for each option, with the count and the share.

Play it again

Every scenario can be played again: pick it from the list, where it now says Again. Try the other option to see the other outcome, or come back to a scenario after a class discussion and see whether your answer still holds. If you played with a class, play on your own too, and compare. Changing your mind is not a failure. It is often the most interesting thing that happens.

Settings

SETTING	CHOICES	WHAT IT DOES
Graphics	Auto, High, Balanced, Low	How much detail the scene has. Choose a lower level if the game runs slowly; it also drops a level by itself when it needs to.
Volume	A slider	The trolley's rumble and the buttons. Nothing in the game depends on sound.
Text size	Normal, Large, Larger	Makes all the writing in the game bigger.
Motion	Full, Reduced	Reduced shortens the camera moves and fades and stops the camera's gentle drift. The game also follows your device's own reduced-motion setting.
Progress	Clear all answers	Clears every answer you have given. Press it a second time to confirm.

What edu.games reports

If you play on edu.games, the game reports your play so that your teacher can see it: when you open the game, when you start, finish or leave each scenario, how long you spend in it, and the option you choose. When you play with a class, it reports that the class decided, but not which way and not the hand counts.

Nothing else is sent: not your settings, and nothing you write in this guide (the game has no boxes to type in). Nothing is scored either. Choosing an option always counts as deciding, whichever option you choose. Played anywhere else, the game sends nothing at all. On edu.games, the game's Settings say the same, under Learning data.

Reasoning about a dilemma

A dilemma is a choice where every option costs something that matters. You can't make the cost disappear, but you can think clearly about it. Here are six ideas philosophers use for cases like these, each with a question to ask.

Idea 1

Consequences and numbers

Look at what each option leads to. If five lives count for more than one, the option that saves more people looks better. People who judge actions mainly by their results are called consequentialists; utilitarians, who aim at the greatest good for everyone affected, are the best-known kind.

Ask: Do the numbers settle it, or are they only where the argument starts?

Idea 2

Doing and allowing

Many people feel there is a difference between causing a harm and letting one happen: between killing someone and failing to save them. Others think that if you could have prevented a death, choosing not to is just as much your doing.

Ask: Is not acting a choice? Are you responsible for what you could have prevented?

Idea 3

Means and side effects

Sometimes a harm is the way a plan works: without it, the plan fails. Sometimes it is a side effect: you can see it coming, but you don't need it. An old principle, the doctrine of double effect, says the second can sometimes be allowed when the first cannot.

Ask: If the person were not there at all, would my plan still work?

Idea 4

Using a person

The philosopher Immanuel Kant argued that we must never treat a person merely as a means: as a tool for other people's ends, without their agreement. Closely linked is the idea of rights, such as the right not to be killed, which others must respect even when breaking them would help.

Ask: Am I treating this person as someone with a life of their own, or as something that happens to be useful?

Idea 5

Special obligations

Most moral theories say that everyone counts equally. Yet most of us feel we owe more to our family and friends than to strangers, and would think less of someone who didn't. Duties like these, which come from a relationship, are called special obligations.

Ask: Is it wrong to put someone you love first? Is there a limit?

Idea 6

Rules and case-by-case judgement

You can judge each case on its own facts, or follow a rule that covers every case. Rules are predictable and treat everyone alike; judging case by case can fit the details better. Deciding in the moment and writing a rule in advance can feel very different.

Ask: What rule would my choice make, and would I want it followed every time?

A word about gut feelings

Most of us start with a gut feeling, an intuition, and it deserves to be taken seriously: it often picks up on something real. But intuitions can also be moved by details that may not matter, such as how close you are or how a question is worded. Treat yours as evidence to examine, not as a verdict.

From a feeling to a reason

Five moves turn a first reaction into an argument you can defend, and change if you need to.

1 Say what you would do, plainly

Start with a clear claim: "I would act" or "I would not." You can sit on the fence only once you have said what each side gets right.

