



It's Complicated



Agenda

- Introduction
- The Madison Collaborative's 8 Key Questions (8KQ)
- Review the Self-Driving Car scenario
- Learn the circle process for discussing ethical situations
- While in your circle group—discuss and analyze the Self-Driving Car scenario using JMU's Eight Key Questions
- Share with others your discussion and final recommendation

The Eight Key Questions

- Fairness - how can I act equitably and balance all interests?
- Outcomes - what are the short-term and long-term outcomes of possible actions?
- Responsibilities - what duties and obligations apply?
- Character - what actions will help me become my ideal self?
- Liberty - what principles of freedom and personal autonomy apply?
- Empathy - how would I respond if I cared deeply about those involved?
- Authority - what do legitimate authorities (e.g., experts, law, my god[s]) expect of me?
- Rights - what rights (e.g., innate, legal, social) apply?

Learning Outcomes

- Participants will be able to state, from memory, all 8KQs.
- Given a specific scenario, participants will identify appropriate considerations for each of the 8KQs.
- Participants will report they view ethical reasoning skills as important for technical cases.

Self-Driving Car: Crash Scenario



What should the car decide and how?

Goal: use 8KQ as process for algorithm design

Self-Driving Car

<https://www.youtube.com/watch?v=AiOxUcDgsa8>

You're driving your brand-new Tesla alone on the interstate when a deer jumps in front of your car, which can now make one of three options: (a) swerve to the left and cross the median, where there is very little on-coming traffic, (b) swerving to the right toward the guard rails, cutting off an old and rusty small car traveling the same speed and direction, and (c) hitting the deer at nearly full speed with definite injury to the driver.

Circle Process

- Whoever is holding the talking piece is the only one speaking and has everyone's undivided attention and respect.
- You will pass the medallion around the circle and share your thoughts related to the prompts.
- You always have the right to pass the talking piece
- Please give whoever is holding the talking piece your complete attention, eye contact, good listening, and respect.
- The circle is a safe space to question assumptions, to challenge each other in a respectful way; everyone is equal in the circle, and a space for sharing openly your thoughts and experiences.
- For this circle process you all will be the group responsible for determining where to send help. Please take this task seriously and use the eight key questions to make the best possible decision together (lives are at stake).

Round Zero

- Identify stakeholders (individuals or groups) who have an interest in this scenario.
- Divide the room into the following stakeholder groups: (based on your packet)
 - Car manufacturer
 - Programmer at the car company
 - Driver of the vehicle
 - Other drivers and pedestrians
 - Government

Round One

- Take three minutes to individually reflect on the eight key questions and how they apply to the case study from your stakeholder's perspective.
- As an individual, decide which key questions are the most relevant and why.
- As a group, decide which three questions most apply. Be prepared to share to the larger group.

The Eight Key Questions

- Fairness - how can I act equitably and balance all interests?
- Outcomes - what are the short-term and long-term outcomes of possible actions?
- Responsibilities - what duties and obligations apply?
- Character - what actions will help me become my ideal self?
- Liberty - what principles of freedom and personal autonomy apply?
- Empathy - how would I respond if I cared deeply about those involved?
- Authority - what do legitimate authorities (e.g., experts, law, my god[s]) expect of me?
- Rights - what rights (e.g., innate, legal, social) apply?

Round Two

- Identify and discuss technical issues relevant to stakeholders' concerns

Round Three

- Move to sit with a group of different stakeholders – you should have approximately 5 people
- Discuss at least two alternative decisions you could make for programming the car.
- Report to the larger group what you recommend and why. The 8KQs should help you arrive at your decision.

Round Four

- How might you reconsider this case if some of the facts were changed?
 - Substitute child/criminal/elderly for deer
 - Certain death vs. probabilistic evaluation
 - Law abiding citizen vs. jaywalker
 - Interstates vs. city driving
 - Connectedness of other vehicles

Round Five

- Additional questions to consider...
 - How do the questions differ across stakeholder groups?
 - How might your decision change when you consider all of the 8KQs?
 - What value assertions and assumptions emerged from the discussion?

Round Six

- Why do you think the crash scenario was utilized for this activity?
- Why were you asked to take on different stakeholders' personas?
- How did using the 8KQs change your considerations about the scenario?

Round Seven – take homes

- What other questions about self-driving cars might you explore with the 8KQs?
- How could you use other activities like MIT's Moral Machine (<http://moralmachine.mit.edu/>) in conjunction with the 8KQs? With other class assignments?