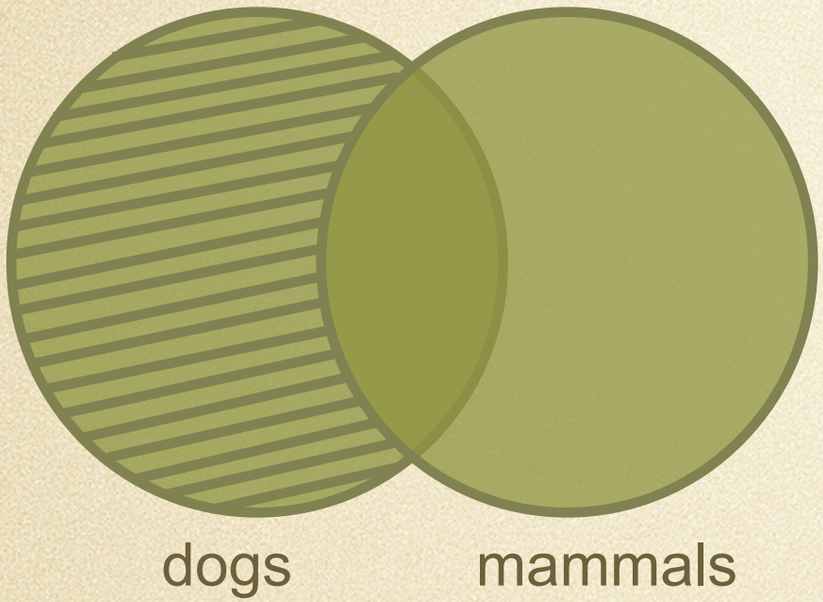
PHI 103 - Categorical Logic
Lecture 2

The Square of Opposition
and Immediate Inference

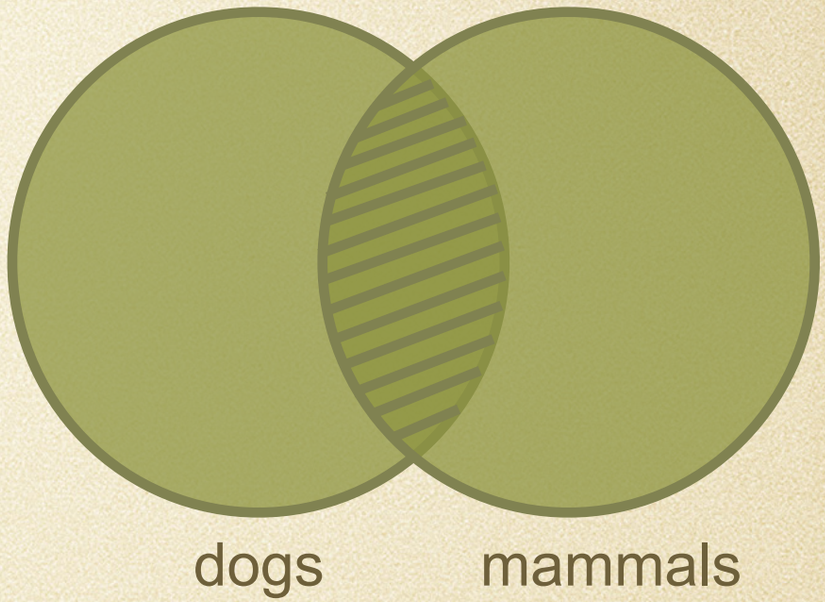
Categorical Logic

The Square of Opposition

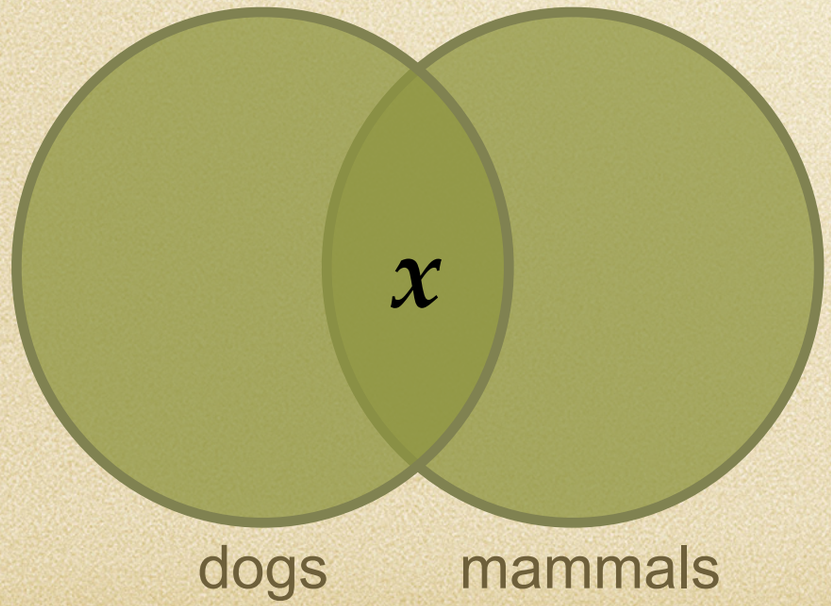
All dogs are mammals.



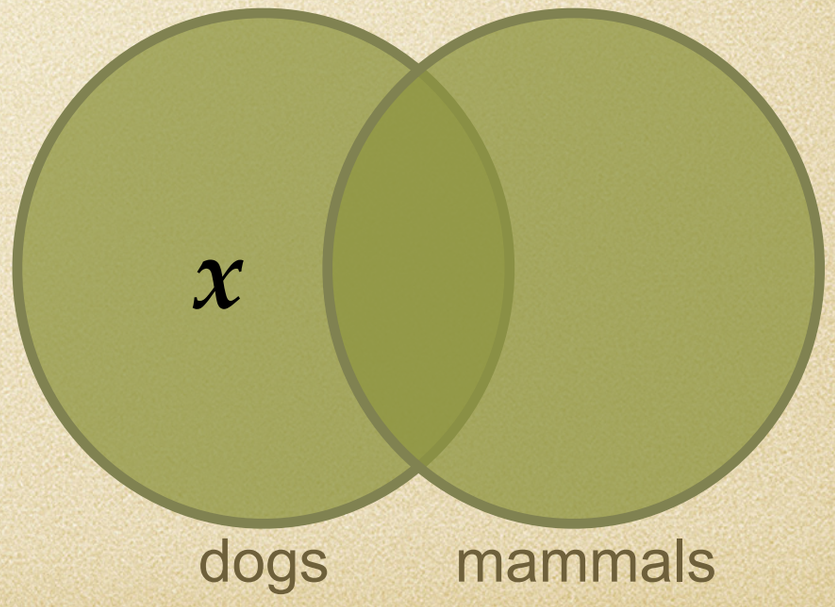
No dogs are **mammals**.



Some dogs are mammals.



Some dogs are **not** mammals.



Categorical Logic

The Square of Opposition

Quantity

Universal

all *of a class*

Particular

at least one *of a class*

Categorical Logic

The Square of Opposition

Quality

Affirmative	**Negative**
(*are*)	(*are not*)