2 Give a reason that reaches beyond this case

A reason is a principle, something that would apply to other cases too: "because it is wrong to ...", "because what matters most is ...". "Because it feels wrong" is a start, not a reason: ask what about it feels wrong.

3 Test it on another case

Look for a case where your principle gives an answer you don't accept. Philosophers call this a counterexample. If you find one, change the principle or change your answer. The six scenarios are built for this: each one changes one thing.

4 State the strongest view you disagree with

Put the other side as well as its best defender would, so well that they would say "Yes, that is what I think." Then explain why you still disagree, or admit that you no longer do.

5 Say what would change your mind

Name a fact or a case that would make you choose differently. If nothing could, ask yourself whether you are reasoning or defending.

A WORKED EXAMPLE, NOT FROM THE GAME

Is it ever right to break a promise?

CLAIM

No. Breaking a promise is always wrong.

REASON

A promise gives someone the right to count on you, and breaking it lets them down.

TEST

I promised to meet a friend, and on the way I find someone who needs an ambulance. I would stay and help, and I think that is right. So "always" is too strong.

REVISED

Breaking a promise is wrong, unless keeping it would mean failing someone in serious danger.

STRONGEST OBJECTION

Some say a promise is only one thing to weigh among others, every time. That explains the ambulance. But it would let us break a promise whenever something slightly better came along, and then promises would mean nothing.

WHAT WOULD CHANGE MY MIND

A case where breaking a small promise for a small gain seems fine to nearly everyone.

Sentence starters

- I would ... because ...
- The difference between this case and ... is ...
- That difference matters (or doesn't) because ...
- Someone who disagrees would say ...
- The strongest reply to them is ...
- I would change my mind if ...

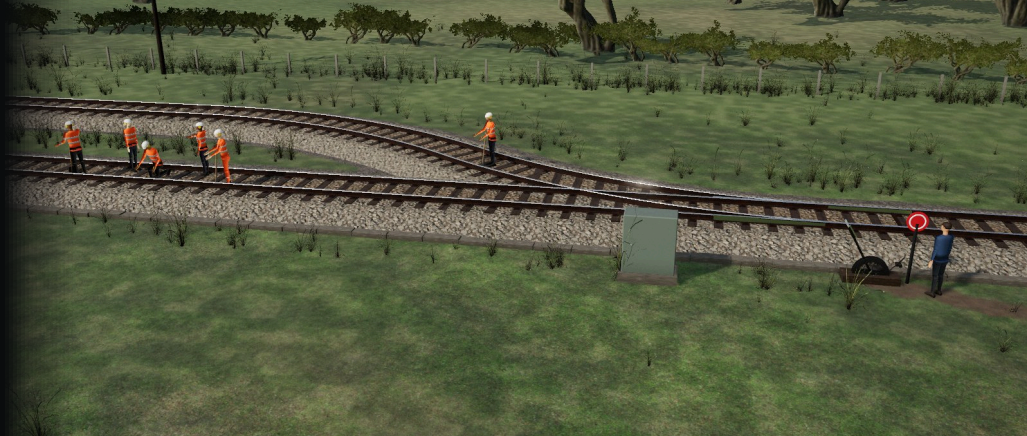
Talking it through with others

- Disagree with the reason, not the person.
- Ask before you argue: "What makes you say that?"
- Changing your mind is allowed. It is often the point.
- Nobody has to share anything personal, and anyone can pass.
- These cases are about life and death. Joke about the trolley, not about the people.

SCENARIO 1 OF 6
BEFORE YOU PLAY

The Switch

Pull a lever to save five?



THE SITUATION, AS THE GAME TELLS IT

A runaway trolley is heading for five workers who can't get out of the way. You are standing by a lever. Pull it, and the trolley switches onto a side track, where it will hit one worker instead.

THE QUESTION Do you pull the lever?

THE TWO OPTIONS, AS THE BUTTONS SHOW THEM

ACTING

Pull the lever

One person dies

NOT ACTING

Do nothing

Five people die

KEY TERMS

Bystander

Someone who is there but not part of what is happening: here, you, at the lever.

