

Master's in Philosophical Knowledge:  
Foundations, Methods, Applications

Bergamo  
Pavia

# I. Evidence and Evidentialism

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CAMBRIDGE

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Philosophy

# lecture aims

- to introduce evidentialism and to consider criticisms and problems for evidentialism
- to consider the concept of evidence and theories of what evidence is

# introducing evidentialism and evidence

under what conditions may one believe a proposition  $p$ ?

*plausible answer*

when one has sufficient evidence in support of  $p$

# introducing evidentialism and evidence

under what conditions may one believe a proposition  $p$ ?

*plausible answer*

when one has sufficient evidence in support of  $p$

what is evidence?

# introducing evidentialism and evidence

under what conditions may one believe a proposition  $p$ ?

*plausible answer*

when one has sufficient evidence in support of  $p$

what is support?

# introducing evidentialism and evidence

under what conditions may one believe a proposition  $p$ ?

*plausible answer*

when one has sufficient evidence in support of  $p$

how much is sufficient?

# introducing evidentialism and evidence

## evidentialism

(EVI) S is justified in believing proposition  $p$  [if and] only if S's evidence supports  $p$ .

epistemic justification

Feldman, R. and Conee, E. (1985). Evidentialism. *Philosophical Studies*, 48: 15–34.

# introducing evidentialism and evidence

the proposition that  $p$  is supported S's evidence

but S may not believe that  $p$  for *this* reason

S justifiedly believes that  $p$  because S's evidence supports the proposition that  $p$

distinguish:

propositional justification

doxastic justification

e.g. S has evidence for the proposition that  $p$  but does not use this evidence in coming to believe that  $p$

# introducing evidentialism and evidence

## evidentialism

(EVI) S is justified in believing proposition  $p$  only if S's evidence supports  $p$ .

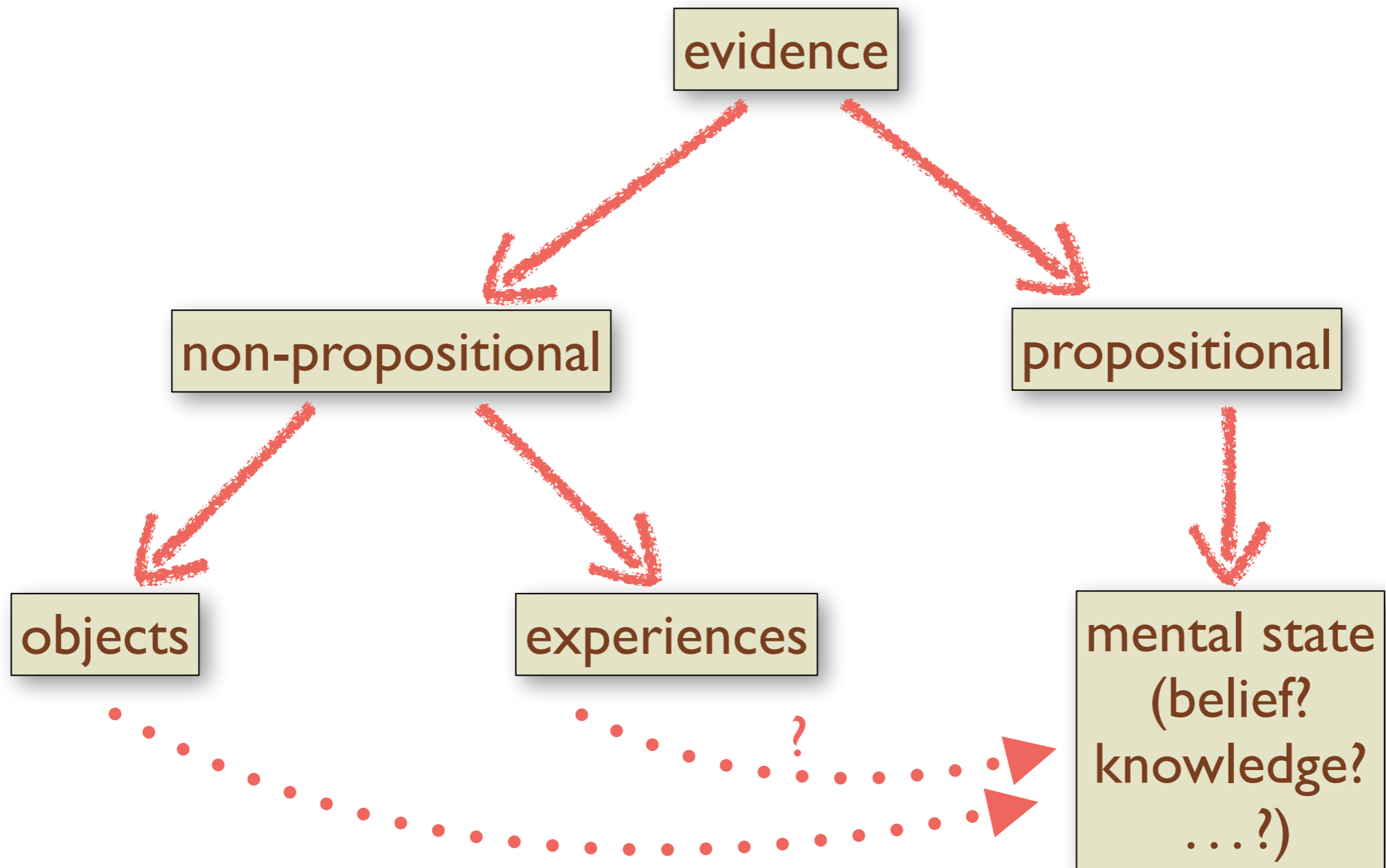
distinguish:

propositional justification  
doxastic justification

Feldman, R. and Conee, E. (1985). Evidentialism. *Philosophical Studies*, 48: 15–34.

# introducing evidentialism and evidence

evidence



# introducing evidentialism and evidence

## evidence

the term 'evidence' in English has roots connecting it with 'evident' (meaning *obvious*), but not longer possesses this connotation

no direct translation into Italian  
perhaps *prova* or *evidenza*

key idea: distinguish between premises and argument, or between an argument and its starting point, between reasons and reasoning with those reasons

e.g. the court is presented with a weapon and DNA etc. these are **evidence** — argument is need to turn these into a proof against the accused

# introducing evidentialism and evidence

**support**

when is  $e$  evidence for  $h$ ?

when does  $e$  support  $h$ ?

theory of confirmation (in philosophy of science)

incremental versus absolute confirmation

# evidential support and confirmation

support

best possible support:  $e$  entails  $h$

probabilistic support:  $e$  partially entails  $h$

*(inductive logic)*

this can be formalised

can this be formalised?