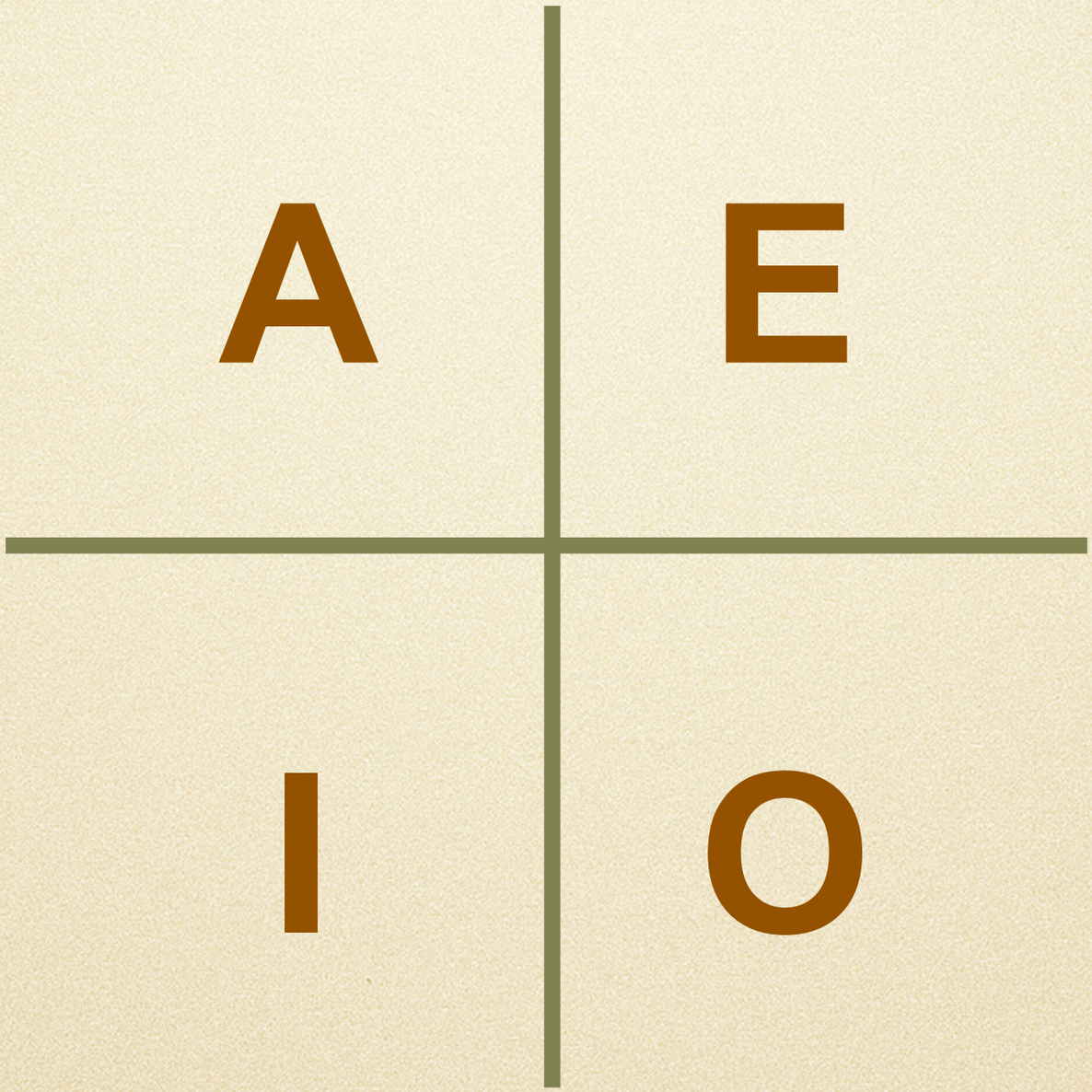
Categorical Logic

The Square of Opposition

	Affirmative	*Negative*
Universal	A	E
Particular	I	O