Killing and letting die

Causing a death, compared with failing to prevent one.

Permissible

Morally allowed: not wrong, though not necessarily required.

Before you play

1 Describe the two options in your own words. What exactly would you be doing in each?

2 If you do nothing, are you responsible for what happens? Write a first thought.

3 What would you want to know that the scenario doesn't tell you? Why would it matter?

Your first answer

☐

Pull the lever

☐

Do nothing

How sure?

☐☐☐☐☐

Why, in one sentence:

1

AFTER YOU PLAY The Switch

Your choice

☐ Pull the lever ☒ Do nothing

Same as your first answer? ☐ Yes ☐ No

How sure now? (1) (2) (3) (4) (5)

What research found

The game shows this after you choose. Note it here, then ask: does it change your view? Should it?

Think about it

The game's own questions, from its Think it through panel.

1 Is there a moral difference between killing someone and letting someone die?

2 Before you touched the lever, were you already responsible for the five? Why?

3 If you were the one on the side track, would it be fair for a stranger to pull?

4 What if you were the driver, not a bystander? Whichever way you steer, you are the one who kills.

5 What if there were a 90% chance the five would jump clear in time? Would your answer change?

Test your reason

Write your reason as a principle: "It is right (or wrong) to ... because ...". Then try it on another scenario. Does it still give the answer you believe?

The Footbridge

Push one person to save five?



THE SITUATION, AS THE GAME TELLS IT

Five workers again, and no side track. You are on a footbridge over the line, next to a stranger with a heavy pack. Push him off, and his weight will stop the trolley: he dies, and the five live. You are too light to stop it yourself.

THE QUESTION Do you push him?

THE TWO OPTIONS, AS THE BUTTONS SHOW THEM

ACTING

Push him

He dies

NOT ACTING

Don't push

Five people die

KEY TERMS

Means

Something used to bring something else about.

Personal force

Harm done directly with your own body, such as a push, rather than through a mechanism such as a lever.

Intuition

A judgement that comes before any reasoning: a gut feeling about a case.

Before you play

1 List what is the same as in The Switch and what is different.

2 Does it matter how a death comes about, if the numbers are the same? Write a first thought.

3 Predict: will your answer be the same as in The Switch? Why?

Your first answer

☐

Push him

☐

Don't push

How sure?

☐☐☐☐☐

Why, in one sentence:

2 AFTER YOU PLAY The Footbridge

Your choice

☐ Push him ☐ Don't push

Same as your first answer? ☐ Yes ☐ No

How sure now? (1) (2) (3) (4) (5)

What research found

The game shows this after you choose. Note it here, then ask: does it change your view? Should it?

Think about it

The game's own questions, from its Think it through panel.

