

Arguments

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So what if $p \implies q$?

- ▶ If we know p is true, and $p \implies q$ is true, then we can say q is true.
- ▶ This is one of the building blocks of making logical arguments.
- ▶ An argument is made up of two parts:
 1. a number of propositions, called the premises;
 2. a proposition, called the conclusion.

Sorites

- ▶ Lewis Carroll put this idea to good use in a type of puzzle he called 'Sorites'.
- ▶ These are a collection of premises for which a conclusion is to be found, and they are a good way to practice logical arguments.

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- ▶ The two premises can therefore be written:
 - ▶ $d \implies u$;
 - ▶ $u \implies v$.
- ▶ The conclusion that can be drawn from these premises is $d \implies u \implies v$, that dictionaries are valuable.