# evidential support and confirmation

## support

can we formalise the relation of probabilistic/inductive support (partial entailment etc.)?

e.g.

- inductivism: instances of  $F$ s that are  $G$  confirm 'all  $F$ s are  $G$ s'
- hypothetico-deductivism:  $e$  confirms  $h$  if  $e$  is deducible from  $h$

# evidential support and confirmation

## support

can we formalise the relation of probabilistic/inductive support (partial entailment etc.)?

**NO**

two reasons:

- Bayes's theorem and the need for prior probabilities
- Goodman's new riddle of induction

# evidential support and confirmation

Bayes's theorem

$$P(h|e) = \frac{P(h) P(e|h)}{P(e)}$$

prior probabilities

# evidential support and confirmation

Goodman's new riddle of induction

instances of Fs that are G confirm 'all Fs are Gs'

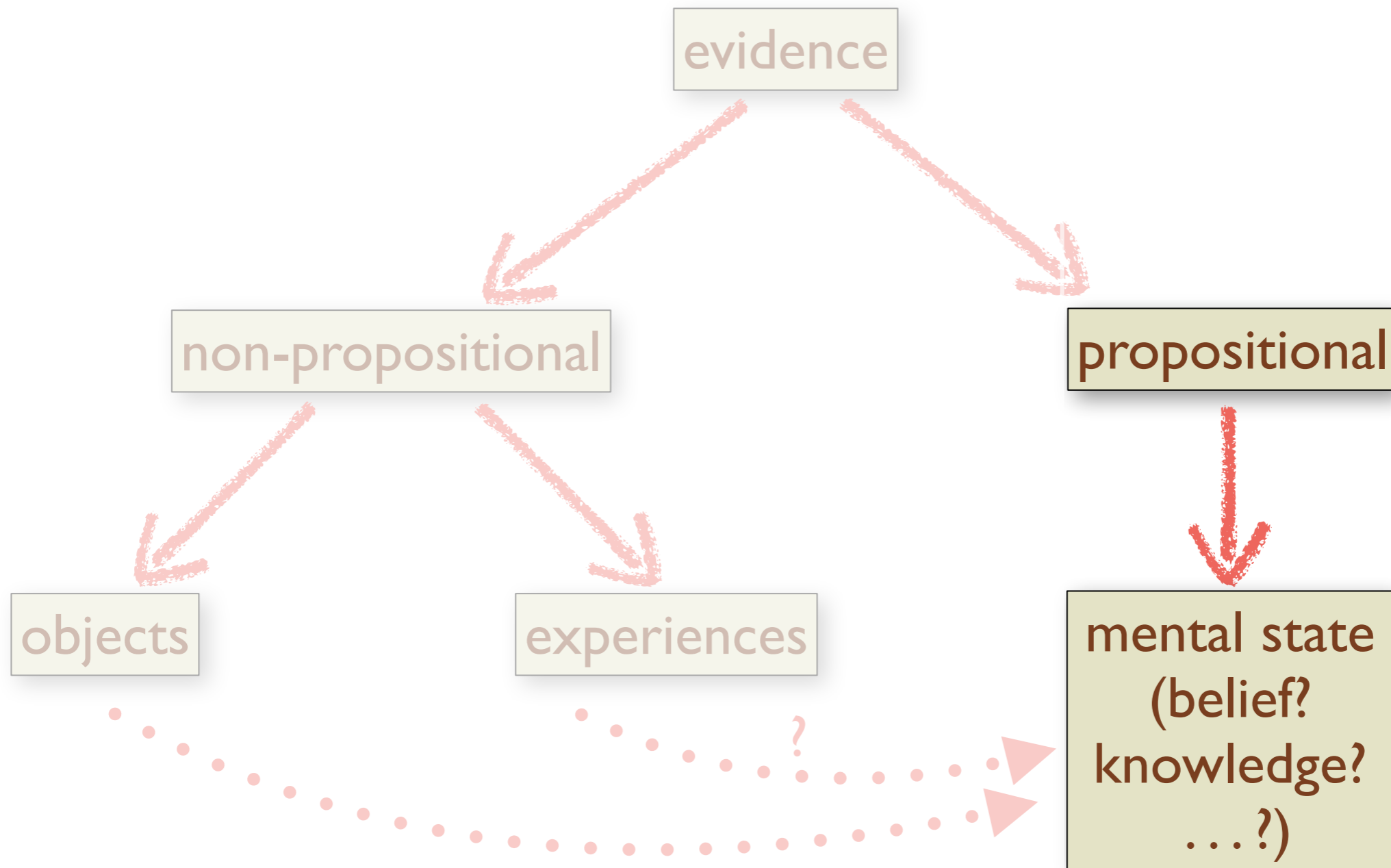
this is a green emerald  
confirms  
all emeralds are green

this is a grue emerald  
confirms  
all emeralds are grue

inconsistent

# evidence

## evidence



# evidence

S's evidence includes  $p$  if and only if S believes  $p$

S's evidence includes  $p$  only if S believes  $p$

S's evidence includes  $p$  if S believes  $p$

Williamson, T. (1997). Knowledge as evidence. *Mind*, 106: 1–25.

Bird, A. (2018). Evidence and inference. *Philosophy and Phenomenological Research*, 96: 299–317.

# evidence

S's evidence includes  $p$  if S believes  $p$

do one's false beliefs count as evidence?

Williamson, T. (1997). Knowledge as evidence. *Mind*, 106: 1–25.

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# evidence

‘reject a hypothesis inconsistent with your evidence’

*implies evidence must be true*

S’s evidence includes  $p$  if S believes  $p$

do one’s false beliefs count as evidence?

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# evidence

S's evidence includes  $p$  if and only if S believe  $p$  and  $p$  is true

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S's evidence includes  $p$  if S believes  $p$  and  $p$  is true

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# evidence

*suggests evidence must be justified belief*

S's evidence includes  $p$  if S believes  $p$  and  $p$  is true

over-confident lucky guess?

