

Survey material: AGM belief revision

R1 conclusion 1 rule

K includes not only the beliefs contained in it, but also the consequences which follow from K.

R1 conclusion 2 rule

Given

- Zeeta M is a classical pianist (new information)

The result of revising K with the new information that Zeeta M is a classical pianist, also contains the information which follows from the result of revising K with the new information that Zeeta M is a classical pianist.

R2 premise rule

Given

- Jacob B is a truck driver (new information)

Jacob B does drive at night follows from revising K with the new information that Jacob B is a truck driver.

R2 conclusion rule

Given

- Jacob B is a truck driver (new information)

Jacob B does drive at night follows from expanding K with the new information that Jacob B is a truck driver.

R3 premise rule

Given

- Jessica B is a yoga instructor (new information)

K is satisfiable with respect to the new information that Jessica B is a yoga instructor.

R3 conclusion 1 rule

Given

- Jessica B is a yoga instructor (new information)

Jessica B does teach breathing exercises follows from the expansion of K with the new information that Jessica B is a yoga instructor.

R3 conclusion 2 rule

Given

- Jessica B is a yoga instructor (new information)

Jessica B does teach breathing exercises follows from the revision of K with the new information that Jessica B is a yoga instructor.

R4 conclusion rule

Given

- Chris P is a waiter (new information)

The new information that Chris P is waiter is contained in the revision of K with the new information that Chris P is a waiter.

R5 premise rule

Given

- If Noel W is a firefighter then Noel W is strong (new information)
- Either Noel W is not a firefighter or Noel W is strong (new information)

The new information that if Noel W is a firefighter then Noel W is strong is equivalent to the new information that either Noel W is not a firefighter or Noel W is strong.

R5 conclusion 1 rule

Given

- If Noel W is a firefighter then Noel W is strong (new information)
- Either Noel W is not a firefighter or Noel W is strong (new information)

Noel W does save lives follows from the revision of K with the new information that Noel W is a strong firefighter.

R5 conclusion 2 rule

Given

- If Noel W is a firefighter then Noel W is strong (new information)
- Either Noel W is not a firefighter or Noel W is strong (new information)

Noel W does save lives follows from the revision of K with the new information that either Noel W is not a firefighter or Noel W is strong.

R6 premise rule

Given

- Wilma D is a car owner (new information)

The new information that Wilma D is a car owner, is consistent.

R6 conclusion rule

Given

- Wilma D is a car owner (new information)

The revision of K with the new information that Wilma D is a car owner, is consistent.

R7 premise rule

Given

- Philip P is a police officer and Philip P can arrest a criminal (new information)

Philip P does carry a gun follows from the revision of K with the new information that Philip P is a police officer and Philip P can arrest a criminal.

R7 conclusion rule

Given

- Philip P is a police officer (new information)
- Philip P can arrest a criminal (new information)

Philip P does carry a gun follows from the result of first revising K with the new information that Philip P is a police officer and then expanding with the new information that Philip P can arrest a criminal.

R8 premise rule

Given

- Mark M is a science professor (new information)
- Mark M does enjoy solving problems (new information)

The revision of K with the new information that Mark M is a science professor is satisfiable with respect to the new information that Mark M does enjoy solving problems.

R8 conclusion 1 rule

Given

- Mark M is a science professor (new information)
- Mark M does enjoy solving problems (new information)

Mark M is a good teacher follows from the result of first revising K with the new information that Mark M is a science professor and then expanding with the new information that Mark M does enjoy solving problems.

R8 conclusion 2 rule

Given

- Mark M is a science professor and Mark M does enjoy solving problems (new information)

Mark M is a good teacher follows from the result of revising K with the new information that Mark M is a science professor and Mark M does enjoy solving problems.

Ends.