1 The numbers are the same as in The Switch (scenario 1). What exactly is different about pushing him?

2 If your gut says "don't push", is it tracking a real moral difference, or only squeamishness?

3 What if you could drop him through a trapdoor with a switch, without ever touching him?

4 What if he were the one who cut the trolley's brakes?

5 If you were heavy enough to stop the trolley yourself, would you jump? If not, may you push him?

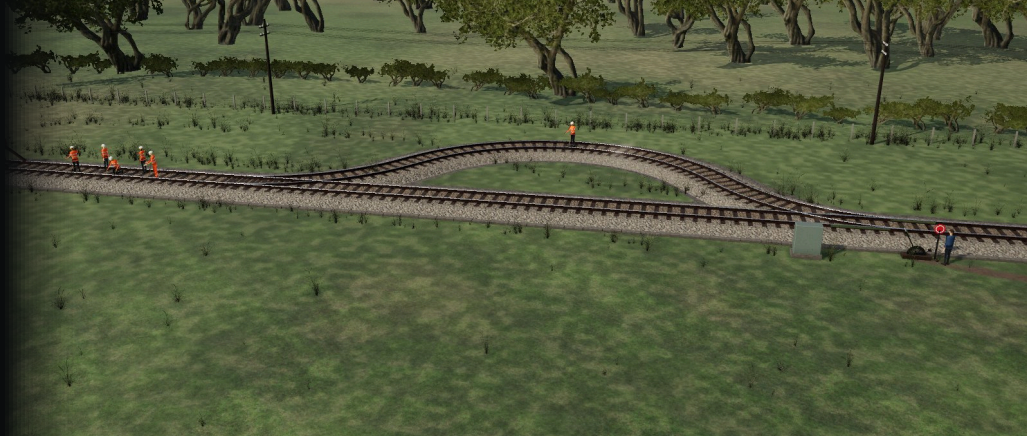
Test your reason

Write your reason as a principle: "It is right (or wrong) to ... because ...". Then try it on another scenario. Does it still give the answer you believe?

SCENARIO 3 OF 6
BEFORE YOU PLAY

The Loop

The side track loops back



THE SITUATION, AS THE GAME TELLS IT

This time the side track loops round and rejoins the main line just before the five. One worker stands on the loop. Pull the lever, and the trolley hits him and his weight stops it. If he weren't there, it would race round the loop and hit the five anyway.

WHO IS INVOLVED

- Five workers on the main line, just past the point where the loop rejoins it.
- One worker standing on the loop.
- You, by the lever.

THE QUESTION Do you pull the lever?

THE TWO OPTIONS, AS THE BUTTONS SHOW THEM

ACTING

Pull the lever

One person dies

NOT ACTING

Do nothing

Five people die

KEY TERMS

Intend

To aim at a result, as part of your plan.

Foresee

To expect a result without aiming at it.

Doctrine of double effect

The principle that a harm foreseen as a side effect may sometimes be allowed when the same harm, intended as a means, would not be.

Before you play

1 Trace the trolley's route for each option. What stops it in each case?

2 Which earlier scenario does this one feel closer to, The Switch or The Footbridge? Why?

3 Think of an everyday example of a harm that someone foresees but doesn't aim at.

Your first answer

☐

Pull the lever

☐

Do nothing

How sure?

☐☐☐☐☐

Why, in one sentence:

3

AFTER YOU PLAY
The Loop

Your choice

☐ Pull the lever ☒ Do nothing

Same as your first answer? ☐ Yes ☐ No

How sure now? (1) (2) (3) (4) (5)

What research found

The game shows this after you choose. Note it here, then ask: does it change your view? Should it?

Think about it

The game's own questions, from its Think it through panel.

1 Did your answer differ from The Switch (scenario 1)? Can you explain why in one sentence?

2 Here his body is what stops the trolley. Does it matter whether you need someone to be hurt, or only foresee that they will be?

3 What if a heavy weight on the loop stopped the trolley, and he just happened to be standing in front of it?

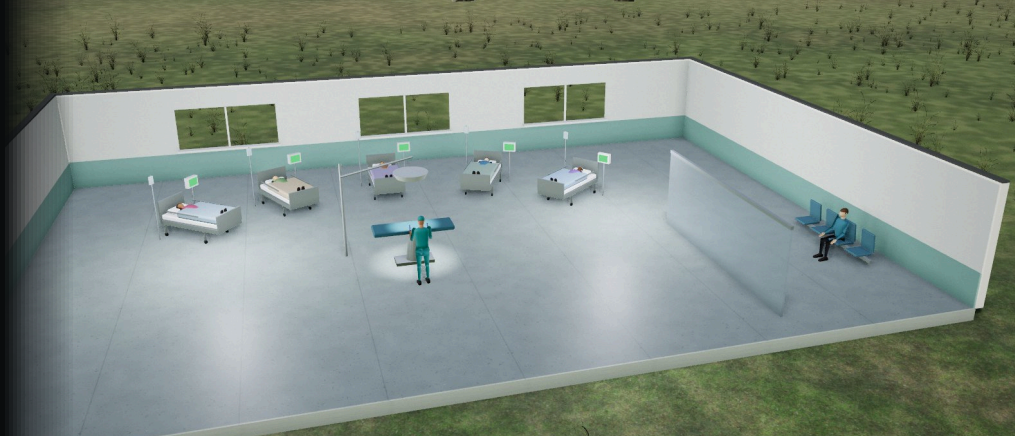
4 If thoughtful people's gut feelings disagree about this case, how far should we trust gut feelings?