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# evidence

S's evidence includes  $p$  if and only if S has a justified true belief  $p$

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# evidence

S's evidence includes  $p$  if and only if S has a justified true belief  $p$

*if* knowledge = justified true belief *then*

S's evidence includes  $p$  if and only if S knows  $p$

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# evidence

S's evidence includes  $p$  if and only if S has a justified true belief  $p$

if knowledge = justified true belief then

S's evidence includes  $p$  if and only if S knows  $p$

Gettier?

Williamson, T. (1997). Knowledge as evidence. *Mind*, 106: 1–25.

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# evidence

S's evidence includes  $p$  if and only if S has a justified true belief  $p$

knowledge  $\neq$  justified true belief

S's evidence includes  $p$  if and only if S knows  $p$

Williamson, T. (1997). Knowledge as evidence. *Mind*, 106: 1–25.

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# evidence

S's evidence includes  $p$  if and only if S knows  $p$

$$E = K$$

Williamson, T. (1997). Knowledge as evidence. *Mind*, 106: 1–25.

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# evidence

why do we want evidence?

we want evidence to test (confirm, disconfirm) hypotheses  
we want to have correct beliefs about hypotheses on the  
basis of inference from evidence


Williamson, T. (1997). Knowledge as evidence. *Mind*, 106: 1–25.

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# evidence

when does belief achieve its goal?  
when belief is a belief correct/satisfactory?

let's assume that belief aims at knowledge  
only beliefs that amount to knowledge are  
satisfactory/correct



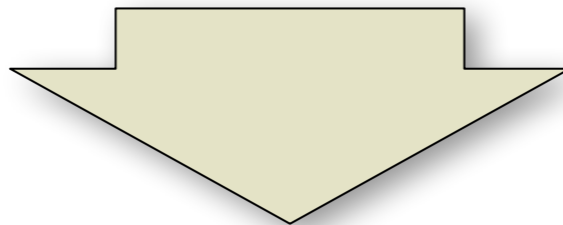
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# evidence

we want to have correct beliefs about hypotheses on the basis of inference from evidence

only beliefs that amount to knowledge are satisfactory/  
correct



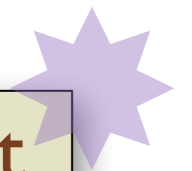
evidence is that which allows us to gain knowledge from it  
by inference

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# evidence

evidence is that which allows us to gain knowledge from it  
by inference

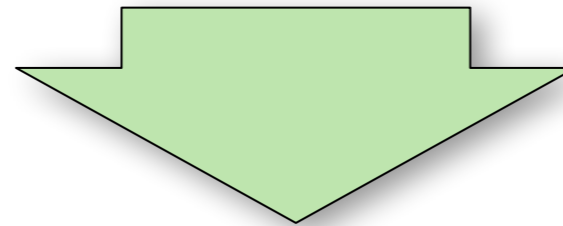


# evidence

evidence is that which allows us to gain knowledge from it  
by inference

what constraints does this put on evidence?

only knowledge allows us to gain knowledge by inference



evidence is knowledge

$E = K$

$S$ 's evidence includes  $p$  if and only if  $S$  knows  $p$

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# evidence

S's evidence includes  $p$  if and only if S knows  $p$

*is all knowledge evidence?*

Williamson, T. (1997). Knowledge as evidence. *Mind*, 106: 1–25.

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# evidence

S's evidence includes  $p$  if and only if S knows  $p$

*alternative proposals*

S's evidence includes  $p$  if and only if S knows  $p$  non-inferentially

S's evidence includes  $p$  if and only if S knows  $p$  from experience

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Bird, A. (2018). Evidence and inference. *Philosophy and Phenomenological Research*, 96: 299–317.

# evidence

S's evidence includes  $p$  if and only if S knows  $p$  non-inferentially

S's evidence includes  $p$  if and only if S knows  $p$  from experience

the problem of forgotten evidence

Williamson, T. (1997). Knowledge as evidence. *Mind*, 106: 1–25.

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# evidentialism

## evidentialism

(EVI) S is justified in believing proposition  $p$  [if and] only if S's evidence supports  $p$ .

Feldman, R. and Conee, E. (1985). Evidentialism. *Philosophical Studies*, 48: 15–34.

# the Agrippan trilemma

(JUST) If  $S$  is justified in believing proposition  $p$  then, for some proposition  $q$ ,  $S$  is justified in believing  $q$  and  $q$  supports  $p$ .

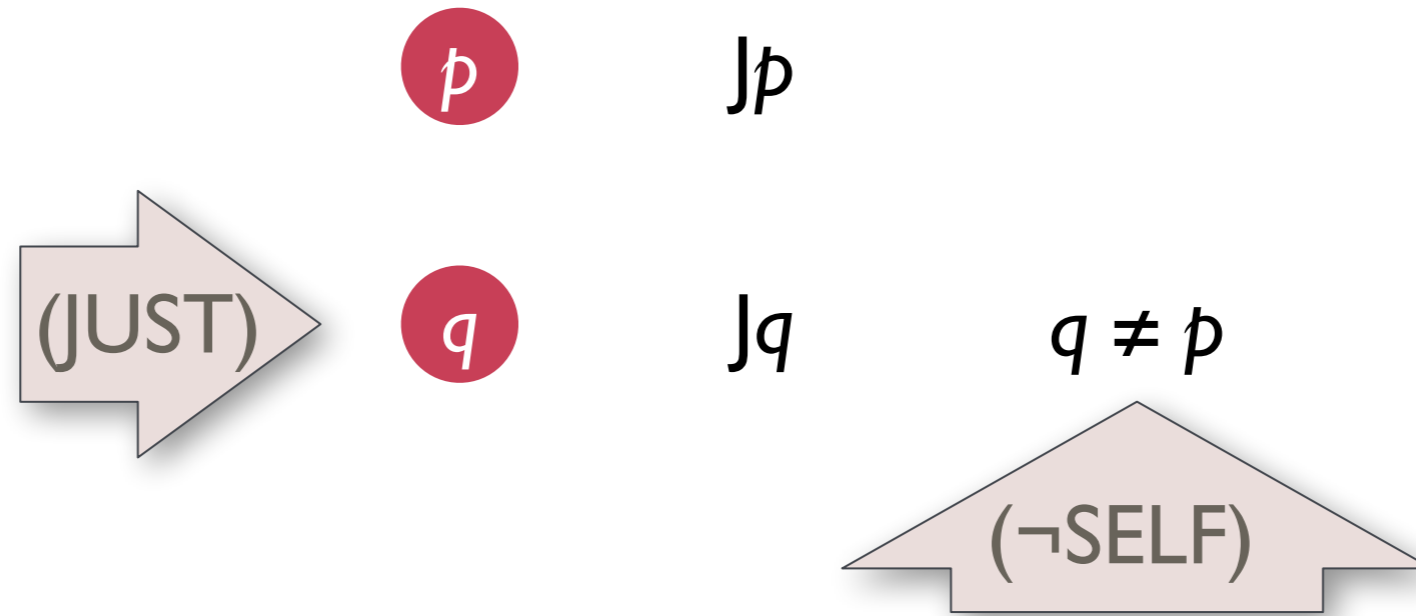
( $\neg$ SELF) A proposition cannot be justified by supporting itself.

