# 4.2. Arguing from and for alternatives

### 4.2.0. Overview

Because a disjunction normally says less than its components while a conjunction says more, the two connectives play very different roles in entailment.

#### 4.2.1. Proofs by cases

Since a disjunction says only what is said by both its disjuncts, it entails only what is entailed by both of them.

## 4.2.2. Proving disjunctions

Since a disjunction makes a relatively weak claim, it is easy to state a sound rule to plan for it, but a safe rule that will cover all cases where it holds is more complex.

### 4.2.3. Further examples

There are now many choices to be regarding the order in which rules are applied and some differences in the length of derivations can result.

### **4.2.4.** The duality of conjunction and disjunction

Conjunction and disjunction are, in a certain formal sense, mirror images of one another.

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