Test your reason

Write your reason as a principle: "It is right (or wrong) to ... because ...". Then try it on another scenario. Does it still give the answer you believe?

The Transplant

A surgeon's choice



THE SITUATION, AS THE GAME TELLS IT

No trolley this time. You are a surgeon, and five of your patients will die today without new organs. A healthy visitor in the waiting room is a perfect match for all five. Operate, and he dies and the five live.

THE QUESTION Do you operate?

THE TWO OPTIONS, AS THE BUTTONS SHOW THEM

ACTING

Operate

The visitor dies

NOT ACTING

Don't operate

Five patients die

WHO IS INVOLVED

- ☒ Five of your patients, who will die today without new organs.
- ☒ A healthy visitor in the waiting room, who is a perfect match for all five.
- ☐ You, their surgeon.

KEY TERMS

Consequentialism

The view that the right action is the one with the best results.

Rights

Protections a person has, such as the right not to be killed, that others must respect even when breaking them would help.

Consent

Agreeing freely to something, knowing what it involves.

Before you play

1 Who are the people in this scenario, and what does each of them expect of the surgeon?

2 What do people trust doctors and hospitals to do, and never to do?

3 Is there anything that must never be done to a person, whatever the result? Write a first thought.

Your first answer

☐

Operate

☐

Don't operate

How sure?

☐☐☐☐☐

Why, in one sentence:

Your choice

☐ **Operate** ☒ **Don't operate**

Same as your first answer? ☐ Yes ☐ No

How sure now? (1) (2) (3) (4) (5)

Why philosophers use this case

The game shows this after you choose. Note it here, then ask: does it change your view? Should it?

Think about it

The game's own questions, from its Think it through panel.

- 1 List the differences between this case and The Switch (scenario 1). Which ones matter morally?

- 2 If the operation could be kept secret forever, would that change anything?

- 3 What if the visitor offered to give his life so the five could live?

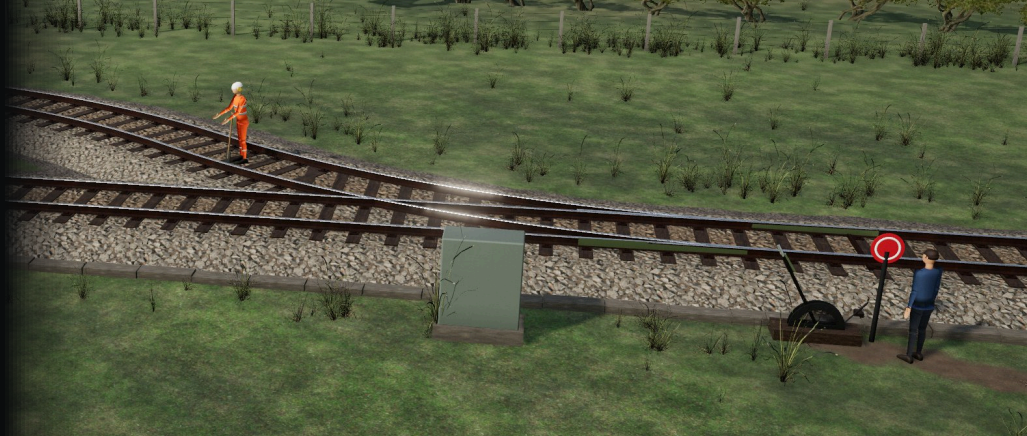
- 4 What should a society do for the five patients instead?

Test your reason

Write your reason as a principle: "It is right (or wrong) to ... because ...". Then try it on another scenario. Does it still give the answer you believe?

The One You Love

The one is your best friend



THE SITUATION, AS THE GAME TELLS IT

Back at the switch: five workers on the main line, one person on the side track. But this time the one is your best friend. Pull the lever, and five strangers live and your best friend dies.