Categorical Logic

The Square of Opposition



Categorical Logic

Immediate Inference

A

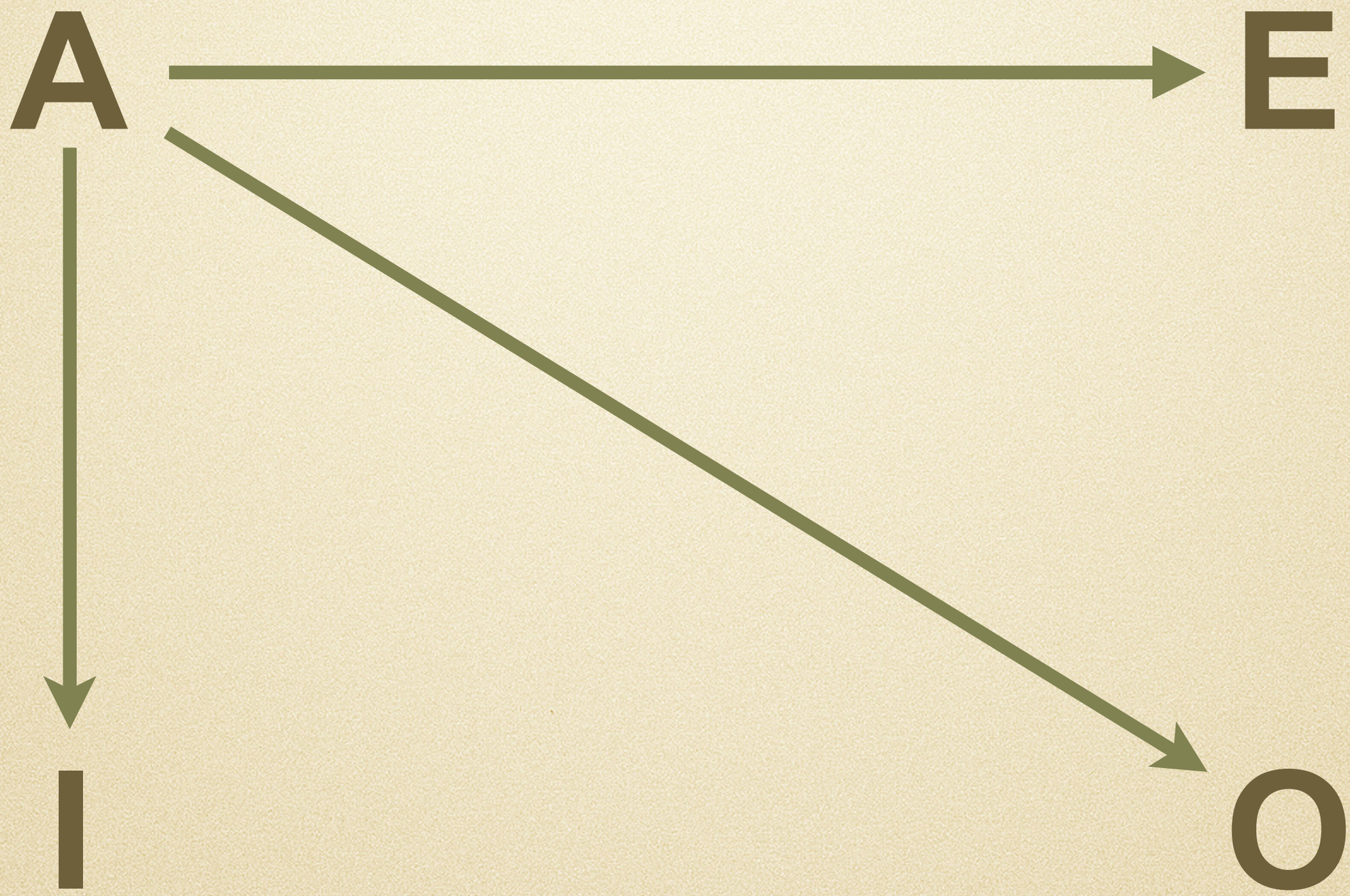
E

I

O