( $\neg$ CIRC) A proposition cannot be justified by a chain of support that is circular.

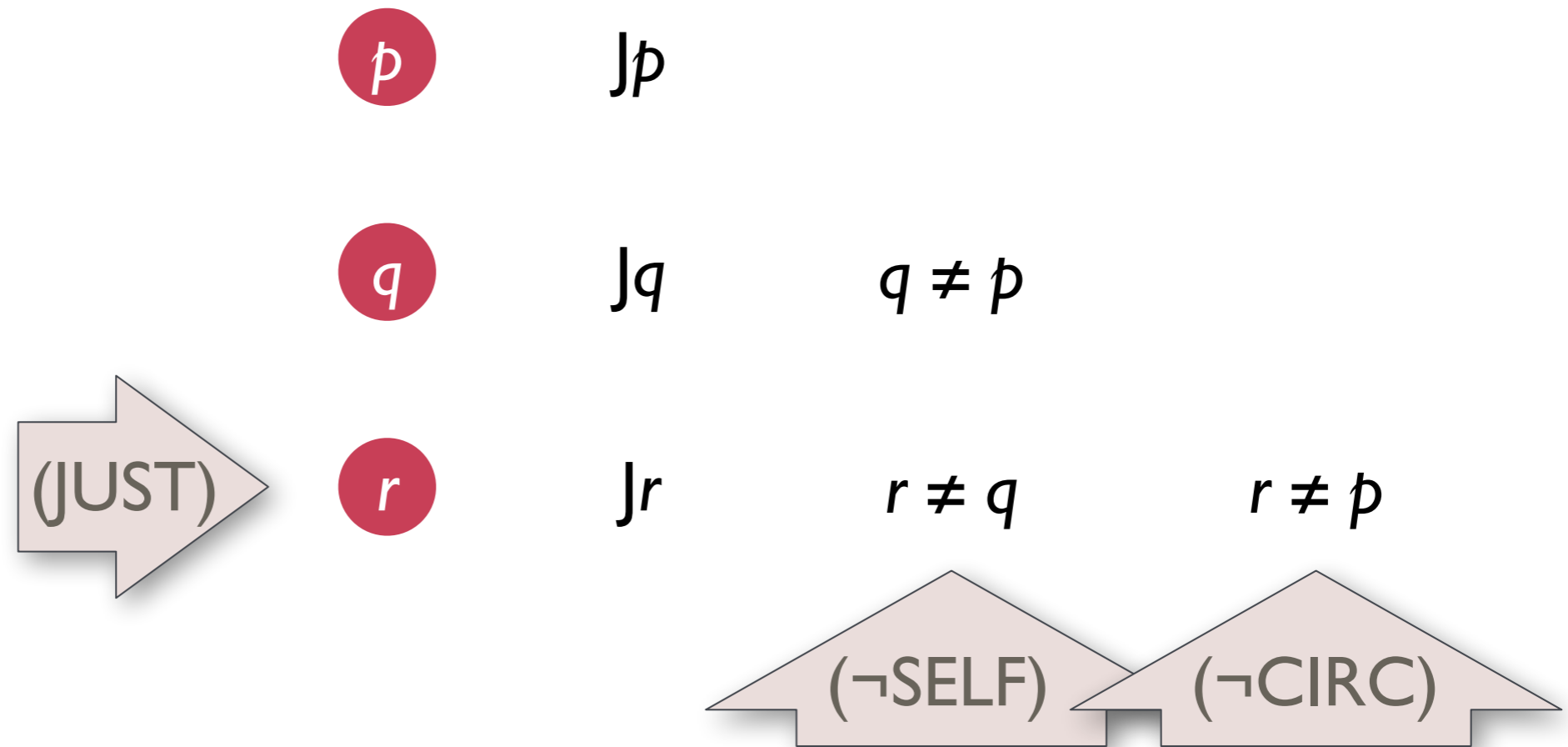
( $\neg$ INF) A belief in a proposition cannot be justified by an infinite chain of support.