WHO IS INVOLVED

- Five workers on the main line: strangers to you.
- Your best friend, on the side track.
- You, by the lever.

THE QUESTION Do you pull the lever?

From the game: If this case brings up a real loss for you, it is fine to step back from it.

THE TWO OPTIONS, AS THE BUTTONS SHOW THEM

ACTING

Pull the lever

Your best friend dies

NOT ACTING

Do nothing

Five strangers die

KEY TERMS

Impartiality

Counting everyone equally, whoever they are.

Special obligations

Duties owed to particular people because of a relationship, such as a friendship.

Should and would

What you ought to do, and what you would actually do. They are not always the same.

Before you play

1 What is the one thing that has changed since The Switch?

2 What do we owe the people we love that we don't owe strangers?

3 If a stranger were at the lever instead of you, should they decide any differently?

Your first answer

☐

Pull the lever

☐

Do nothing

How sure?

☐☐☐☐☐

Why, in one sentence:

Your choice

☐ Pull the lever ☒ Do nothing

Same as your first answer? ☐ Yes ☐ No

How sure now? (1) (2) (3) (4) (5)

What research found

The game shows this after you choose. Note it here, then ask: does it change your view? Should it?

Think about it

The game's own questions, from its Think it through panel.

1 Did loving the one change what you think you should do, or only what you would do?

2 Is it fair to ask anyone to sacrifice their best friend for strangers?

3 If you were one of the five, what would you hope the person at the lever would do?

4 Most moral theories say everyone counts equally. Most people feel they owe more to those they love. Can both be true?

Test your reason

Write your reason as a principle: "It is right (or wrong) to ... because ...". Then try it on another scenario. Does it still give the answer you believe?

The Driverless Trolley

Set the rule for every trolley



THE SITUATION, AS THE GAME TELLS IT

Trolleys drive themselves now, and someone must decide in advance what they do when the brakes fail. That someone is you. Your rule will be copied into every trolley in the city, and used on people you will never meet.

THE QUESTION Which rule should every trolley follow?

WHO IS INVOLVED

- ☐ You: the person who decides, in advance, what every self-driving trolley in the city will do. In the scene you are at a signal box across the line.
- ☒ Five people on the line ahead: people you will never meet.
- ☐ One person on the other track.

THE TWO OPTIONS, AS THE BUTTONS SHOW THEM

ACTING

Steer toward fewer deaths

Swerve toward the smaller group

Its tag in the scene: "One person dies"

NOT ACTING

Never steer into anyone

Brake and stay on track

Its tag in the scene: "Five people die"

KEY TERMS

Policy

A rule decided in advance and applied to every case it covers.

Self-driving vehicle

A vehicle that drives itself, following rules its makers have set.

Responsibility

Being the one who must answer for an outcome.

Before you play

1 How is writing a rule in advance different from deciding in the moment?

2 Who should decide what a machine does in an emergency?

3 What would make a rule fair to everyone it might affect?

Your first answer

☐

Steer toward fewer deaths

☐

Never steer into anyone

How sure? (1) (2) (3) (4) (5)

Why, in one sentence:

Your choice
☐ **Steer toward fewer deaths**
☐ **Never steer into anyone**

 Same as your first answer? ☐ Yes ☐ No

How sure now? (1) (2) (3) (4) (5)

What research found

The game shows this after you choose. Note it here, then ask: does it change your view? Should it?

Think about it

The game's own questions, from its Think it through panel.

1 Did deciding in advance, as a rule, feel different from deciding in the moment?

2 Who should set the rule: engineers, governments, buyers, or the public?

3 What if the rule also covered trolleys carrying your family as passengers?

4 Should a rule ever consider who the people are, for example their age?

5 Engineers often say the real work is preventing these dilemmas in the first place. Do you agree?

Test your reason

Write your reason as a principle: "It is right (or wrong) to ... because ...". Then try it on another scenario. Does it still give the answer you believe?