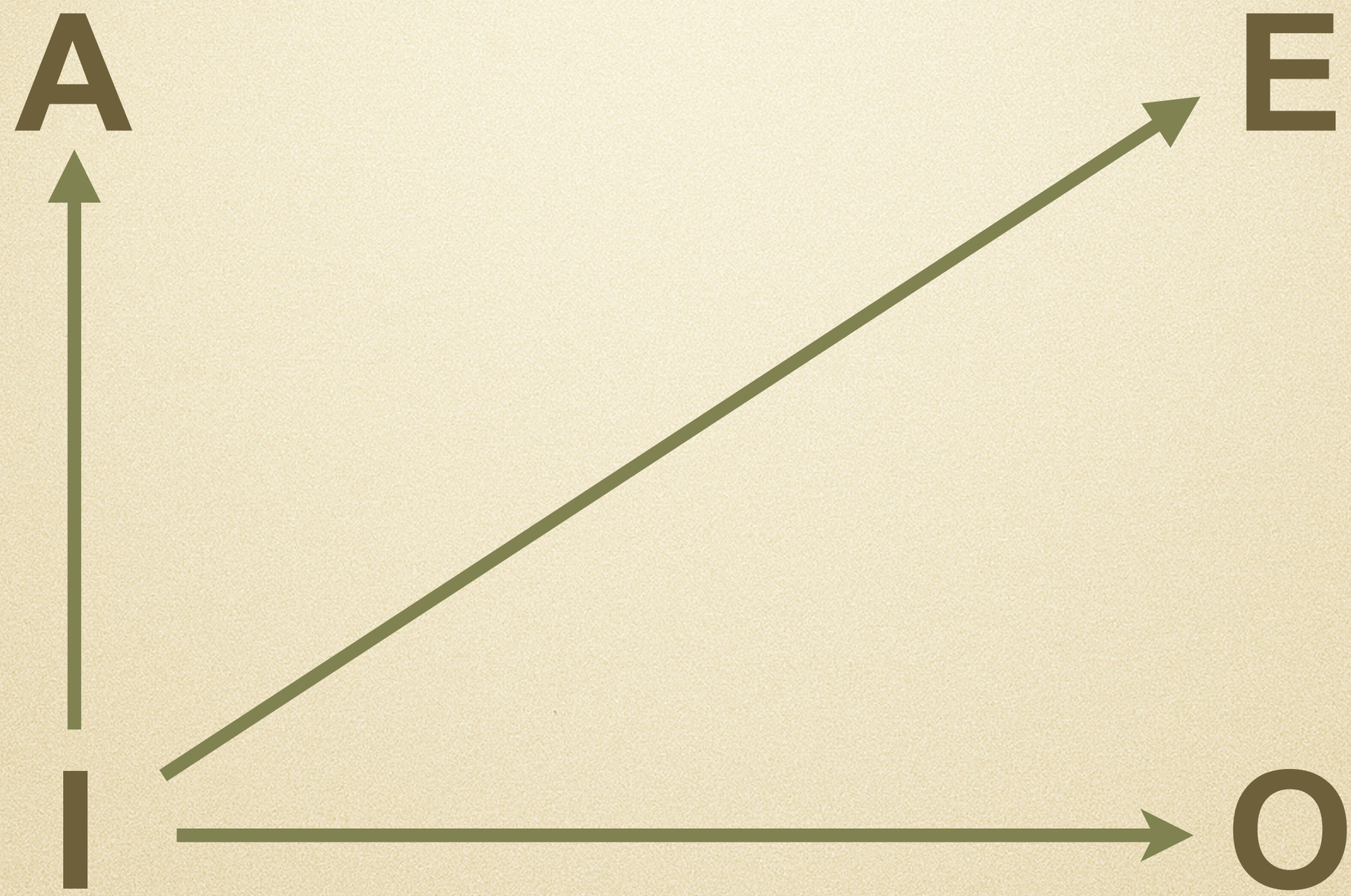
Categorical Logic

Immediate Inference



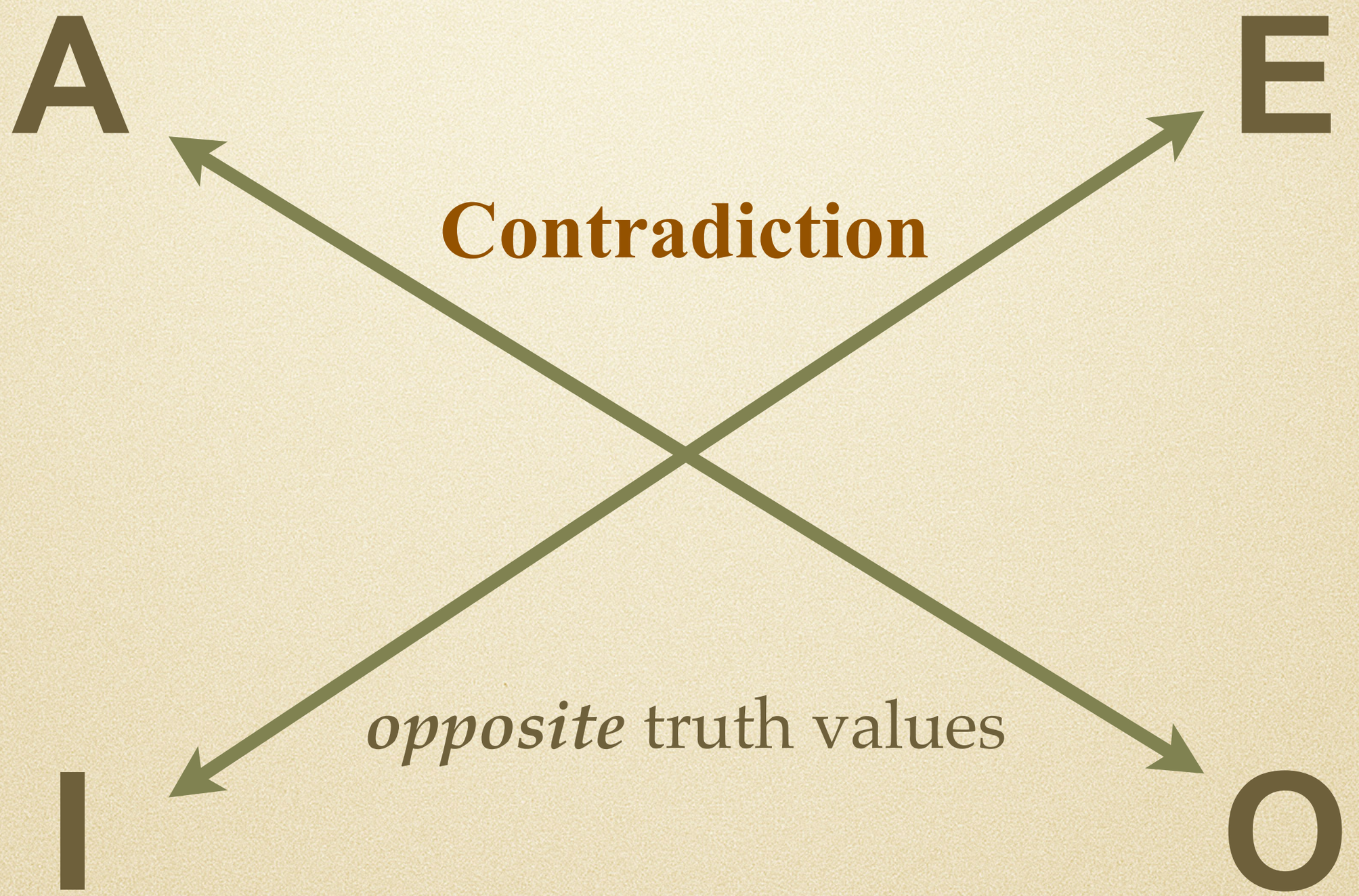
Categorical Logic

Immediate Inference



Categorical Logic

Immediate Inference



Categorical Logic

Immediate Inference

Contrary

cannot both be true (***can*** *both be false*)