(SCEP-J) No-one has any justified beliefs

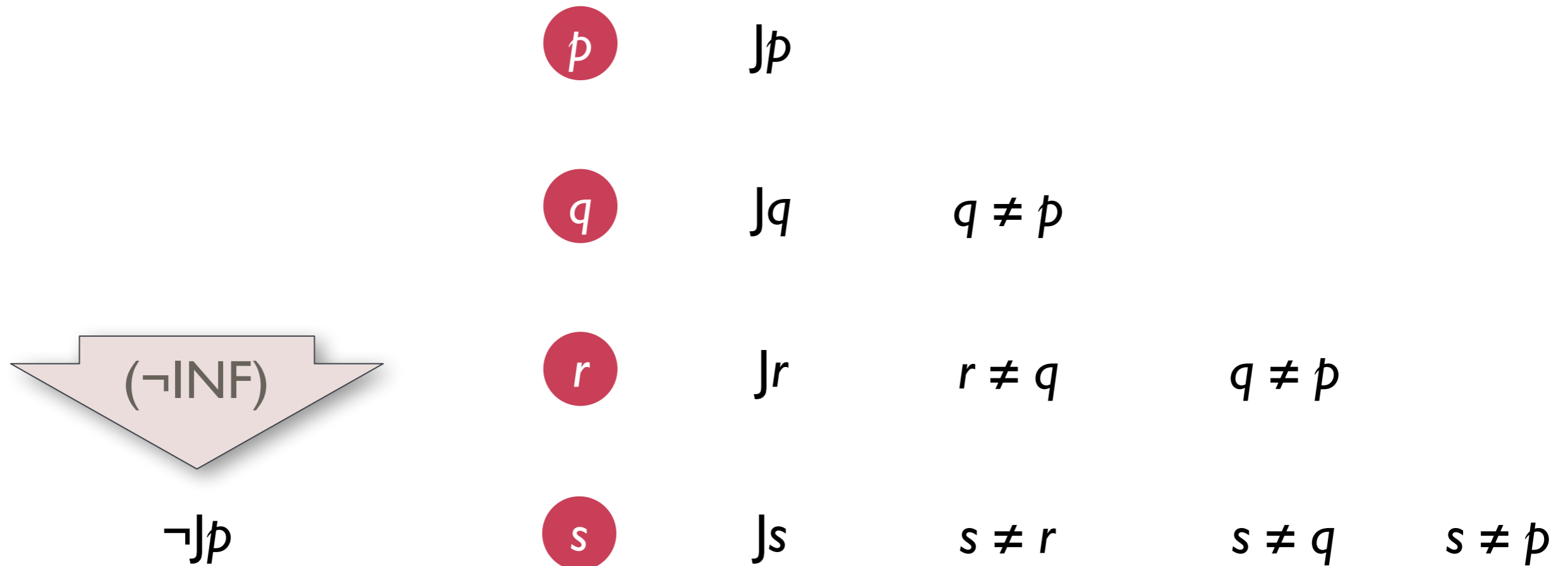
# the Agrippan trilemma



# the Agrippan trilemma



# the Agrippan trilemma

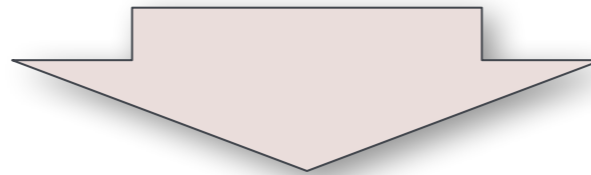


(SCEP-J) No-one has any justified beliefs

# the Agrippan trilemma

(SCEP-J) No-one has any justified beliefs

(K  $\rightarrow$  J) If S knows  $p$  then S is justified in believing proposition  $p$



(SCEP-K) No-one has any knowledge

# the Agrippan trilemma

*Agrippa*

$(\text{JUST}) \wedge (\text{K} \rightarrow \text{J}) \wedge (\neg \text{SELF}) \wedge (\neg \text{CIRC}) \wedge (\neg \text{INF})$

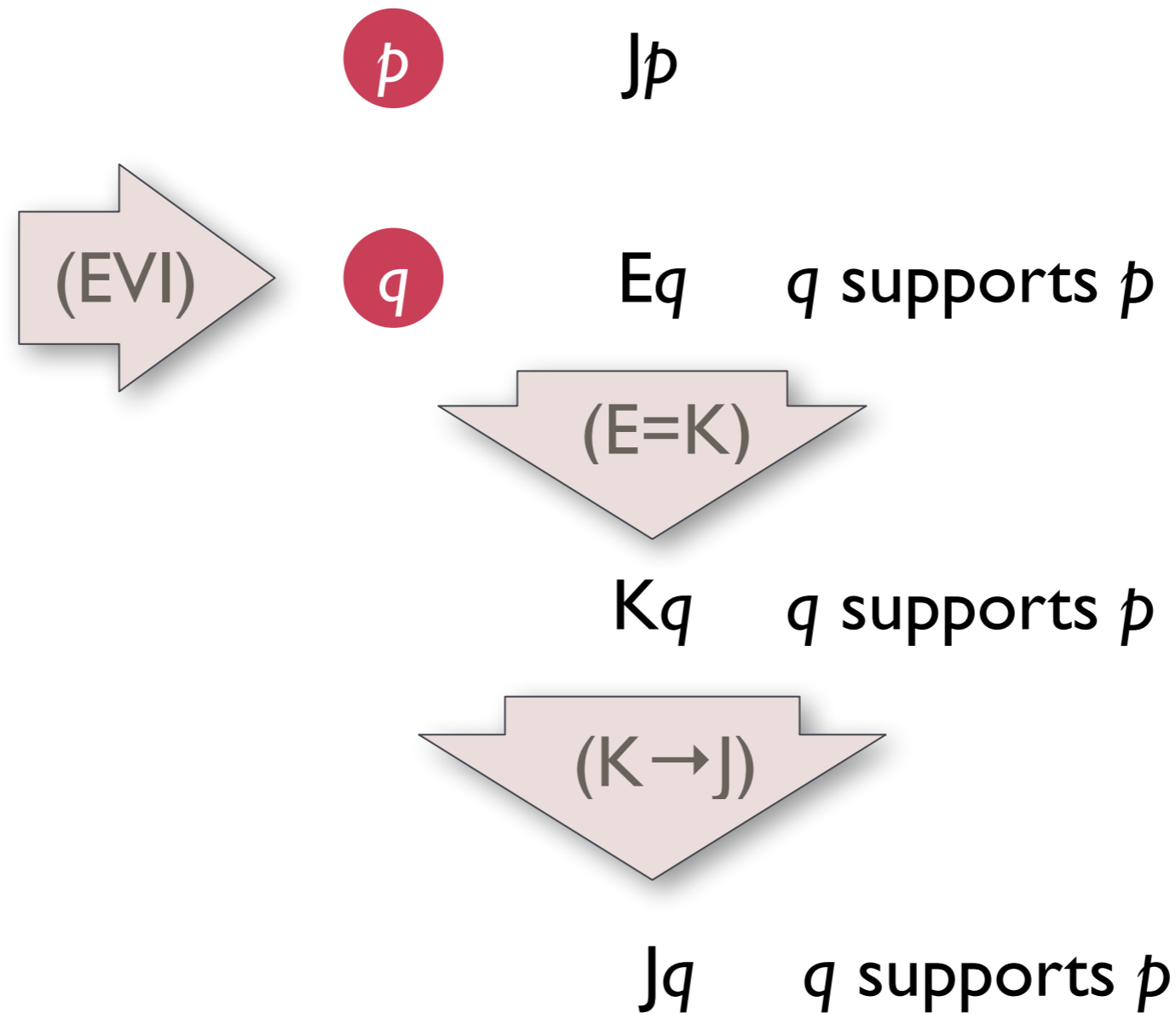
$\models$

$(\text{SCEP-J}) \wedge (\text{SCEP-K})$

# Agrippa plus

- (EVI) S is justified in believing proposition  $p$  if and only if S's evidence supports  $p$ .
- (E=K) S's evidence is precisely what S knows ( $p$  is in S's evidence iff S knows  $p$ ).
- (K→J) If S knows  $p$  then S is justified in believing proposition  $p$

