## Immediate (deductive) inference

A ⊢ ₸ For example, All snakes are poisonous implies some snakes are poisonous (assuming the subject satisfies the condition of existential import—at least one instance of the subject exists)

A ⊢ ∼(O)

A ⊢ ∼(E)

E ⊢ O

I ⊢ ∼(E)

∼(A) ⊢ O

∼(E) ⊢ I

∼(I) ⊢ E

∼(I) ⊢ O

∼(O) ⊢ A

∼(O) ⊢ I

E ⊢ ∼(A)

E ⊢ ∼(I)

∼(I) ⊢ ∼(A)

O ⊢ ∼(A)

∼(O) ⊢ ∼(E)

⊣ means “does not imply or entail, or cannot be deduced from”. I.e., Given that it is not the case that All S is P, one cannot deduce that No S is P. The fact that “it is not the case that All men are Italian” does not permit us to conclude that No men are Italian.

∼ (A) ⊣ E (E is not deducible from ∼ (A), but remains unknown).

∼ (A)⊣ I (If we know it is false that all men are geniuses, we do not thereby know that some men are geniuses)

∼ (E) ⊣ A (If we know that it is false that no men are geniuses, we do not thereby know that all men are geniuses)

∼ (E) ⊣ O (and we do not thereby know that some men are not geniuses; they could all be geniuses for all we know).

I ⊣ A (knowing that some men are geniuses does not tell us whether or not all men are geniuses)

I ⊣ O (knowing that some men are geniuses does not tell us whether some men are not geniuses)

O ⊣ E (knowing that some men are not geniuses does not tell us whether no man is a genius)

O ⊣ I (knowing that some men are not geniuses does not tell us that some men are geniuses)