Comparing your six answers

Your six answers are evidence about what you believe. Put them side by side and look for the pattern, and for the principle behind it.

SCENARIO	YOUR CHOICE	HOW SURE?	YOUR REASON, IN A FEW WORDS
1 The Switch	☐ Pull the lever ☒ Do nothing	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	
2 The Footbridge	☐ Push him ☒ Don't push	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	
3 The Loop	☐ Pull the lever ☒ Do nothing	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	
4 The Transplant	☐ Operate ☒ Don't operate	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	
5 The One You Love	☐ Pull the lever ☒ Do nothing	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	
6 The Driverless Trolley	☐ Steer toward fewer deaths ☒ Never steer into anyone	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	

Replay and compare

Play the scenario you were least sure about again and choose the other option. Read its questions again: does anything look different from the other side? Then replay the one where your answer moved furthest from The Switch, and see whether your principle explains it.

Compare with others

If you played with a class, compare its answers with yours. Where did you agree with the majority, and where not? A majority shows what most people chose, not what is right, and the same goes for the research the game shows.

Find your pattern

Can one principle explain all six of your answers? Try to write it, then try to break it.

- 1 In which scenarios did you act, and in which did you not? Mark them on the table.

- 2 Where did your answer differ from your answer to The Switch? Name the one difference that changed it.

- 3 Write one principle that explains all six of your answers. If you can't, which answer, or which part of the principle, would you change?

- 4 Test your principle on a case you invent yourself. Does it give the answer you believe?

- 5 What is the strongest objection to your principle, and how would you answer it?

My principle, in one sentence

Words worth knowing

The terms used in this guide and in the game's questions, in plain English.

Bystander

Someone who is there when something happens but is not part of it.

Consent

Agreeing freely to something being done, knowing what it involves.

Consequentialism

The view that the right action is the one with the best results. Utilitarianism is the best-known kind.

Counterexample

A case that shows a general claim is false, or needs changing.

Deontology

The view that some actions are required or forbidden whatever their results, because of duties and rights.

Dilemma

A choice in which every option has a serious cost.

Doctrine of double effect

The principle that causing a harm as a side effect of doing good can sometimes be allowed, when causing the same harm as a means to that good cannot.

Doing and allowing

The difference, if there is one, between causing a harm and letting it happen.

Impartiality

Counting everyone's interests equally, whoever they are.

Intend and foresee

To intend a result is to aim at it; to foresee it is to expect it without aiming at it.

Intuition

A judgement that arrives before any reasoning: a gut feeling about a case.

Means

Something used to bring something else about. A person used as a means is used as a tool.

Moral Machine

An online experiment that asked people around the world whom a self-driving car should spare in a crash.

Partiality

Giving more weight to some people, such as family and friends, than to others.

Permissible

Morally allowed: not wrong, though not necessarily required.

Personal force

Harm done directly with your own body, such as a push, rather than through a mechanism such as a switch.

Policy

A rule decided in advance and applied to every case it covers.

Principle

A general rule that gives a reason in many cases, not just one.

Rights

Protections each person has, such as the right not to be killed, that others must respect even when breaking them would help.

Self-driving vehicle

A vehicle that drives itself by following rules its makers have set; also called an autonomous vehicle.

Side effect

A result of an action that is foreseen but not aimed at.

Special obligations

Duties owed to particular people because of a relationship with them: family, friends, patients.

Steelman

The strongest version of a view you disagree with: the opposite of a straw man.

Thought experiment

An imagined situation, simplified on purpose, used to test an idea.

Trolley

In American English, a tram: a vehicle that runs on rails.

Trolley problem

The puzzle of whether, and why, it is right to cause one death to prevent five, and the family of cases built on it.

Utilitarianism

The view that the right action is the one that does the most good overall, for everyone affected.

Where the ideas come from

The studies and papers behind each scenario, as the game lists them in its Sources menu. Each one links to Google Scholar, where you can find it.

What research found is what people said or did when they were asked. It can show you how other people see a case. It can't tell you what is right: that is what your reasons are for.

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