# Agrippa plus



(JUST) If  $S$  is justified in believing proposition  $p$  then, for some proposition  $q$ ,  $S$  is justified in believing  $q$  and  $q$  supports  $p$

# Agrippa plus

$(EVI) \wedge (E=K) \wedge (K \rightarrow J)$

$\models$

(JUST)

*Agrippa*

(JUST)  $\wedge (K \rightarrow J) \wedge (\neg \text{SELF}) \wedge (\neg \text{CIRC}) \wedge (\neg \text{INF})$

$\models$

$(\text{SCEP-J}) \wedge (\text{SCEP-K})$

*Agrippa plus*

$(EVI) \wedge (E=K) \wedge (K \rightarrow J) \wedge (\neg \text{SELF}) \wedge (\neg \text{CIRC}) \wedge (\neg \text{INF})$

$\models$

$(\text{SCEP-J}) \wedge (\text{SCEP-K})$

# Agrippa plus

*Agrippa plus*

$(EVI) \wedge (E=K) \wedge (K \rightarrow J) \wedge (\neg \text{SELF}) \wedge (\neg \text{CIRC}) \wedge (\neg \text{INF})$

$\models$

$(\text{SCEP-J}) \wedge (\text{SCEP-K})$

# avoiding scepticism

*Agrippa plus*

$(EVI) \wedge (E=K) \wedge (K \rightarrow J) \wedge (\neg \text{SELF}) \wedge (\neg \text{CIRC}) \wedge (\neg \text{INF})$

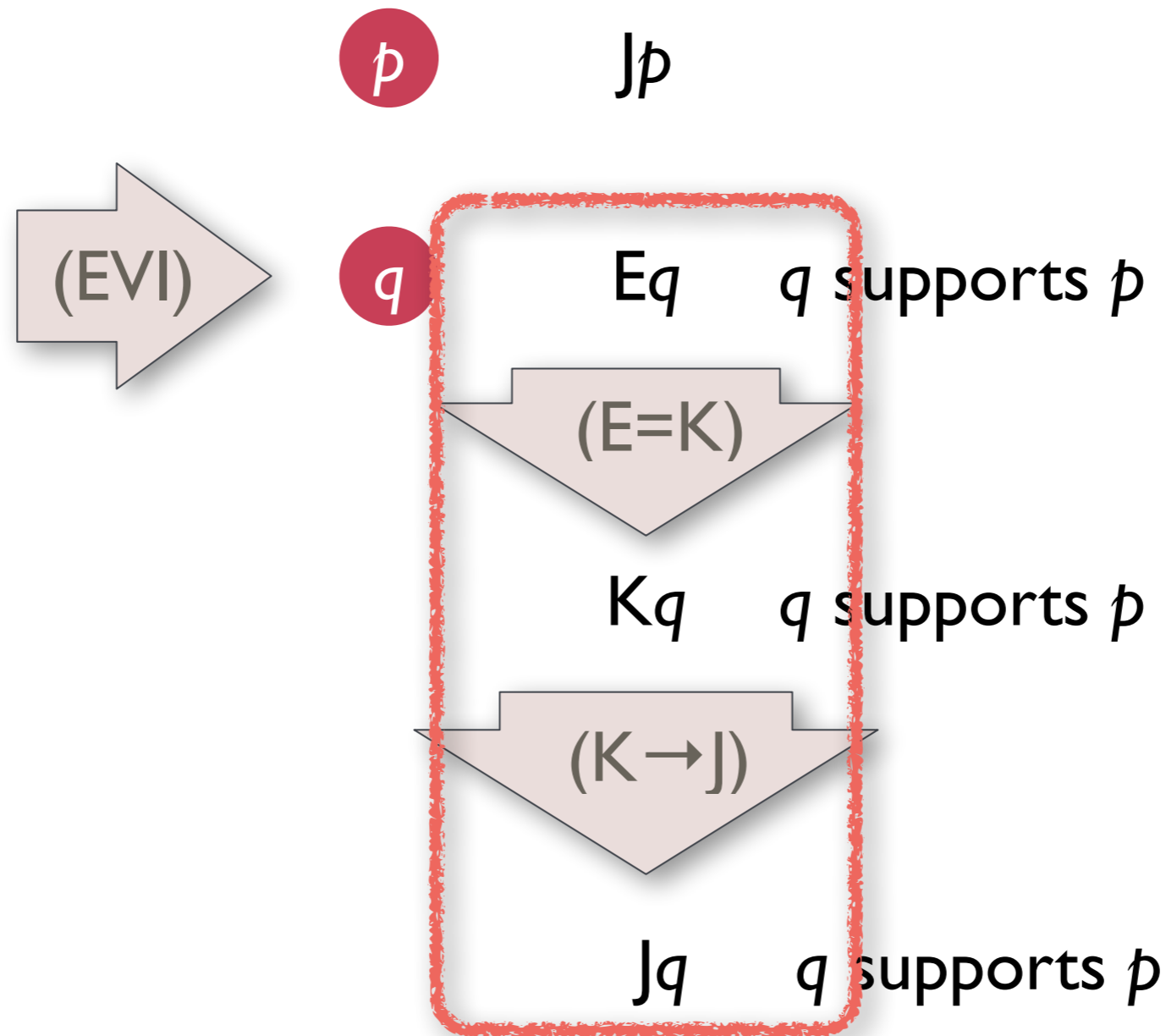
$\models$

$(\text{SCEP-J}) \wedge (\text{SCEP-K})$

could we reject  $E = K$ ?

but note ...

