Validity and Truth
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Validity is a formal feature of argument. It has nothing to do with the actual truth or falsity (i.e., the substance) of the argument’s premises or conclusion. It has to do, instead, with how the premises are related to the conclusion. A valid argument, by definition, is one in which the conclusion follows logically (necessarily, conclusively) from the premises. Put differently, a valid argument has the characteristic that if its premises are true, then its conclusion is true as well. The only combination of truth values that you will never find in a valid argument—because it is logically impossible—is T, T (for as many premises as there are), and F (for the conclusion). Every other combination is possible, as the following arguments demonstrate. All of the arguments have the same valid form, which is:

1. All S are M.
2. All M are P.
   Therefore,
3. All S are P.

I chose classes (spaniels, dogs, and so forth) that make the propositions either obviously true or obviously false, so that there is no quibbling or doubt about the truth of the propositions.

1. All spaniels are dogs (T).
2. All dogs are animals (T).
   Therefore,
3. All spaniels are animals (T).

1. All spaniels are four-legged things (T).
2. All four-legged things are animals (F).
   Therefore,
3. All spaniels are animals (T).

1. All spaniels are dogs (T).
2. All dogs are snails (F).
   Therefore,
3. All spaniels are snails (F).
1. All spaniels are birds (F).
2. All birds are animals (T).
   Therefore,
3. All spaniels are animals (T).

1. All spaniels are Fords (F).
2. All Fords are automobiles (T).
   Therefore,
3. All spaniels are automobiles (F).

1. All spaniels are Fords (F).
2. All Fords are animals (F).
   Therefore,
3. All spaniels are animals (T).

1. All spaniels are Spaniards (F).
2. All Spaniards are spelunkers (F).
   Therefore,
3. All spaniels are spelunkers (F).