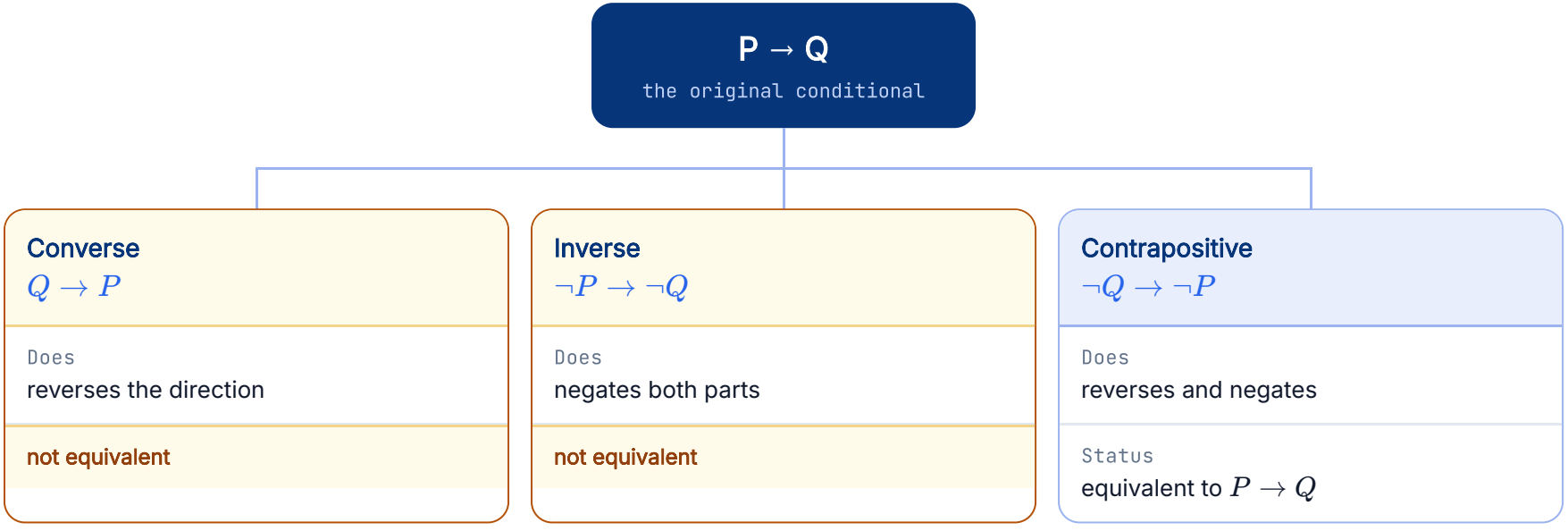
BEFORE YOU READ

Three relatives of a conditional

Reversing or negating the parts of $P \to Q$ gives three new conditionals. Only one of them says the same thing.



TAKEAWAY

Only the contrapositive is safe

The contrapositive is logically equivalent to the original, which is why proof by contrapositive works. The converse and the inverse are not.