# avoiding scepticism



(JUST) If  $S$  is justified in believing proposition  $p$  then, for some proposition  $q$ ,  $S$  is justified in believing  $q$  and  $q$  supports  $p$

# avoiding scepticism

*Agrippa plus*

$(EVI) \wedge (E=K) \wedge (K \rightarrow J) \wedge (\neg \text{SELF}) \wedge (\neg \text{CIRC}) \wedge (\neg \text{INF})$

$\models$

$(\text{SCEP-J}) \wedge (\text{SCEP-K})$

# avoiding scepticism

*Agrippa plus (v.2.0)*

$(EVI) \wedge (E \rightarrow J) \wedge (\neg \text{SELF}) \wedge (\neg \text{CIRC}) \wedge (\neg \text{INF})$

$\models$

$(\text{SCEP-J}) \wedge (\text{SCEP-K})$

# avoiding scepticism

*Agrippa plus (v.2.0)*

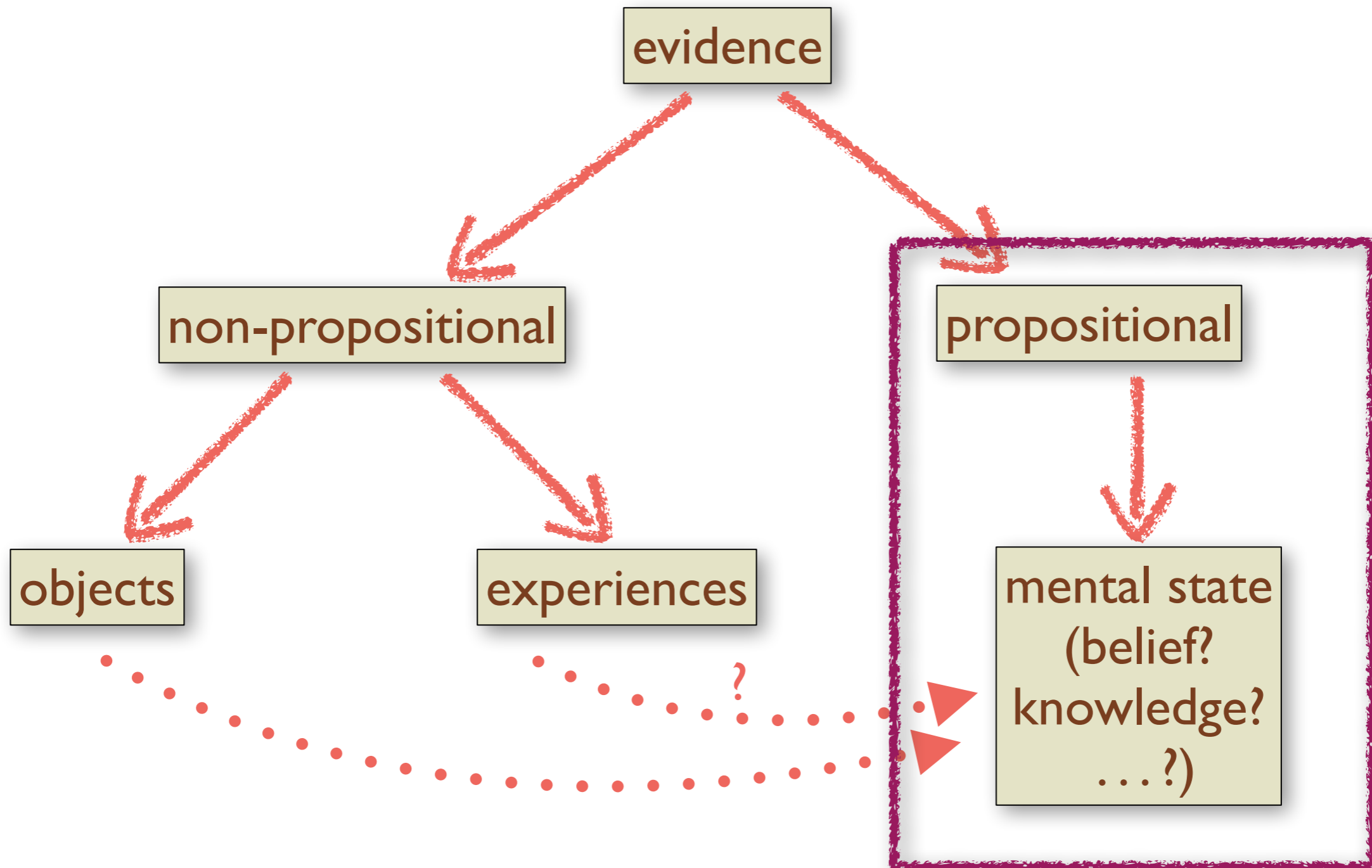
$(EVI) \wedge (E \rightarrow J) \wedge (\neg SELF) \wedge (\neg CIRC) \wedge (\neg INF)$