I

O

Categorical Logic

Immediate Inference

A **E**

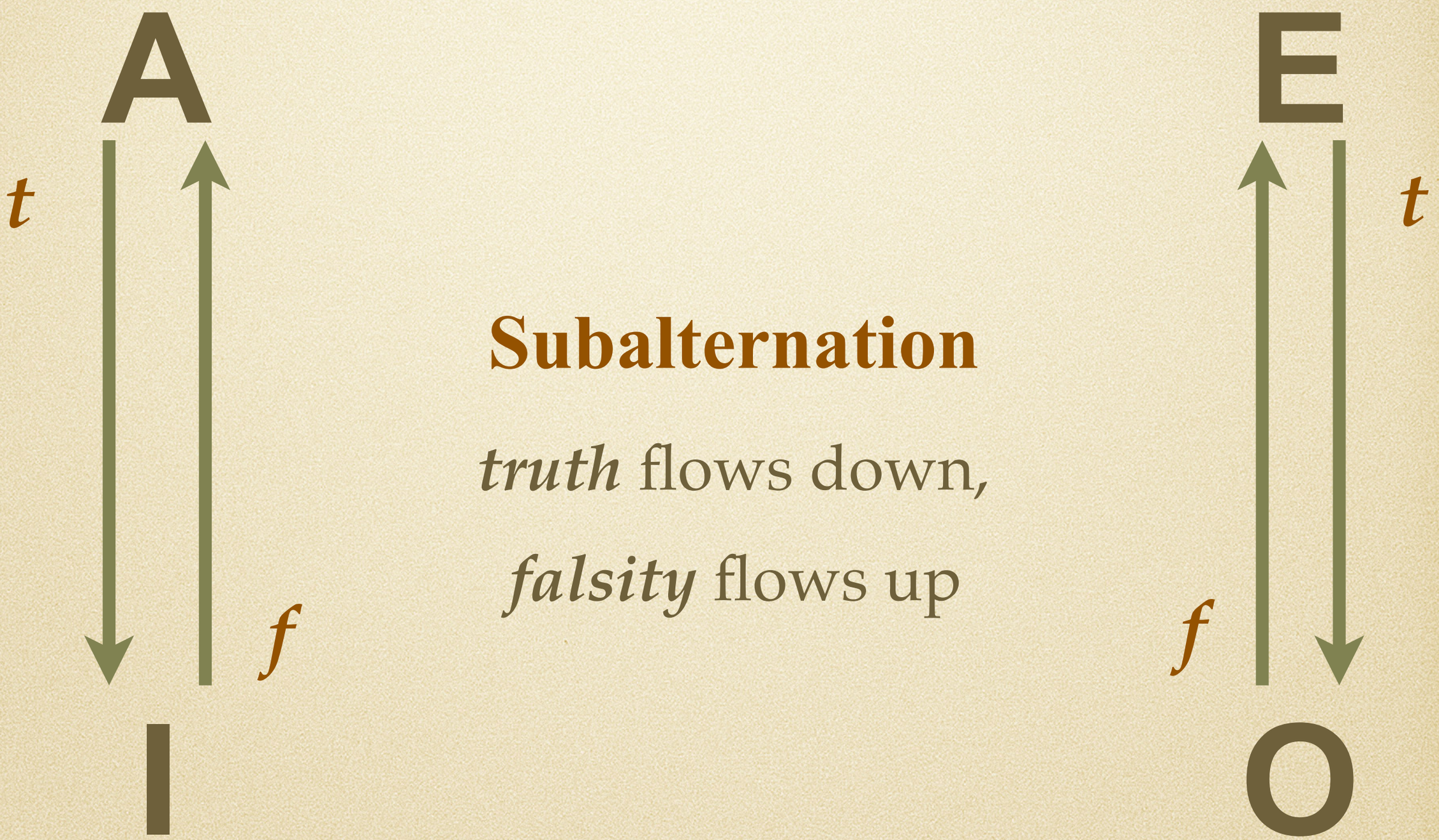
at least one is true (***can't*** *both be false*)