$\models$

$(SCEP-J) \wedge (SCEP-K)$

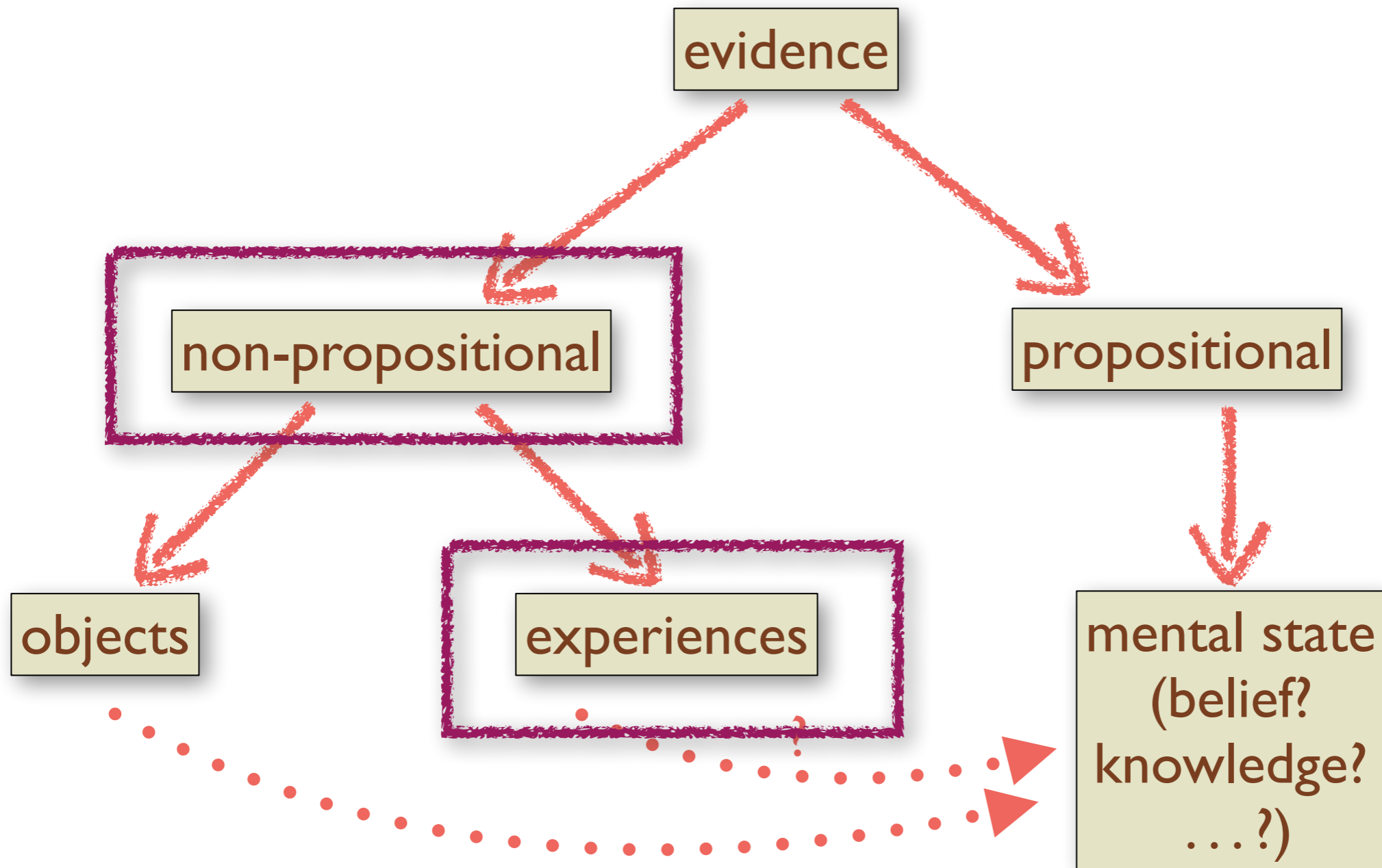
# avoiding scepticism

evidence



# avoiding scepticism

evidence — denying ( $E \rightarrow J$ )



# avoiding scepticism

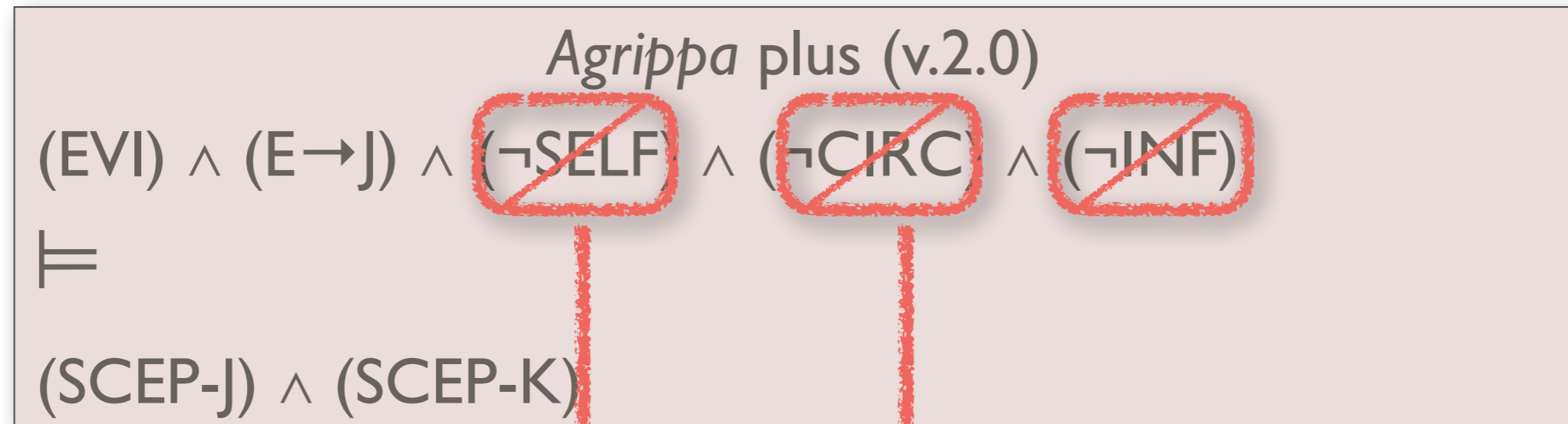
*Agrippa plus (v.2.0)*

$(EVI) \wedge (E \rightarrow J) \wedge (\neg SELF) \wedge (\neg CIRC) \wedge (\neg INF)$

$\models$

$(SCEP-J) \wedge (SCEP-K)$

# avoiding scepticism



foundationalism

coherentism

# avoiding scepticism

*Agrippa plus (v.2.0)*

~~(EVI)~~  $\wedge (E \rightarrow J) \wedge (\neg \text{SELF}) \wedge (\neg \text{CIRC}) \wedge (\neg \text{INF})$

$\models$

$(\text{SCEP-J}) \wedge (\text{SCEP-K})$

evidentialism is false: some beliefs are justified without being justified by evidence

# avoiding scepticism

evidentialism is false: some beliefs are justified without being justified by evidence

some (all?) beliefs are justified by an appropriate connection with the truth

appropriate connection = causation or reliability or tracking



externalism about justification

# avoiding scepticism

## **internalism**

justification depends only on  
'internal' facts

internal facts:

within the skin/brain *or*  
mental states

## **internalism**

what justifies belief must be  
accessible to the subject

## **externalism**

justification can depends on  
'external' facts

external facts:

causation *or* reliability  
*or* tracking

## **externalism**

what justifies belief need not be  
accessible to the subject

# reading

see reading list at: [http://www.alexanderbird.org/Teaching/Reading\\_lists.pdf](http://www.alexanderbird.org/Teaching/Reading_lists.pdf)