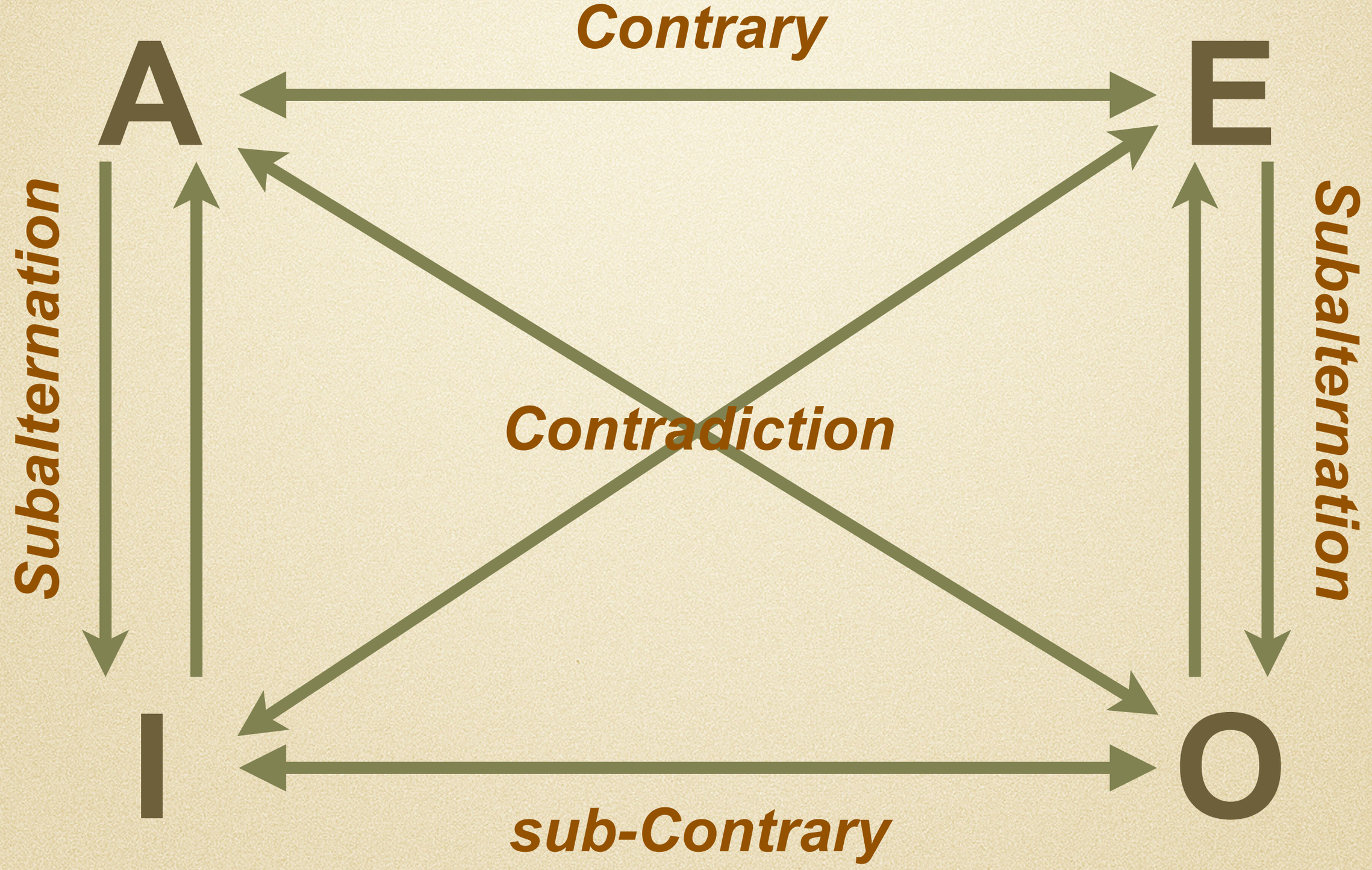
I **O**

sub-Contrary

Categorical Logic

Immediate Inference



Categorical Logic

Immediate Inference